THE *INDIANA* APPLICATION

FOR

SUBTITLE D AUTHORIZATION

JUNE 1993

Prepared by:

Solid Waste Management Section
Office of Solid and Hazardous Waste Management
Indiana Department of Environmental Management

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live

Evan Bayh
Governor
Kathy Prosser
Commissioner

105 South Meridian Street
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Telephone 317-232-8603
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June 2, 1993

Mr. Valdas V. Adamkus
Regional Administrator
Region V, U. S. Environmental Protection Agency
77 West Jackson Boulevard
Chicago, IL 60604-3590

Attention: Ms. Susan Mooney

Dear Mr. Adamkus:

RE: Indiana Subtitle D Application

I am requesting, in accordance with Section 4005(c) of Subtitle D of the Resource Conservation and Recovery Act, a review of our permit program to determine whether it is adequate to ensure compliance with the 40 CFR Part 258 standards pertaining to municipal solid waste landfills. Enclosed is our application for a determination of adequacy. I believe you will find this application demonstrates that Indiana is in strong partial compliance now and will make the required regulatory changes to be deemed fully adequate. The Indiana Department of Environmental Management has been designated the lead agency for this program.

Should you require further information concerning the application, please contact Mr. David Wersan at (317) 232-3210 or Mr. Bruce Palin at (317) 232-8892. We greatly appreciate the support and information Mr. Andrew Tschampa and Ms. Susan Mooney have provided to assist us in preparing the application.

Sincerely,

Kathy Prosser

Kathy Prosser
Commissioner

Enclosures

STATE OF INDIANA
OFFICE OF THE ATTORNEY GENERAL
INDIANA GOVERNMENT CENTER SOUTH, FIFTH FLOOR
402 WEST WASHINGTON STREET • INDIANAPOLIS, IN 46204-2770

PAMELA CARTER
ATTORNEY GENERAL

TELEPHONE (317) 232-6201
WRITER'S: _____

May 26, 1993

Mr. Valdas V. Adamkus
Regional Administrator
Region V, U.S. Environmental Protection Agency
230 South Dearborn Street
Chicago, Illinois 60604

Re: State of Indiana Application for Subtitle D Authority

Dear Mr. Adamkus:

I hereby certify, pursuant to my authority as Attorney General for the State of Indiana, that in my opinion the laws of Indiana cited in our Department of Environmental Management's application for a determination of MSWLF permit program adequacy are contained in statutes or regulations lawfully adopted at the time this statement is signed and will be effective by the time the program is determined to be adequate. The citations to applicable laws and regulations are provided in the attachments to this application, which will be submitted to you by the Indiana Department of Environmental Management. No guidance documents have been submitted with this application.

Sincerely,

Pamela Carter

Pamela Carter
Attorney General of Indiana

PC/dls:6497D

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I. INTRODUCTION

The State of Indiana is submitting this application package to demonstrate compliance with Sections of 40 CFR Part 258 to receive partial approval of its solid waste management program.

Indiana has worked diligently for the last twenty years to manage solid waste appropriately to protect Hoosiers and our environment. The Office of Solid and Hazardous Waste Management, Indiana Department of Environmental Management, is revising parts of the State's Administrative Codes (IAC) in a continuing effort to be a leader in solid waste management. The present regulations and the additional regulations, soon to be promulgated, will allow Indiana to be at least as stringent in siting and compliance of municipal solid waste landfill units as the Federal Subtitle D regulations in Part 258. The language shown in Chapter XIV in the right column represents current Indiana regulations, policy or guidelines which already meet or exceed Federal regulations. In all other areas, Indiana will adopt new language to allow the State to be as stringent as, or more stringent than, the federal regulations in 40 CFR Part 258.

Senate Bill 302 has been passed by the 1993 Indiana General Assembly. This bill establishes a new rule making procedure and sets forth additional opportunities for public input at the drafting stage of a proposed rule (See Appendix BB). It also requires the Attorney General to determine if the final adopted rule is a logical outgrowth of both the proposed rule and public input received on the proposed rule. The Board and the Office of Solid and Hazardous Waste Management, Indiana Department of Environmental Management, will comply with the new requirements immediately upon the effective date of the statute. The first step in this new process is development of an issue brief, which invites public input in the development of the proposed rule. The first issue brief on the new municipal solid waste landfill rules mentioned above, will be published in the Indiana Register on June 1, 1993 (See Appendix CC) and the regulations that follow will tentatively be effective by December 1994.

II. THE HISTORY OF SOLID WASTE MANAGEMENT IN INDIANA

The early settlers of the State, as well as the Native Americans, had few waste disposal problems. Being nomadic, they simply discarded their wastes during their travels, or moved away when the filth became unbearable. The wastes of that time were almost wholly organic in composition, so mother nature and time obligingly and quickly solved the early waste disposal problems.

As the settlers became tied to the land, waste disposal problems still were hardly apparent. As woodlands were converted to farmlands, the felled trees remaining after home and barn construction were burned. Other wastes were generally organic in nature and presented few problems.

The development of villages and towns followed by industrialization can be considered the start of Indiana's solid waste problems. A small area of land or a creek bank within walking distance served as the disposal site for the community for such material not considered fit for chickens. Such a site, if not the actual slaughter and dressing site of food animals, was most likely the repository of the offal. The rise of mining, industrial, and commercial activities marked the rise of inorganic and nonputrescible waste. The disposal sites for these wastes quickly evolved into open burning dumps sometimes inhabited by individuals who carried on salvage operations. At this time solid waste disposal was not considered so much a problem as an untidy necessity. Generally, uncontrolled open disposal sites were in use until 1965.

The first act to prohibit open dumping, the Solid Waste Disposal Act, (Refuse Disposal Act), was originally enacted in 1965 and was under the administration of the State Board of Health. The purpose of the Act was "...to authorize counties, cities, and towns to establish, acquire, construct, install, operate, and maintain certain facilities for the collection and disposal of refuse and to declare open dumps to be inimical to human health." (IC 19-2-1-1 (1965) and IC 19-2-6(1965))

The Refuse Disposal Act (1965) read as follows:

(a) Disposal of garbage, rubbish, and refuse on lands may be made only through use of sanitary landfills or by means of incineration, composting, garbage grinding, or other acceptable methods approved by the state board. No person may operate or maintain an open dump.

(b) No person may operate or maintain facilities for the collection and disposal of refuse except as set out in section 3 of this chapter or under rules and regulations adopted by the state board.

(c) Any failure to comply with this section constitutes the operation of a nuisance inimical to human health. The prosecuting attorney of each judicial circuit to whom the secretary of the state board, his authorized agent, or local health officer reports such a failure shall cause appropriate court proceedings to be instituted.

The Refuse Disposal Act of 1965 was the first state legislation to prohibit open dumping. Responsibility for implementation of the Refuse Disposal Act was given to the Stream Pollution Control Board which was also charged with implementing the Federal Clean Water Act. Unfortunately, the statute as passed in 1965 had population restrictions so that it only applied to the city of Evansville. A 1968 survey indicated that Indiana, a State of 92 counties, had 393 municipal open dumps (i.e. town and city open dumps) serving a population of little more than 5,000,000 people. Each county and community did as it pleased and as its immediate needs dictated. In 1967, the legislature amended the Refuse Disposal Act to remove the population restrictions so that the statute applied to the entire state. In 1971, the act was amended again to allow local health departments to enforce the provisions in the act.

Within the State Board of Health Agency (now the State Department Of Health), in addition to the Stream Pollution Control Board (SPCB), there also existed an Air Pollution Control Board (APCB), which was responsible for adopting the provisions of the Federal Clean Air Act. With the celebration of the first Earth Day in 1970 and the formation of the United States Environmental Protection Agency, many states created their own separate environmental agencies. Indiana decided to maintain the existing environmental programs within the State Board of Health and instead created the Environmental Management Board (EMB) to serve as an umbrella board over the Stream Pollution Control Board and the Air Pollution Control Board.

This was done through the passage of the Environmental Management Act (EMA) of 1971. The three boards (SPCB, APCB, and EMB) which were recognized under the EMA had the authority to issue permits, take enforcement actions and promulgate rules. Board members, as designated by statute, were state officials (ex officio) and lay people appointed by the Governor to represent various interests such as agriculture, labor, industry, and municipal government. The State Board of Health provided staff to support each of the boards' activities. At the time, solid waste activities were assigned to the General Sanitation Section in the Division of Sanitary Engineering. This Division was also responsible for setting standards for septic systems, migrant labor camps and swimming pools. It was this staff which developed the "Minimum Requirements for the Selection and Operation of a Sanitary Landfill" which became the precursor to the solid waste rules which were to follow.

In the 1960's and early 1970's environmental programs and resources for dealing with air and water pollution concerns had undergone significant development and recognition. Solid waste concerns on the other hand had been relatively ignored. This began to change in Indiana in the spring of 1974, with the creation of the Solid Waste Management Section within the Division of Sanitary Engineering.

August 15, 1974, is a significant date in the development of Indiana's solid waste program, as it is the effective date of the State's first set of regulations to establish standards for solid waste facility permits and operation, SPC-18. It was with the effectiveness of these regulations and the dedication of a handful of ambitious staff that the state made significant strides in either closing open dump sites or having them converted to permitted "sanitary landfills", a term, which up to this point in time, had not been defined in a state statute or regulation. SPC-18 is also significant because it defined the term "hazardous waste" and required written authorization from the Stream Pollution Control Board in order for a landfill to accept such waste. This was the genesis of what became the State's hazardous waste program now authorized under RCRA Subtitle C.

In July of 1978 the SPCB adopted a strategy to implement a phase-out program for Indiana landfills located within poor geologic environments. Thirty landfills were sent notice that, according to staff records, they were located in areas of highly permeable soils or shallow water tables that made them a threat to the environment. These sites

were given an opportunity to upgrade their site, provide contrary site information or close at the end of their next permit renewal (2 years). As a result of this program, 22 landfills closed and 8 were upgraded to meet standards current at that time.

In the late 70's, the establishment of RCRA and the growth of Indiana's solid waste program, primarily in the hazardous waste area, overwhelmed the SPCB. The EMA was amended in 1980 to transfer the responsibilities for solid waste management to the Environmental Management Board (EMB). At the time this transfer occurred, it was estimated that Indiana generated 3.5-4 pounds of solid waste per person per day and had 150 permitted sanitary landfills.

The Refuse Disposal Act was recodified in IC 36-9-30-35 as the Indiana Solid Waste Disposal Law in 1981. In November 1981, Indiana undertook the task of developing its own comprehensive waste regulatory program by creating the Division of Land Pollution Control from the former Solid Waste Management Section of the Indiana State Board of Health. The Division of Land Pollution Control still maintained three separate program areas: hazardous waste, conventional solid waste, and Superfund/resource recovery. Its role continued to include permitting, inspecting, investigation, and enforcement in these areas. As mandated by RCRA, open dumps were still being inventoried. In 1982, Indiana reported approximately 700 non-permitted disposal sites.

The increase in the number of open dumps from those discovered in the 1968 survey can be attributed to several factors. First, there was an increase in state resources for identifying open dump sites throughout the state. Second, by 1982, sanitary landfills were in existence which charged for the disposal of waste. This factor, for economic reasons, encouraged the creation of many small illegal disposal sites along roadsides, river banks, ravines and secluded locations in rural areas.

Prior to 1985, the lead agency in the State of Indiana authorized to maintain and implement the State's Solid Waste Management Program was the Environmental Management Board (EMB). In 1985, passage of Senate Enrolled Act 566 replaced the EMB with the Solid Waste Management Board (SWMB). This board would continue with the solid and hazardous waste management responsibilities. This law also created the Department of Environmental Management. The new agency, established in April 1986, would provide the needed organizational structure (more staff and funds) required for the state to manage U. S. EPA authorized waste programs. (IC 13-7-2-15)

The Indiana Department of Environmental Management (IDEM) is charged with protecting public health and environment so that Indiana is a cleaner, healthier place to live. After two years of concentrated effort, solid waste rules (329 IAC 2), effective in February 1989, contained tough new technical provisions for ground water monitoring, siting restrictions, and leachate collection systems. The rules also required that facilities show financial responsibility to ensure proper closure and post-closure care and monitoring.

House Enrolled Act 1240 (IC 13-9.5) passed by the Indiana General Assembly in 1990, mandated the development of 20 year solid waste management plans at the state and local levels. Counties were charged with forming either single county or joint-county solid waste management districts. Each district must appoint a board and adopt a 20 year plan by July 1, 1992. The plans must prioritize source reduction, reuse, recycling and composting over landfilling and incineration. The district is required to have education programs and provisions for final disposal for 20 years. The districts are also challenged to meet the state reduction goals of 35% by the end of the year 1995 and 50% by the end of the year 2000. IDEM was mandated to review and approve the district plans according to established criteria. (See Appendix W) The Indiana State Solid Waste Plan, adopted in December 1990, provides a format for district plans.

Since the creation of IDEM, numerous other pieces of legislation have been passed which have expanded the agency authority and shaped the direction of new programs for regulating solid waste activities. A summary of recent legislative actions are included in the Appendix I.

Almost thirty years have passed since the first legislation to control open dumps was adopted. The State has made tremendous strides in responsible solid waste management. The State's role has been greatly expanded and the Indiana Department of Environmental Management has accepted each new task with the determination and the energy needed to meet the challenge.

III. SOLID WASTE FACILITIES IN INDIANA

Indiana generated approximately 3.6 million tons of solid waste in 1980 and had 150 permitted sanitary landfills. In 1991, Indiana disposed of 6 million tons of solid waste and had 76 sanitary landfills. On September 10, 1992 a memorandum was sent to all Indiana landfill owners and operators to summarize provisions in 40 CFR Part 258. (See Appendix AA.) Of Indiana's 74 permitted sanitary landfills accepting waste in 1993, approximately 24 municipal solid waste landfill (MSWLF) units are expected to close due to not meeting the new federal regulations. The other 50 MSWLF units are approved, engineered facilities, and are in substantial compliance with IDEM's requirements and the new federal criteria.

Between April 15, 1993 and October 9, 1993, Indiana will issue a generic minor modification permit to existing MSWLF units, requiring each facility to comply with all applicable federal requirements. Each facility will be monitored closely for compliance with federal regulations. If the MSWLF unit does not comply, then IDEM will use its present enforcement procedures to ensure compliance with Subtitle D criteria or implement closure of the MSWLF unit. The First Notice (See Chapter VII) of the revised Indiana MSWLF unit permit rule published in the Indiana Register June 1, 1993, includes a request for comment on a date for closure of non-complying facilities. (See Appendix CC) An enforceable closure date of non-complying facilities will be included in the new rule. (See Chapter I)

IV. OVERVIEW OF OFFICE OF SOLID AND HAZARDOUS WASTE MANAGEMENT

The Office of Solid and Hazardous Waste Management (OSHWM), as part of the Indiana Department of Environmental Management (IDEM), has the responsibility for the environmental quality of our land. This includes vigorous implementation and enforcement of state and federal solid and hazardous waste statutes and regulations.

OSHWM responsibilities include:

1. The development and enforcement of rules adopted by Indiana's Solid Waste Management Board.

2. The implementation of federal environmental laws, including the Resource Conservation and Recovery Act (RCRA).

The regulatory program can be divided into several major categories: permitting, compliance monitoring, enforcement and solid waste planning.

Permitting

329 IAC 2 clearly establishes procedures to be followed for the issuance of new permits or major modifications for solid waste facilities. There are two types of facilities which are regulated. Solid Waste Land Disposal Facilities consist of sanitary landfills, construction/demolition sites and restricted waste sites. Solid Waste Processing Facilities include solid waste incinerators, transfer stations, solid waste balers, solid waste shredders, resource recovery systems, co-composting facilities (sludge or municipal solid waste) and garbage grinding operations. The existing permit system provides adequate administrative control to prohibit the establishment of new open dumps. The owner of a disposal facility must receive an operating permit from the IDEM in order to run the facility. Without an approved permit, the state has the legal and regulatory authority to pursue enforcement action which could result in the closure of a facility. The permit application process requires the owner to describe all general operations of the facility and indicate how the facility will comply with the minimum state standards, including groundwater monitoring and leachate collection systems. The permit system also delineates those causes which will justify the revocation or modification of any permit that has been issued. These causes include the violation of any condition of the permit, failure to disclose any relevant facts or a misrepresentation of facts, and any changes in the circumstances relating to the use of the permit (IC 13-7-10-5). The permit system also provides for financial responsibility requirements and corrective action for closed facilities.

Compliance Monitoring

The Environmental Management Act provides the IDEM with broad powers to establish and administer a surveillance and inspection program for all solid waste disposal facilities. Indiana Code 13-7-5-3 states that: "The department may have a designated agent, upon presentation of proper credentials, enter upon private or public property to inspect for and investigate possible violations of IC 13-1-1, IC 13-1-3, IC 13-1-5, IC 13-1-5.7, IC 13-1-12, this article (13-7), or any rule adopted by one of the boards."

IC 13-7-10-2(a) and 329 IAC 2 provides that permits will be valid for up to five years. Prior to the expiration date of a permit, the owner must submit a complete application for a renewal of the permit. The evaluation of a renewal permit application is to be based in part on the quality of the facility operation during the previous operation period. The Office of Solid and Hazardous Waste Management personnel conduct unannounced inspections at all approved facilities in the state every three to five weeks. If a landfill has experienced particular problems in complying with the operating standards, the OSHWM makes more frequent unannounced inspections of the site. Periodically, after hours and weekend inspections are also conducted. The engineering staff in the office also conduct periodic surveys of landfill sites to assure they are filling within their approved grades and boundaries. Any discovery of overfilling results in a referral for appropriate enforcement action.

Enforcement

In addition to the powers and duties discussed above, the IDEM has the legal authority to initiate an investigation of any violation of the state regulations and may take appropriate enforcement actions. (IC 13-7-11) Existing remedies for the violations include obtaining a cease and desist order, monetary penalties, and mandating corrective actions through administrative or judicial forums. (IC 13-7-11-5;13-7-12-2) There are adequate procedures set forth in the Environmental Management Act (IC 13-7-11 and 12) to address any emergency situation caused by inadequate waste disposal practices. The Environmental Management Act (EMA) provides for a maximum civil penalty of $25,000 per day per violation of the Act. (IC 13-7-13-3) The EMA also allows for the prosecution of criminal violations. (IC 13-7-13-3)

Solid Waste Planning

OSHWM is required to provide assistance to districts on solid waste plan development. The district plans are reviewed to determine if they meet the required criteria. Plans which are approved comply with statutory requirements, the state plan, and guidelines. Indiana has goals to reduce the amount of waste for final disposal by 35% by the end of the year 1995 and 50% by the end of the year 2000. (IC 13-7-1-1(c)

FUNDING

Solid waste management in Indiana is financed through the Indiana General Fund and solid waste operating and permit fees. The State Legislature approves a biennial budget for IDEM. There was $4,200,000 allocated from the general fund for the fiscal years 1992 and 1993 and an additional estimated income of $1,500,000 from the solid waste fees. This gives the agency a total budget of $5,700,000 for the solid waste program for the fiscal years 1992-1993.

V. OFFICE OF SOLID AND HAZARDOUS WASTE STAFF RESPONSIBILITIES AND POSITIONS ASSIGNED TO THOSE RESPONSIBILITIES

The Office of Solid and Hazardous Waste Management (OSHWM) has more than 80 staff positions and support staff responsible for developing and implementing a comprehensive regulatory program for all solid wastes stored, collected, transported, processed, recycled, composted or disposed of throughout the state.

The Solid and Hazardous Waste Assistant Commissioner's office offers various support functions including:

* clerical support.
* budget analysis.
* purchasing supplies and equipment.
* training.
* medical monitoring.
* computer support.

There are 20 positions allocated for these activities, with half the work time spent on solid waste.

The Solid Waste Data Assessment Section reports directly to the Assistant Commissioner. This Section is responsible for:

* review of groundwater data for compliance.
* sampling of groundwater at facilities.
* developing an agency groundwater sampling and analysis plan.
* overseeing contract laboratory activities.
* monitoring leachate characterization.
* monitoring quality assurance/quality control of sample collection and analysis.

This section has 3 positions allocated just for solid waste compliance.

The Solid Waste Permitting Branch is divided into three sections: Permit, Engineering, and Geology.

There are 4 management positions allocated to this Branch.

The Solid Waste Permit Section oversees:

* the administrative procedures for permitting.
* determination of financial assurance for closure and post-closure.
* special waste permitting.
* determination of good character for solid waste facility operators and owners.
* the public process requirements for facility permitting.

This section has 9 positions allocated.

The Solid Waste Engineering Section must:

* review the engineering aspects of facility applications.
* write permits for solid waste facilities.
* write renewal permits for solid waste facilities.
* review engineering aspects for facility operation, closure and post-closure.
* determination of the need for a solid waste facility.

This section has 9 positions allocated.

The Solid Waste Geology Section must:

* review the geologic aspects of facility applications.
* write renewal permits for solid waste facilities.
* review the geology aspects for facility operation, closure and post-closure.
* evaluate the adequacy of ground water monitoring systems at MSWLF units.
* assessment of ground water quality information and corrective measures for solid waste facilities.

This section has 10 positions allocated.

The Solid Waste Management Branch is also divided into three sections: District Planning, Solid Waste Management, and Compliance.
There are four management positions.

The District Planning Section is responsible for:

* reviewing and approving district solid waste management plans.
* collection of solid waste disposal capacity data.
* State Solid Waste Plan review.

This section has 7 positions allocated.

The Solid Waste Management Section is responsible for:

* writing and revising solid waste rules.
* review of solid waste manifests.
* implementing solid waste management information service.

This section has 7 positions allocated.

The Solid Waste Compliance Section is responsible for:

* landfill inspections.
* inspections of processing facilities.
* open dump investigations.
* certification of resource recovery facilities.

This section has 12 positions allocated.

The Indiana Department of Environmental Management has several offices involved in Solid Waste Management support.

Office of Legal Counsel is responsible for:

* reviewing drafts of rules, letters, and documents.
* reviewing Solid Waste Board actions as OSHWM counsel.
* being the OSHWM counsel in administrative litigation.

This office has 2 positions allocated for OSHWM.

The Office of Hearings is responsible for:

* administrative hearings.

This office has 1 position allocated for OSHWM.

The Office of Management, Budget and Administration is responsible for:

* reviewing contracts, memorandums of understanding and agreements.

This office has 1 position allocated for OSHWM.

Office of Enforcement has different sections to support the program areas in IDEM. The Solid Waste Enforcement Section is responsible for:

* enforcement case development for solid waste facilities.
* suspension orders for solid waste facilities.

This section has 6 positions allocated.

Office of Environmental Investigation has responsibilities and positions detailed in Chapter X.

VI. SOLID WASTE MANAGEMENT BOARD RESPONSIBILITIES

The solid waste management board is established through IC 13-1-12. It adopts policy for the Indiana Department of Environmental Management (IDEM) on solid and hazardous waste issues. Its goal is to safeguard human health and the resources of the state through the regulation of processing, treatment, storage and disposal of solid and hazardous waste.

The board consists of nine (9) members, including three (3) ex officio members (the secretary of the State Department of Health, the lieutenant governor, and the director of the Department of Natural Resources, or their designees). The remaining six (6) members are appointed by the governor as follows:

One (1) representative of agriculture;
One (1) representative of business and industry;
One (1) representative of environmental interests;
One (1) representative of labor;
One (1) representative of local government; and
One (1) physician who holds an unlimited license to practice medicine in Indiana.

No more than three (3) of the appointed members of the board may be members of the same political party. The appointed members' terms are four (4) years. The board must hold at least six (6) regular meetings each calendar year at a place and time set by the board.

The commissioner of IDEM serves as the technical secretary for the board. Personnel within the Office of Solid and Hazardous Waste Management and the Office of Emergency Response serve as the technical staff for the board.

The board has the following powers:

(1) to adopt rules under IC 4-22-2 to regulate solid and hazardous waste and atomic radiation in Indiana, including rules necessary to the implementation of the federal Resource Conservation and Recovery Act (42 USC 6901 et seq.), as amended;
(2) to review orders and determinations of the commissioner under petitions filed under IC 4-21.5;
(3) to develop operating policy concerning the activities of IDEM; and
(4) to carry out other duties imposed by law.

VII. RULEMAKING PROCEDURE

Adopting rules to protect the environment is a major function of the solid waste management board. Rulemaking for the solid waste management board is governed by procedures set in Senate Enrolled Act 302 and IC 4-22 et seq. (See Appendix P) Once promulgated by the board, the rules are published in Title 329 of the Indiana Administrative Code as 329 IAC, solid and hazardous waste management regulations. Indiana will make only regulatory changes to comply with 40 CFR Part 258. A tentative effective date for the new municipal solid waste landfill rule is December 1994. The entire process, at a minimum, takes 18 months. See Appendix BB for minimum timeframes for Indiana rule promulgation under the new statute and a flow chart of the rule making process.

The major points of the process of rule development and promulgation are:

(1) As a policy, the Indiana Department of Environmental Management's (IDEM) Office of Solid and Hazardous Waste Management (OSHWM) will announce to the Solid Waste Management Board the intention to promulgate a rule. A general synopsis of the subject matter of the proposed rule will be given.

(2) By law, the OSHWM staff will prepare an issue brief and a Notice of the First Comment Period of the proposed rule to be printed in the *Indiana Register*. The issue brief must be submitted to the *Indiana Register*, Administrative Code Division at the Legislative Services Agency (LSA) on or before the tenth (10th) calendar day of the month. The issue brief must contain the subject matter of the proposed rule, the basic purpose of the proposed rule, authority for adoption, alternatives being considered by the department and a request for public comments.

(3) The *Indiana Register* is dated the first day of each month, and the first comment period on the Issue Brief must be for a minimum of 30 days.

(4) OSHWM staff will write a proposed draft rule in accordance with LSA Administrative Rules Drafting Manual. All new parts of the rule are shown in bold. Those items of the rule being replaced or deleted are indicated by a strike-out through the words.

(5) A Second Notice will then be published in the *Indiana Register*. This notice will contain the draft language of the proposed rule and a response to public comments made during the first comment period.

(6) The Second Notice in the *Indiana Register* will announce a second comment period. Comments must be received for a minimum of 30 days.

(7) As a policy, the draft language will be sent to the Attorney General for preliminary review.

(8) For a proposed rule with limited policy alternatives, the Commissioner may omit the issue brief and first comment period and begin by publishing draft rule language and notices of a comment period in the *Indiana Register*. However, this is not the case for the new MSWLF unit rules. Findings of Fact by the Commissioner regarding the decision that the rule has limited policy alternatives would be prepared by OSHWM staff.

(9) OSHWM staff will prepare a Solid Waste Management Board packet which will contain the revised rule language and responses to public comments.

(10) A Public Board Hearing/Meeting will be scheduled to hear public testimony on the proposed rule. The Board can preliminarily adopt the rule at the meeting which follows the hearing. A court reporter must be present and prepare a transcript.

(11) A Third Notice will be published in the *Indiana Register*. The notice will include the finalized rule language and a summary of response to the public comments. This notice commences a one year time limit for promulgation of the rule.

(12) OSHWM staff will prepare a fiscal impact memorandum and an environmental assessment form and submit those to the State Budget Agency.

(13) For rules which adopt federal language or make technical or clarifying changes to existing rules, the Commissioner may omit early procedural steps and begin rulemaking by publishing final rule language.

(14) The OSHWM staff will prepare a second Solid Waste Management Board Packet. Included in the packet is a copy of the finalized rule language, suggested amendments to the rule, a summary of hearing testimony and public comments and staff's response to public testimony and comments.

(15) The OSHWM staff will also prepare a Promulgation Packet. The promulgation packet is prepared for each rule to be final adopted at the board meeting. The promulgation packet includes five (5) copies of the rule with signature page with LSA document number, two (2) copies of supporting documentation including title page, executive document form, LSA document form, public hearing notice, legal notice, statement that a quorum of the board was present at final adoption, hearings transcripts, fiscal impact memo and reply, environmental assessment form and findings of fact document. Findings of fact will be prepared by reviewing each verbal comment from the hearing transcript and each written comment. A response is written for each. If applicable, "incorporation by reference" documents are included.

(16) At the Second Solid Waste Management Board Hearing/Meeting, public testimony will be heard. In the meeting the Board will a) final adopt the preliminarily adopted rule, b) amend the proposed rule from logical outgrowth of public comment and final adopt, c) amend the proposed rule for reasons other than public comment and renotice the rule with amendments and hold another Board meeting, or d) reject the proposed rule. If the rule is adopted by the Board, the promulgation packet is signed by the technical secretary to the board (commissioner of IDEM) prior to being submitted

to the Attorney General's (AG) office. The AG has forty-five (45) days to review and sign. The AG reviews the final adopted rule as per IC 4-22-2-32. The AG reviews the rule for legality and then determines whether the final adopted rule substantially differs from the proposed rule. The AG disapproves a rule only if it has been adopted without statutory authority, has been adopted without complying with IC 4-22-2, substantially differs from the proposed rule, or violates another law. If the rule does not comply with the format, numbering system, standards and techniques established under 4-22-2-42, the AG may disapprove the rule or return the rule to IDEM without disapproving the rule. The returned rule may be brought into compliance and resubmitted to the AG without readopting the rule. If the AG neither approves nor disapproves the rule within forty-five (45) days, the rule is deemed approved.

(17) If the rule is approved or deemed approved, the promulgation packet then goes to the Governor's office. The Governor has fifteen (15) days plus a fifteen (15) day extension in which to sign the rule.

(18) The promulgation packet then goes to the Secretary of State's office for signature and filing. This is to be accomplished in three (3) days. The date of the Secretary of State's signature becomes the promulgation date and, unless noted otherwise, the rule becomes effective thirty (30) calendar days after filing with the Secretary of State.

(19) The Final Rule is published in the *Indiana Register*. OSHWM staff proofread the rule. Any changes are filed with the Secretary of State and printed as errata in the *Indiana Register*.

VIII. PUBLIC PROCESS FOR PERMIT APPLICATION

Prior to the submittal of a permit application for new MSWLF units and lateral expansions to the Indiana Department of Environmental Management (IDEM), the application goes through the process for obtaining local siting and zoning approval, if local approvals are required. (See Chapter XIII) Once a municipal solid waste land disposal facility application is received by IDEM and logged into Permit Tracking, the application is assigned to a Permit Manager. (See Standard Operating Procedures (SOP)-Permit Review and Flow Chart, Appendix B and Appendix D) The Permit Manager will distribute the application packet to the review groups: Engineering, Geology, Good Character, and Needs Assessment for completeness review.

Once IDEM determines the application is complete, Notice of Receipt of Application (NOR) is published in a local newspaper distributed in the area of the proposed facility site. This is completed according to IC 5-3-1-2(h). "If the event is one about which notice is required to be published after the event, notice shall be published one (1) time within thirty (30) days after the date of the event." Notices are published as required "legal notices" in the newspaper. The notice opens a 30 day public comment

period. The notice also offers the opportunity for a public hearing. A public hearing will be held if one or more persons request it. Written public comments are accepted by Permit Managers and filed in the IDEM public files with the application. Additional copies of the application are made available locally. Usually the copies are placed at the library in the county where the facility will be located.

As a policy, a public hearing is held in the county where the facility will be sited. An IDEM staff member serves as the hearing officer. (See SOP-Hearing Procedures, Appendix C) Notice of the public hearing is published one time in a major newspaper in the county at least thirty days before the date of the hearing.

A transcript of the hearing and any comments received from the initial NOR through 10 days after the hearing are collected by the Permit Manager. All comments or questions are addressed in a Responsiveness Summary prepared by the technical staff. A copy of the Responsiveness Summary with the Notice of Decision (NOD) is mailed to all potentially affected parties. "Potentially Affected Parties" includes those people who live within one mile of the proposed facility, anyone submitting a public comment or question, or anyone who asks to be notified.

A potentially affected party has fifteen (15) days to appeal the IDEM decision for the facility to the Administrative Law Judge. (The procedure for Adjudication is continued in Chapters XI and XII.)

(The Public Process for permitting MSWLF units will be changed within the next six months. The permit application will be received at IDEM. An NOR will be published and a copy of the permit application will be made available locally. After a technical review is completed, a draft permit will be written. There will be a public notice of the draft permit, an opportunity for a public hearing, and a thirty (30) day public comment period on the draft permit for the proposed facility. Subsequent procedure remains the same.)

IX. COMPLIANCE MONITORING

LANDFILL INSPECTIONS

The State of Indiana is divided into several geographic inspection areas. Each inspection area has an inspector assigned to carry out facility inspections. All permitted facilities are inspected, at least, every three to five weeks. If a complaint is lodged against a facility, an additional inspection will take place. All inspections are carried out unannounced. Each inspector carefully examines the site against a checklist (See Appendix U) and conditions specified in each individual permit. Permit conditions may vary with each site.

Indiana's inspection staff is also on-call for complaints about open dumping in their inspection area. The inspector will work with local health departments to clean up the open dumping according to 329 IAC 2-4-4. An inspector will attempt to determine

a party responsible for clean up of the site through interviews of the complainant and by researching land ownership records.

The inspection staff provides summaries of problems and histories of permitted sites for enforcement action. They also provide technical assistance to Municipal Solid Waste Landfill (MSWLF) unit owners and operators, as well as, assistance to county health departments and solid waste districts in Indiana.

GROUNDWATER MONITORING

The Geology Section conducts a documentation review and an on-site inspection of monitoring wells before renewing a permit. The document review includes assessing the ground water monitoring system. If the system has been determined to be inadequate, then the geologist would provide technical assistance to the facility to upgrade the system. The geologist may also inspect a facility when they are notified that one or more wells were inadvertently destroyed by daily operational activities. The staff's authority to inspect and investigate for violations is IC 13-7-5-3(a). The authority to investigate, allows IDEM staff to take ground water samples for independent analysis.

> IC 13-7-5-3(a) The department may have a designate agent, upon presentation of proper credentials, enter upon private or public property to inspect for and investigate possible violation of IC 13-1-1, IC 13-1-3, IC 13-1-5, IC 13-1-5.5, IC 13-1-5.7, IC 13-1-12, this article, or any rule adopted by one (1) of the boards.

If an owner or operator refuses entry to a facility or refuses to allow staff to take ground water samples, the department would pursue the securing of a search warrant from a local court having jurisdiction.

This section reviews and evaluates ground water quality data for significant statistical differences. If differences do occur, the geologist would provide technical assistance to the facility to develop plans for assessing and, if necessary, correcting the ground water contamination.

ENGINEERING COMPLIANCE MONITORING

The Engineering Section inspects the MSWLF unit to ensure compliance with the facility permit which contains the approved design specifications. The Engineering Section reviews construction quality control/quality assurance reports and as-built plans for newly constructed cells. Staff performs on-site inspections that include: random survey of the facility for subgrade, boundary and final contours to ensure compliance with the approved plans.

At the request of the facility inspector or occasionally by the public, the engineer will check the facility for proper grading, erosion, leachate seepage or outbreaks, maintenance of the hydraulic system (drainage ditches, sedimentation ponds, down chutes, etc.) and the potential for methane gas release.

The Engineering Section staff is also available to provide technical assistance to the facility compliance staff and the MSWLF unit to correct any noncompliance problems.

X. INDIANA SOLID WASTE ENFORCEMENT

I. Goals

Indiana's solid waste enforcement program is guided by three (3) primary goals: achieving **compliance,** establishing **deterrence** and **improving the environment**. **Compliance** is achieved when:

- open dumps are satisfactorily cleaned up and remediated;
- landfills and solid waste processing facilities return to construction and operational practices in line with Indiana's solid waste rule, 329 IAC 2 and the Environmental Management Act, IC 13-7; and
- transporters and transfer stations are brought back into compliance with the transportation and manifesting requirements of 329 IAC 2 and IC 13-7.

Deterrence is accomplished through:

- assessment of penalties which will deter violators and others from open dumping; and
- assessment of penalties against operators and owners of solid waste processing and disposal facilities which create an incentive for those individuals to construct and operate their facilities in accordance with applicable standards.

Improvement of the environment is achieved by:

- using enforcement actions as leverage to get landfills and solid waste processing facilities to take steps that protect the environment above and beyond regulatory requirements, and to establish pollution prevention efforts in facilities such as solid waste incinerators.

II. Statutory Enforcement Structure

The enforcement powers of the Indiana Department of Environmental Management (IDEM) are contained in the Indiana Code Title 13, and are quite broad. The statutes provide IDEM the authority to initiate administrative and civil actions to enforce its solid waste laws and regulations. Penalties of up to $25,000 per violation per day may be

assessed pursuant to IC 13-7-13-1. The statutes also establish a category of environmental crimes in IC 13-7-13-3 and 4. The following is a description of each type of enforcement action:

A. Administrative Enforcement

1. Notice of Violation and Agreed Order (IC 13-7-11-2(b))

Formal administrative enforcement begins when IDEM issues a Notice of Violation (NOV) which cites the rule(s) or statute(s) violated, the date(s) and location(s) of the violation(s), what was observed, and includes an offer to settle within sixty (60) days of receipt of the NOV. The NOV also may include a proposed date for a settlement conference, a contact person, and a phone number. In solid waste actions, a proposed Agreed Order (AO) is routinely attached. The AO consists of the proposed Findings of Fact, which in general repeat the findings of the NOV, and an Order, which contains what steps are needed for the violator to return to compliance, a civil penalty for the alleged violation(s), and stipulated penalties for failure to comply with the AO.

2. Commissioner's Order, (IC 13-7-11-2 and 5)

If settlement is not achieved within the sixty (60)-day period noted above, the Commissioner may issue a unilateral Commissioner's Order (CO), which is similar to the proposed AO, except for a different format and the fact that only the Commissioner's signature is needed for it to take effect.

After receipt of the CO, the violator has fifteen (15) days to request an administrative review. If the request is received within this timeframe, an Administrative Law Judge (ALJ) is appointed to conduct review proceedings on behalf of the Indiana Solid Waste Management Board. Prior to the administrative hearing, the parties may still settle the case by entering into an AO.

If the case proceeds to hearing, the ALJ enters evidence in the record, hears testimony and arguments, and makes a finding and order. The Board may approve, modify, reject or remand the recommendation with or without instructions to the ALJ.

3. Judicial Review (IC 4-21.5-5)

Judicial review of a Board action on a contested CO is available pursuant to IC 4-21.5-5 when all administrative remedies have been exhausted. Judicial review is initiated by either party filing a petition for review in the appropriate court. If the Commissioner files for judicial review, he or she is represented by the Office of the Attorney General (AG).

4. Governor's Emergency Order (IC 13-7-12-1)

If the Commissioner, in consultation with the Secretary of the Indiana Department of Health, concludes that the contamination constitutes a clear and present danger to the

health and safety of persons in any area, this determination shall be immediately communicated to the Governor with a request that the Governor declare that an emergency exists. The Governor may then proclaim that an emergency exists and order all persons causing or contributing to the contamination to reduce or discontinue immediately the emission or discharge of the contaminants.

B. Civil Enforcement

1. IC 13-7-5-7

The Commissioner may proceed in court under this statute to enforce an AO, CO or EO, or any final order of the Solid Waste Board, or to secure compliance with any environmental law over which he or she has jurisdiction.

2. IC 13-7-12-2

The Commissioner may bring suit under this statute for emergency injunctive proceedings if evidence is received that pollution is presenting an imminent and substantial threat to the public's health or welfare.

C. Criminal Enforcement

Pursuant to IC 13-7-13-3, any person who intentionally, knowingly, recklessly or negligently violates an IDEM statute, rule, permit or order or determination of the Commissioner, is subject to criminal prosecution, imprisonment and/or a fine.

III. IDEM Organizational Structure

A. Compliance

Compliance is determined by the staff of the **Office of Solid and Hazardous Waste Management (OSHWM), Solid Waste Management and Permit Branches.** Information concerning violations is received from various sources:

1. Open dumps - complaints, county health departments, solid waste districts;

2. Permitted solid waste facilities - regularly scheduled inspections and surveys by OSHWM inspectors, geologists and engineers, as well as the sources noted for open dumps;

3. Waste transporters and originating transfer stations - review of solid waste manifests by manifest tracking staff, review of landfill and transfer station records, and periodic spot checks of shippers at landfills.

Warning letters are issued by both the Compliance (inspections) Section, Solid Waste Management Branch, and the various technical sections of the Solid Waste Permit Branch for first time violations and/or minor violations.

B. Administrative and Civil Enforcement

If compliance is not achieved by warning letters issued by OSHWM, a referral is then made to the **Solid Waste Enforcement Section, Office of Enforcement,** which initiates all **formal enforcement** (NOV/AO's, CO's, court actions) for all non-criminal solid waste violations. The **Office of Enforcement** (OE) is a newly created division of IDEM which consists of a **Director** who administers four (4) sections (solid waste, hazardous waste, water and air). The duties of the Office of Enforcement are to initiate, resolve, and, where necessary, escalate enforcement actions in order to achieve compliance, promote deterrence and improve the environment.

The Solid Waste Enforcement section consists of one (1) section chief and five (5) enforcement case managers. When a referral is received from OSHWM, the Section Chief assigns the case to one of the case managers. The case manager, in consultation with the referring inspector or technical staff and an attorney from the Office of Legal Counsel (OLC), develops a proposed enforcement strategy for management approval. In most cases, an NOV and proposed AO are developed for internal review. Any civil penalties are calculated using the IDEM Civil Penalty Policy and its penalty calculation sheet.

The proposed NOV/AO is routed for review to the Director, who signs the NOV for those violations for which he or she has been delegated signature authority from the Commissioner. Other NOV's are routed to the Commissioner for signature.

If review of the violations indicates that civil enforcement is necessary or preferable, a referral to the Attorney General's (AG) office is developed by the OE case manager for approval by the Director and the Deputy Commissioner for Legal Affairs and Enforcement. A Deputy Attorney General, in conjunction with OE and OLC staff, prepares a filing for civil court.

C. Criminal Enforcement

IDEM has an Office of Environmental Investigations (OEI) which consists of a Director, five (5) investigators and a person who handles initial case screening. OEI investigates environmental crimes, and then refers them to the appropriate county prosecutor to file charges under IC 13-7-13-3. Neither IDEM nor the AG have original jurisdiction to prosecute environmental crimes.

XI. ADMINISTRATIVE ORDERS AND PROCEDURES

The environmental boards are empowered by statute to review the orders and determinations of the commissioner of the Indiana Department of Environmental Management (IDEM). The provisions are set forth in IC 13-1-12-8(a)(2) for the solid waste management board.

An adjudication or objections hearing before the board is an appeal of an Administrative Law Judge's (ALJ) decision approving or denying a party's petition of a permit approval or an enforcement action. The purpose of a hearing before the board is to review the evidence and testimony presented to the ALJ and to determine if the ALJ has made the legally correct decision in interpreting the laws and regulations that apply to the case. Board members are provided information including the ALJ's recommended findings of fact along with conclusions of law and order, objections of the ALJ's recommended order and response of the other party to the objections.

The statutory procedures for board adjudications are set forth in IC 4-21.5 et seq. (See Appendix Q) The following summarizes procedures for ALJ decisions and board adjudications.

(1) The procedures apply to orders of IDEM, (i.e. permits, Notices of Violation (NOV) and other agency orders).

(2) Notice of the issuance of agency orders must be given to:
(a) the person to whom the order is directed (permit, NOV),
(b) persons whom the law requires be notified (permit, NOV),
(c) competitors for the permit (permit),
(d) persons who have requested notification (permit),
(e) persons with a proprietary interest in the subject matter of the order (permit), and
(f) any other persons whose absence would deny another party complete relief, or who claim an interest in the subject matter and whose absence would have an impact on the rights of other persons.

(3) A person who is directly affected by the order may file a petition for review.

(4) An ALJ reviews the petition, receives evidence regarding the petition, hears oral arguments on the petition and issues a recommended order.

(5) If no objection to the recommended order is made, the recommended order becomes a final order when (and if) it is affirmed by the board.

(6) A party may object to the ALJ's order if he or she is not in default, identifies the basis of the objection and files the objection within fifteen (15) days after the order is served on the petitioner.

(7) Board members review the ALJ's recommended findings of fact, and conclusions of law and order, as well as the parties' objections and responses prior to the board meeting or hearing.

(8) At the board meeting or hearing, the chairperson of the board provides an opening statement describing the case and outlining the board's options regarding the objections hearing. The board can affirm, modify or dissolve the ALJ's order. The board can remand the matter, with or without instructions, to an ALJ for further proceedings.

(9) Each party to an objections hearing has the opportunity to present briefs and oral arguments.

(10) The final order of the board must identify any differences between the board's final order and the ALJ's nonfinal order, including findings of fact, and briefly explain the available procedures and time limit for seeking administrative review of the final order by another agency (if one is available).

(11) After all administrative remedies have been exhausted, a person with standing may appeal the board's final order to a state court.

XII. ENVIRONMENTAL LEGAL ACTIONS

A citizen suit may be brought against an entity for allegedly polluting, impairing or destructing the environment of Indiana. The suit is not the same as any of the legal actions discussed in Chapter X, Enforcement. This action is brought in a circuit or superior court in the county in which the pollution, impairment or destruction is alleged to have occurred. The following summarizes procedures for judicial adjudication.

(1) As per IC 13-6-1, (See Appendix R) an attorney general, state, city, town, county, local agency or officer vested with the authority to seek judicial relief, citizen of Indiana, or a corporation, partnership or an association maintaining an office in Indiana may bring an action in the name of the state against a legal entity or its legal representative, agent or assigns for the protection of the environment of Indiana from significant pollution, impairment or destruction.

(2) As a condition precedent to maintaining an action, notice must be given in writing by registered or certified mail to the department of natural resources, the department of environmental management and the attorney general who shall promptly notify all state administrative agencies having jurisdiction over, or control of, the pollution, impairment, destruction or protection of the environment.

(3) Action may not be maintained unless none of the state administrative agencies commences an administrative proceeding or a civil action on the alleged pollution, impairment or destruction, or takes steps to have a criminal prosecution commenced on the alleged pollution, impairment or destruction within ninety (90) days after receiving notice. In addition, action may not be maintained unless the state administrative agency that commences an administrative proceeding or a civil action does not diligently pursue the administrative proceeding or civil action after it is commenced.

(4) The petitioner bringing an action is permitted to intervene as a party in the action for judicial review. An action is brought in a circuit or superior court in the county in which the significant pollution, impairment or destruction is alleged to have occurred. The court may dismiss the action where a petitioner seeking judicial adjudication as provided by IC 13-6-1 has willfully and inexcusably failed to intervene in any administrative, licensing or other such proceeding where intervention was available.

INTERVENTION AUTHORITY

In addition to the citizen's suit provisions described above, a citizen may also intervene in an administrative hearing proceeding. IC 4-21.5-3-21 outlines the procedure which must be followed in filing a petition of intervention at the beginning of a hearing. Such a petition must either "state facts demonstrating that a statute gives the petitioners an unconditional right to intervene in the proceeding" or it must demonstrate "that the petitioner is aggrieved or adversely affected by the order or a statute gives the petitioner a conditional right to intervene...". A citizen may also intervene after the beginning of a hearing but before the close of evidence if "a statute confers a conditional right to intervene or an applicant's claim or defense and the main action have a question of law or fact in common; and the administrative law judge determines that the interests of justice and the orderly and prompt conduct of the proceedings will not be impaired by allowing the intervention."

XIII. OTHER STATE AND LOCAL AGENCIES' INVOLVEMENT IN SOLID WASTE MANAGEMENT

The Office of Solid and Hazardous Waste Management (OSHWM) has the primary responsibility for solid waste management in Indiana. However, other Indiana Department of Environmental Management (IDEM) offices, other state agencies and local agencies contribute their roles to solid waste management in Indiana.

OFFICE OF WATER MANAGEMENT

IDEM's Office of Water Management (OWM) evaluates the proposed placement of any landfills into a water, including wetlands, of Indiana. Section 404 of the Clean Water Act requires a person to obtain a permit from the U.S. Army Corps of Engineers (COE) before placing fill material into a water of the United States. Before the COE can complete the processing of the application for the Section 404 permit, Section 401 of the Clean Water Act requires the applicant to provide to the COE a Water Quality Certification from the state in which the discharge is to occur. Section 401 Water Quality Certification is a statement by the state that the project will not cause violations of the water quality standards of that state that are unreasonable and against public interest. Presently, IDEM does not make the determination as to what are waters of the United States. That is determined by the COE and federal law.

(9) Each party to an objections hearing has the opportunity to present briefs and oral arguments.

(10) The final order of the board must identify any differences between the board's final order and the ALJ's nonfinal order, including findings of fact, and briefly explain the available procedures and time limit for seeking administrative review of the final order by another agency (if one is available).

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OWM staff research IDEM files for any existing information on the applicant, the project site, etc. Staff also consult the U.S. Fish and Wildlife Service's National Wetland Inventory Maps. These maps provide a guideline as to what wetland or other water of the United States may exist at the site. Staff will usually make an on-site investigation of the project site. Many investigations are done in conjunction with personnel from the Indiana Department of Natural Resources and the U.S. Fish and Wildlife Service. On-site investigations also normally involve meeting with the applicant.

If the project will not cause violations of the water quality standards of the State of Indiana that are unreasonable and against the public interest, the Assistant Commissioner for OWM sends a letter to the COE stating that IDEM grants Section 401 Water Quality Certification. The COE must incorporate any conditions of the Certification in the Section 404 permit.

If OWM staff cannot approve the project as proposed, the applicant may supply written modifications of the project which avoid impacts to wetlands or other waters, or submit a mitigation plan designed to adequately mitigate for unavoidable impacts. IDEM then may grant the certification if the modifications or mitigation is acceptable. If the project cannot be made acceptable, IDEM denies Section 401 Water Quality Certification. Upon receipt of the denial of Section 401 Water Quality Certification, the COE must inform the applicant that the Section 404 permit is denied "without prejudice"!

In addition, OWM staff issue National Pollutant Discharge Elimination System (NPDES) permits. These apply to point source discharges which enter the waters of the state or municipal sewer systems. Part of the NPDES permit system involves storm water permits. Under the current Phase 1 of the federal program, this pertains to active and inactive landfills which receive or have received industrial wastes and/or construction and demolition wastes. These landfill sites that collect surface water run-on and run-off, and have a point source discharge must obtain a storm water permit. If a landfill has completed proper closure through 329 IAC 2, it is exempt from obtaining a storm water permit. Municipally owned and operated landfills (except for uncontrolled sanitary landfills) which are located in municipalities with a population below 100,000 are currently exempt from obtaining NPDES storm water permits while under the current Phase 1 of the federal program. Federal regulations define "uncontrolled sanitary landfill" as a landfill or open dump, whether in operation or closed, that does not meet the requirements for run-on and run-off controls established pursuant to Subtitle D of the Solid Waste Disposal Act. Storm water regulations are found under 40 CFR 122.26 (Federal) and 327 IAC 15-5 and 15-6 (State).

Also, OWM staff are involved with the state industrial waste pretreatment permit program. However, some larger cities with many industries oversee their own industrial waste pretreatment programs. The industrial waste pretreatment program applies to leachate that is collected from landfills and taken to publicly-owned treatment works (POTW). These wastes must meet requirements for contamination limits before being discharged into a POTW. Those facilities, such as a POTW, which receive NPDES permits are inspected and sampled by OWM staff to ensure that all permit limits and conditions are being met. Also, physical, chemical or biological surveys may be conducted in receiving streams to determine if water quality standards are being met.

OFFICE OF AIR MANAGEMENT

The Office of Air Management (OAM) staff evaluate, write and issue permits for construction and operation of major sources of air pollution. OAM follows U.S. EPA guidance in determining whether air emissions from new landfills are subject to the federal Prevention of Significant Deterioration (PSD) construction permit rules. Indiana's PSD rules must conform with federal regulations in order for the U.S. EPA to approve Indiana's State Implementation Plan (SIP). Once a permit is issued under Indiana's PSD rules, it becomes a part of Indiana's SIP. OAM staff also issue permits for solid waste incinerators which, in addition, receive a solid waste processing facility permit from OSHWM staff. Also, generators of power from methane gas from landfills are required to obtain a permit from OAM. Permitting procedures are discussed in 326 IAC 2-1.

The waste collected by the air pollution control equipment, such as fly ash and flue gas desulfurization sludge, along with bottom ash are special wastes. These wastes are regulated by OSHWM staff, and must receive approval to be disposed of in the proper manner at landfills permitted to accept special wastes.

In addition, OAM staff implement standards for personnel conducting asbestos removal and for asbestos training courses. Asbestos is a special waste and its disposal is regulated by OSHWM staff.

Also, OAM staff require a permit in order for landfills to flare off methane gas. The landfill permittee must provide an estimate of emissions. OAM staff check on levels of toxics in the methane to be compared to ambient air concentrations prior to issuing a permit.

INDIANA DEPARTMENT OF HEALTH

The Indiana Department of Health regulates infectious waste through 410 IAC 1-3. This rule establishes standards for the storage, transportation, treatment and disposal of infectious waste. All infectious waste, including effectively treated infectious waste, must be labeled. The label must include the name and address of the generator of the infectious waste, the name and address of the entity treating it, a brief description of the waste, how it is treated and a signature of a responsible party. Also, sharps such as needles, sutures, etc. must be in a proper container to avoid injury. After the infectious waste is effectively treated, it may be disposed of in a manner as solid waste that is not infectious waste. In addition, infectious waste incinerators and the subsequent disposal of the ash are regulated by OSHWM staff.

INDIANA DEPARTMENT OF NATURAL RESOURCES

The Indiana Department of Natural Resources (DNR) is involved with the protection of wetlands and floodways in Indiana. In addition, construction and filling in floodways requires a permit from DNR.

DNR's Division of Reclamation regulates surface mining activities, such as the disposal of coal processing wastes, through the Surface Mining Control and Reclamation Act (SMCRA) and IC 13-4.1. Disposal of coal combustion waste or residue at a mine must be approved through the DNR. Coal processing wastes and coal combustion wastes are monitored for contaminants before being disposed of on-site. Processing wastes and combustion wastes are not co-disposed, unless a demonstration can show it is appropriate. Also, there is on-going ground water monitoring on-site and adjacent areas to assess the impact of the disposal. Other wastes not related to the coal mining process are disposed of at sanitary landfills, pursuant to 329 IAC 2.

The local Soil and Water Conservation Districts (SWCD) are required to inspect landfills biannually for erosion and off-site sedimentation. IC 13-3-1-15 requires these inspections, but does not provide the SWCDs regulatory authority. The SWCD is required to provide written recommendations to address the erosion and sedimentation concerns that are observed during the inspection. DNR's Division of Soil Conservation and Urban Conservation Specialists, or Erosion Control Technicians provide technical expertise to the SWCDs in carrying out these responsibilities.

LOCAL ZONING BOARDS

In Indiana, local governments are responsible for zoning, and therefore have the primary role in siting final disposal facilities. Zoning laws vary among the local governments; some have no laws, while others have specific ordinances governing solid waste disposal facilities. In some cases, local governments require a "special exception" to site a solid waste disposal facility. The procedure to obtain such an exception varies from county to county, so interested persons should contact zoning departments or other responsible agencies within their jurisdictions for detailed information. When zoning laws are in place, potential solid waste management facilities must meet these laws and receive approval from the appropriate local entity before applying to IDEM for a solid waste permit.

OTHER LOCAL INVOLVEMENT

Siting, construction and operation of solid waste management facilities also may be influenced by local regulations that have been developed to tighten existing state and federal regulations. Such local regulations may require review by local engineering, planning and health departments. Also, county health departments may require permitting and inspection of solid waste management facilities.

In addition, Indiana's "Needs Rule" requires a local or regional need in Indiana for new solid waste facilities or major modifications of permits issued after March 20, 1990. (See Appendix O for 329 IAC 2-8-12.) OSHWM technical staff look at adopted and approved district solid waste management plans for descriptions of need upon review of permit applications. If the district supports the facility and if it wishes to do so, it may send a letter of support to the technical staff at IDEM. (See Chapter II for a description of Indiana's solid waste management districts.)

XIV. STATE REGULATIONS WHICH MEET SUBTITLE D REQUIREMENTS

The following side-by-side comparison includes existing Indiana language in the right hand column and Federal regulations in the left hand column. Indiana will adopt new language to be as stringent as, or more stringent than, federal regulations in Part 258. The existing and proposed language will be incorporated into a new Indiana rule, under Indiana Administrative Code Title 329. The new article number will be determined after consultation between Indiana Department of Environmental Management, Office of Solid and Hazardous Waste Management staff and Legislative Services Agency staff. An asterisk marks each place where Indiana regulations will be added that are at least as stringent as 40 CFR Part 258.

PART 258 CRITERIA

PART 258 CRITERIA §258.1 PURPOSE, SCOPE, AND APPLICABILITY	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(a) The purpose of this part is to establish minimum national criteria under the Resource Conservation and Recovery Act (RCRA or the Act), as amended, for all municipal solid waste landfill (MSWLF) units and under the Clean Water Act, as amended, for municipal solid waste landfills that are used to dispose of sewage sludge. These minimum national criteria ensure the protection of human health and the environment.	*(SEE PAGE 113)
(b) These Criteria apply to owners and operators of new MSWLF units, existing MSWLF units, and lateral expansions, except as otherwise specifically provided in this part; all other solid waste disposal facilities and practices that are not regulated under Subtitle C of RCRA are subject to the criteria contained in Part 257.	*
(c) These Criteria do not apply to municipal solid waste landfill units that do not receive waste after October 9, 1991.	*
(d) MSWLF units that receive waste after October 9, 1991 but stop receiving waste before October 9, 1993 are exempt from all the requirements of this part 258, except the final cover requirement specified in Section 258.60(a). The final cover must be installed within six months of last receipt of wastes. Owners or operators of MSWLF units described in this paragraph that fail to complete cover installation within this six month period will be subject to all the requirements of this part 258, unless otherwise specified.	*

PART 258 CRITERIA

PART 258 CRITERIA §258.1 PURPOSE, SCOPE, AND APPLICABILITY (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(e) All MSWLF units that receive waste on or after October 9, 1993 must comply with all requirements of this part 258 unless otherwise specified.	*(SEE PAGE 113)
(f)(1) Owners or operators of new MSWLF units, existing MSWLF units, and lateral expansions that dispose of less than twenty [20] tons of municipal solid waste daily, based on an annual average are exempt from subparts D and E of this part, so long as there is no evidence of existing ground-water contamination from the MSWLF unit, and the MSWLF unit serves:	(NOT APPLICABLE)
(i) a community that experiences an annual interruption of at least three consecutive months of surface transportation that prevents access to a regional waste management facility, or	
(ii) a community that has no practicable waste management alternative and is located in an area that annually receives less than or equal to 25 inches of precipitation.	
(2) Owners or operators of new MSWLF units, existing MSWLF units, and lateral expansions that meet the criteria in paragraph (f)(1)(i) or (f)(1)(ii) of this section must place in the operating record information demonstrating this.	
(3) If the owner or operator of a new MSWLF unit, existing MSWLF unit, or lateral expansion has knowledge of ground-water contamination resulting from the unit that has asserted the exemption in paragraph (f)(1)(i) or (f)(1)(ii) of this section, the owner or operator must notify the State Director of such contamination and, thereafter, comply with subparts D and E of this part.	

PART 258 CRITERIA

PART 258 CRITERIA §258.1 PURPOSE, SCOPE, AND APPLICABILITY(Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(g) Municipal solid waste landfill units failing to satisfy these criteria are considered open dumps for purposes of State solid waste management planning under RCRA.	329 IAC 2-4-3 Open dumping and open dumps, as those terms are defined in IC 13-7-1-16, are prohibited. IC 13-7-1-16(a) "Open dump" means the consolidation of solid waste from one (1) or more sources or the disposal of solid waste at a single disposal site that does not fulfill the requirements of a sanitary landfill or other land disposal method as prescribed by law or regulations, and that is established and maintained without cover and without regard to the possibilities of contamination of surface or subsurface waste resources. (b) "Open dumping" means the act of disposing of solid waste at an open dump. 329 IAC 2-4-1 The purpose of this rule is to implement the provisions of: (1) IC 13-7-4-1(3) relating to the deposit of contaminants or solid waste upon the land except as permitted in these rules; and (2) IC 13-7-4-1(4) and IC 36-9-30-35 prohibiting dumping, causing, or allowing the open dumping of garbage or of other solid waste in violation of these rules.
(h) Municipal solid waste landfill units failing to satisfy these criteria constitute open dumps, which are prohibited under Section 4005 of RCRA.	
(i) Municipal solid waste landfill units containing sewage sludge and failing to satisfy these Criteria violate sections 309 and 405(e) of the Clean Water Act.	*(SEE PAGE 113)
(j) The effective date of this part is October 9, 1993, except subpart G of this part 258 is effective April 9, 1994.	(ALL LISTED INDIANA RULES, STATUTES AND POLICIES ARE ALREADY IN EFFECT. **NEW INDIANA LANGUAGE WILL BE ADDED THAT IS AS STRINGENT AS, OR MORE STRINGENT THAN, THE FEDERAL REGULATIONS IN PART 258 CRITERIA. TENTATIVELY, PROPOSED RULES WILL BE EFFECTIVE BY DECEMBER 1994.)**

PART 258 CRITERIA

PART 258 CRITERIA §258.2 DEFINITIONS	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
Unless otherwise noted, all terms contained in this part are defined by their plain meaning. This section contains definitions for terms that appear throughout this part; additional definitions appear in the specific sections to which they apply.	
"Active life" means the period of operation beginning with the initial receipt of solid waste and ending at completion of closure activities in accordance with §258.60 of this part.	*(SEE PAGE 113)
"Active portion" means that part of a facility or unit that has received or is receiving wastes and that has not been closed in accordance with §258.60 of this part.	*
"Aquifer" means a geological formation, group of formations, or portion of a formation capable of yielding significant quantities of ground water to wells or springs.	329 IAC 2-2-1(b)(3) "Aquifer" means a geologic formation, group of formations, or part of a formation, that is capable of yielding a significant amount of ground water.
"Commercial solid waste" means all types of solid waste generated by stores, offices, restaurants, warehouses, and other nonmanufacturing activities, excluding residential and industrial wastes.	*

PART 258 CRITERIA

PART 258 CRITERIA §258.2 DEFINITIONS (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
"Director of an approved State" means the chief administrative officer of a State agency responsible for implementing the State municipal solid waste permit program or other system of prior approval that is deemed to be adequate by EPA under regulations published pursuant to section 4005 of RCRA.	329 IAC 2-2-1(a)(1) "Commissioner" refers to the commissioner of the department created under IC 13-7-2-11 (the department of environmental management).
"Existing MSWLF unit" means any municipal solid waste landfill unit that is receiving solid waste as of the effective date of this part (October 9, 1993). Waste placement in existing units must be consistent with past operating practices or modified practices to ensure good management.	*(SEE PAGE 113)
"Facility" means all contiguous land and structures, other appurtenances, and improvements on the land used for the disposal of solid waste.	329 IAC 2-2-1(b)(54) "Solid waste facility" or "facility" means all contiguous land and structures, other appurtenances, and improvements on the land, used for processing, storing in conjunction with processing or disposal, or disposing of solid waste, and may consist of several processing, storage, or disposal operational units, e.g., one (1) or more landfills, surface impoundments, or combinations thereof. 329 IAC 2-2-1(b)(55) "Solid waste land disposal facility" means a solid waste facility in or upon the land into which a solid waste is disposed. Permitted solid waste land disposal facilities shall be classified into one (1) of the following types: (A) Sanitary landfill. (B) Construction/demolition sites. (C) Restricted waste sites.
"Ground water" means water below the land surface in a zone of saturation.	329 IAC 2-2-1(b)(23) "Ground water" means water below the land surface in the zone of saturation.
"Household waste" means any solid waste (including garbage, trash, and sanitary waste in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas).	*

PART 258 CRITERIA

PART 258 CRITERIA §258.2 DEFINITIONS (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
"Industrial solid waste" means solid waste generated by manufacturing or industrial processes that is not a hazardous waste regulated under subtitle C of RCRA. Such waste may include, but is not limited to, waste resulting from the following manufacturing processes: Electric power generation; fertilizer/agricultural chemicals; food and related products/by-products; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing/foundries; organic chemicals; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay, and concrete products; textile manufacturing; transportation equipment; and water treatment. This term does not include mining waste or oil and gas waste.	320 IAC 2-2-1(b)(25) "Industrial process waste" includes, but is not limited to, oil, lubricants, resins, chemical catalysts, distillation bottoms, ink, paint sludges, grinding sludges, incinerator ash, core sand, metallic dust sweepings, material which may create asbestos dust, contaminated or recalled wholesale or retail products.
"Lateral expansion" means a horizontal expansion of the waste boundaries of an existing MSWLF unit.	*(SEE PAGE 113)
"Leachate" means a liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials removed from such waste.	329 IAC 2-2-1(b)(29) "Leachate" means liquid that has passed through or emerged from solid waste and contains soluble, suspended, immiscible, or miscible materials removed from such wastes.

PART 258 CRITERIA

PART 258 CRITERIA §258.2 DEFINITIONS (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
"Municipal solid waste landfill unit" means a discrete area of land or an excavation that receives household waste, and that is not a land application unit, surface impoundment, injection well, or waste pile, as those terms are defined under §257.2. A MSWLF unit also may receive other types of RCRA subtitle D wastes, such as commercial solid waste, nonhazardous sludge, small quantity generator waste and industrial solid waste. Such a landfill may be publicly or privately owned. A MSWLF unit may be a new MSWLF unit, an existing MSWLF unit or a lateral expansion.	*(SEE PAGE 113)
"New MSWLF unit" means any municipal solid waste landfill unit that has not received waste prior to the effective date of this part (October 9, 1993).	*
"Open burning" means the combustion of solid waste without: (1) Control of combustion air to maintain adequate temperature for efficient combustion, (2) Containment of the combustion reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion, and (3) Control of the emission of the combustion products.	329 IAC 2-2-1(a)(8) "Open burning" means the combustion of any matter in the open or in an open dump.
"Operator" means the person(s) responsible for the overall operation of a facility or part of a facility.	329 IAC 2-2-1(b)(36) "Operating personnel" means persons necessary to properly operate a solid waste land disposal or processing facility.

PART 258 CRITERIA

PART 258 CRITERIA §258.2 DEFINITIONS (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
"Owner" means the person(s) who owns a facility or part of a facility.	*(SEE PAGE 113)
"Run-off" means any rainwater, leachate, or other liquid that drains over land from any part of a facility.	*
"Run-on" means any rainwater, leachate, or other liquid that drains over land onto any part of a facility.	*
"Saturated zone" means that part of the earth's crust in which all voids are filled with water.	*
"Sludge" means any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility exclusive of the treated effluent from a wastewater treatment plant.	329 IAC 2-2-1(b)(51) "Sludge" means any solid, semisolid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility.

PART 258 CRITERIA

PART 258 CRITERIA §258.2 DEFINITIONS (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
"Solid waste" means any garbage, or refuse, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved materials in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges that are point sources subject to permit under 33 U.S.C. 1342, or source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923).	329 IAC 2-2-1(a)(12) "Solid waste" means any garbage, refuse, sludge from a waste treatment plant, sludge from a water supply treatment plant, sludge from an air pollution control facility, or other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, or agricultural operations or from community activities. However, the term "solid waste" does not include: (A) solid or dissolved material in domestic sewage or solid or dissolved materials in irrigation return flows or industrial discharges, which are point source subject to permits under Section 402 of the Federal Water Pollution Control Act Amendments (33 U.S.C. 1342); (B) source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 U.S.C.2011 et seq.); or (C) manures or crop residues return [*sic.*] to the soil at the point of generation as fertilizers or soil conditioners as part of a total farm operation. (IC 13-7-1-22)
"State" means any of the several States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Marianas Islands.	(NOT APPLICABLE)
"State Director" means the chief administrative officer of the State agency responsible for implementing the State municipal solid waste permit program or other system of prior approval.	329 IAC 2-2-1(a) (1) "Commissioner" refers to the commissioner of the department created under IC 13-7-2-11 (the department of environmental management).

PART 258 CRITERIA

PART 258 CRITERIA §258.2 DEFINITIONS (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
"Uppermost aquifer" means the geologic formation nearest the natural ground surface that is an aquifer, as well as, lower aquifers that are hydraulically interconnected with this aquifer within the facility's property boundary.	*(SEE PAGE 113)
"Waste management unit boundary" means a vertical surface located at the hydraulically downgradient limit of the unit. This vertical surface extends down into the uppermost aquifer.	*

PART 258 CRITERIA §258.3 CONSIDERATION OF OTHER FEDERAL LAWS	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
The owner or operator of a municipal solid waste landfill unit must comply with any other applicable Federal rules, laws, regulations, or other requirements.	*(SEE PAGE 113)

§§258.4 - 258.9 [Reserved]

PART 258 CRITERIA

SUBPART B – LOCATION RESTRICTIONS §258.10 AIRPORT SAFETY	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(a) Owners or operators of new MSWLF units, existing MSWLF units, and lateral expansions that are located within 10,000 feet (3,048 meters) of any airport runway end used by turbojet aircraft or within 5,000 feet (1,524 meters) of any airport runway end used by only piston-type aircraft must demonstrate that the units are designed and operated so that the MSWLF unit does not pose a bird hazard to aircraft.	329 IAC 2-14-7(d) Sanitary landfill which operates within ten thousand (10,000) feet (three thousand forty-eight (3,048) meters) of any airport runway used by turbo-jet aircraft or within five thousand (5,000) feet (one thousand five hundred twenty-four (1,524)(meters) of any airport runway used by only piston-type aircraft shall not pose a bird hazard to aircraft. (IDEM'S LANDFILL INSPECTORS MONITOR LANDFILLS FOR BIRDS AND VECTORS.)
(b) Owners or operators proposing to site new MSWLF units and lateral expansions located within a five-mile radius of any airport runway end used by turbojet or piston-type aircraft must notify the affected airport and the Federal Aviation Administration (FAA).	*(SEE PAGE 113)
(c) The owner or operator must place the demonstration in paragraph (a) of this section in the operating record and notify the State Director that it has been placed in the operating record.	
(d) For purposes of this section:	
(1) "Airport" means public-use airport open to the public without prior permission and without restrictions within the physical capacities of available facilities.	329 IAC 2-2-1(b)(2) "Airport" means a public use airport open to the public without prior permission and without restrictions within the physical capacities of available facilities and military airports.
(2) "Bird hazard" means an increase in the likelihood of bird/aircraft collisions that may cause damage to the aircraft or injury to its occupants.	*

PART 258 CRITERIA

PART 258 CRITERIA §258.11 FLOODPLAINS	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(a) Owners or operators of new MSWLF units, existing MSWLF units, and lateral expansions located in 100-year floodplains must demonstrate that the unit will not restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain, or result in washout of solid waste so as to pose a hazard to human health and the environment. The owner or operator must place the demonstration in the operating record and notify the State Director that it has been placed in the operating record.	329 IAC 2-10-1 On and after the effective date of this article, the solid waste boundary of new solid waste land disposal facilities and the additional areas beyond that which has been previously approved for existing solid waste land disposal facilities, shall be prohibited from the following areas: (1) For sanitary landfills: (C) floodways of drainage areas greater than one (1) square mile, without the approval of the department of natural resources and floodways without provisions to prevent washout of the waste: (THE DEPARTMENT OF NATURAL RESOURCES APPROVAL IS PER THE FLOOD CONTROL ACT. THERE ARE THREE (3) CRITERIA EVALUATED FOR APPROVAL: (1) WILL THE LANDFILL HAVE AN ADVERSE EFFECT ON THE CAPACITY OF THE FLOODWAY? (2) WILL THE LANDFILL HAVE AN ADVERSE EFFECT ON FISH AND WILDLIFE? (3) WILL THE LANDFILL ADVERSELY AFFECT THE SAFETY TO LIFE AND PROPERTY? SEE APPENDIX G FOR FLOOD CONTROL ACT.) (I) within the floodplain unless the waste is protected from floodwater inundation by a dike with a top elevation not less than three (3) feet above the base flood elevation. (DNR REVIEWS ENSURE THE UNIT WILL NOT RESTRICT THE FLOW OF THE 100-YEAR FLOOD OR REDUCE THE TEMPORARY WATER STORAGE CAPACITY OF THE FLOODPLAIN. IDEM PERMITTING REQUIREMENTS (329 IAC 2-10-1(I)) ENSURES THAT THE DIKE WILL PREVENT WASHOUT OF WASTE. THE DIKE IS CONSTRUCTED USING STANDARD CIVIL ENGINEERING PRACTICES. THE PRESENT REGULATIONS COVER FLOODPLAIN SITING REQUIREMENTS FOR NEW AND LATERAL EXPANSIONS OF MSWLF UNITS. **NEW RULE LANGUAGE WILL BE ADDED WHICH IS AS STRINGENT OR MORE STRINGENT THAN FEDERAL REQUIREMENTS FOR EXISTING MSWLF UNITS BEING SITED IN FLOODPLAINS.**)
(b) For purposes of this section:	
(1) "Floodplain" means the lowland and relatively flat areas adjoining inland and coastal waters, including flood-prone areas of offshore islands, that are inundated by the 100-year flood.	329 IAC 2-2-1(b)(19) "Flood plain" means the areas adjoining a river, stream, or lake which are inundated by the base flood as determined by the Indiana department of natural resources.

PART 258 CRITERIA

(2) "100-year flood" means a flood that has a 1-percent or greater chance of recurring in any given year or a flood of a magnitude equalled or exceeded once in 100 years on the average over a significantly long period.

329 IAC 2-2-1(b)(4)

"Base flood" means a flood that has a one percent (1%) or greater chance of recurring in any year or a flood of a magnitude equaled or exceeded once in one hundred (100) years on the average over a significantly long period. In any given one hundred (100) year interval such a flood may not occur, or more than one (1) such flood may occur.

(3) "Washout" means the carrying away of solid waste by waters of the base flood.

329 IAC 2-2-1(b)(62)

"Washout" means the carrying away of solid waste by water of the base flood.

PART 258 CRITERIA

PART 258 CRITERIA §258.12 WETLANDS	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(a) New MSWLF units and lateral expansions shall not be located in wetlands, unless the owner or operator can make the following demonstrations to the Director of an approved State:	329 IAC 2-10-1 On and after the effective date of this article, the solid waste boundary of new solid waste land disposal facilities and the additional areas beyond that which has been previously approved for existing solid waste land disposal facilities, shall be prohibited from the following areas:
(1) Where applicable under section 404 of the Clean Water Act or applicable State wetlands laws, the presumption that a practicable alternative to the proposed landfill is available which does not involved wetlands is clearly rebutted:	(1) For sanitary landfills: (A) wetlands in violation of Section 404 of the Clean Water Act, as amended; (IDEM REVIEWS A 401 CERTIFICATION APPLICATION TO DETERMINE: 1) IF THE APPLICANT CAN AVOID WETLAND IMPACTS BUT STILL ACHIEVE THE GOALS OF THE PROJECT; 2) IF APPLICANT CANNOT AVOID IMPACTS, HOW THOSE IMPACTS CAN BE MINIMIZED; 3) IF IMPACTS CANNOT BE MINIMIZED, HOW APPLICANT WILL MITIGATE FOR ANY LOST WETLAND FUNCTION OR VALUE. THIS CRITERIA DOES REQUIRE ADDRESSING PRACTICABLE ALTERNATIVES. SEE APPENDIX X, WATER QUALITY STANDARDS FOR THE STATE OF INDIANA.)
(2) The construction and operation of the MSWLF unit will not:	
(i) Cause or contribute to violations of any applicable State water quality standard,	(F) within six hundred (600) feet of a potable water well, in use as a water supply for a dwelling or dwellings on the date of public notice for zoning approval for the permitted activity or the date of public notice by the commissioner of the permit application, whichever occurs first, unless written consent is obtained from the owner of the well; (H) within one hundred (100) feet of the normal water line of any lake, reservoir, or continuously flowing stream; (K) within one thousand two hundred (1,200) feet of any public water supply well, in use as such on the date of public notice for zoning approval for permitted activity or the date of public notice by the commissioner of the permit application, whichever occurs first, unless written consent is obtained from the owner of the well.
(ii) Violate any applicable toxic effluent standard or prohibition under Section 307 of the Clean Water Act,	327 IAC 2-1-2(1) 327 IAC 2-1-6 (SEE APPENDIX X)
(iii) Jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of a critical habitat, protected under the Endangered Species Act of 1973, and	329 IAC 2-10-1(1)(B) the critical habitat of an endangered species as defined by 50 C.F.R. 17;
(iv) Violate any requirement under the Marine Protection, Research, and Sanctuaries Act of 1972 for the protection of a marine sanctuary;	(NOT APPLICABLE)

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PART 258 CRITERIA §258.12 WETLANDS (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(3) The MSWLF unit will not cause or contribute to significant degradation of wetlands. The owner/operator must demonstrate the integrity of the MSWLF unit and its ability to protect ecological resources by addressing the following factors:	329 IAC 2-10-1(1) On and after the effective date of this article, the solid waste boundary of new solid waste land disposal facilities and additional areas beyond that which has been previously approved for existing solid waste land disposal facilities, shall be prohibited from the following areas: (1) For sanitary landfills: (A) wetlands in violation of Section 404 of the Clean Water Act, as amended;
(i) Erosion, stability, and migration potential of native wetland soils, muds and deposits used to support the MSWLF unit;	327 IAC 2-1 (THESE ITEMS ARE REQUIRED WHEN ISSUING A 401 CERTIFICATION UNDER THE STATE QUALITY STANDARDS. SEE APPENDIX X FOR THE WATER QUALITY STANDARDS FOR THE STATE OF INDIANA.)
(ii) Erosion, stability, and migration potential of dredged and fill materials used to support the MSWLF unit;	
(iii) The volume and chemical nature of the waste managed in the MSWLF unit;	
(iv) Impacts on fish, wildlife, and other aquatic resources and their habitat from release of the solid waste;	
(v) The potential effects of catastrophic release of waste to the wetland and the resulting impacts on the environment; and	

PART 258 CRITERIA

PART 258 CRITERIA §258.12 WETLANDS (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(vi) Any additional factors, as necessary, to demonstrate that ecological resources in the wetland are sufficiently protected.	
(4) To the extent required under section 404 of the Clean Water Act or applicable State wetlands laws, steps have been taken to attempt to achieve no net loss of wetlands (as defined by acreage and function) by first avoiding impacts to wetlands to the maximum extent practicable as required by paragraph (a)(1) of this section, then minimizing unavoidable impacts to the maximum extent practicable, and finally offsetting remaining unavoidable wetland impacts through all appropriate and practicable compensatory mitigation actions (e.g., restoration of existing degraded wetlands or creation of mad-made wetlands); and	(IDEM REVIEWS A 401 CERTIFICATION APPLICATION TO: 1) SEE IF THE APPLICANT CAN AVOID WETLAND IMPACTS BUT STILL ACHIEVE THE GOALS OF THE PROJECT; 2) DETERMINE IF APPLICANT CANNOT AVOID IMPACTS, HOW THOSE IMPACTS CAN BE MINIMIZED; 3) DETERMINE IF IMPACTS CANNOT BE MINIMIZED, HOW APPLICANT WILL MITIGATE FOR ANY LOST WETLAND FUNCTION OR VALUE.)
(5) Sufficient information is available to make a reasonable determination with respect to these demonstrations.	(THE INFORMATION IS REQUIRED BY THE APPLICANT FOR THE 401 CERTIFICATION.)
(b) For purposes of this section, *wetlands* means those areas that are defined in 40 CFR 232.2(r).	329 IAC 2-2-1(b)(65) "Wetlands" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstance do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. (IDEM BELIEVES ITS REGULATIONS ARE CONSISTENT WITH FEDERAL WETLAND REQUIREMENTS BECAUSE LANDFILLS ARE PROHIBITED FROM LOCATING IN A WETLAND UNLESS AUTHORIZED UNDER 404 OF THE CLEAN WATER ACT. IN ADDITION, TO OBTAIN A 404 CERTIFICATE, A COMPREHENSIVE REVIEW IS COMPLETED UNDER SECTION 401. THIS REVIEW INCLUDES THE FEDERAL REQUIREMENTS OF 258.12.)

PART 258 CRITERIA

PART 258 CRITERIA §258.13 FAULT AREAS	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(a) New MSWLF units and lateral expansions shall not be located within 200 feet (60 meters) of a fault that has had displacement in Holocene time unless the owner or operator demonstrates to the Director of an approved State that an alternative setback distance of less than 200 feet (60 meters)will prevent damage to the structural integrity of the MSWLF unit and will be protective of human health and the environment.	*(SEE PAGE 113)
(b) For the purposes of this section:	
(1) "Fault" means a fracture or a zone of fractures in any material along which strata on one side have been displaced with respect to that on the other side.	*
(2) "Displacement" means the relative movement of any two sides of a fault measured in any direction.	*
(3) "Holocene" means the most recent epoch of the Quaternary period, extending from the end of the Pleistocene Epoch to the present.	*

PART 258 CRITERIA

PART 258 CRITERIA §258.14 SEISMIC IMPACT ZONES	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(a) New MSWLF units and lateral expansions shall not be located in seismic impact zones, unless the owner or operator demonstrates to the Director of an approved State/Tribe that all containment structures, including liners, leachate collection systems, and surface water control systems, are designed to resist the maximum horizontal acceleration in lithified earth material for the site. The owner or operator must place the demonstration in the operating record and notify the State Director that it has been placed in the operating record.	*(SEE PAGE 113)
(b) For the purposes of this section:	
(1) "Seismic impact zone" means an area with a ten percent or greater probability that the maximum horizontal acceleration in lithified earth material, expressed as a percentage of the earth's gravitational pull paragraph (g) of this section, will exceed 0.10g in 250 years.	*
(2) "Maximum horizontal acceleration in lithified earth material" means the maximum expected horizontal acceleration depicted on a seismic hazard map, with a 90 percent or greater probability that the acceleration will not be exceeded in 250 years, or the maximum expected horizontal acceleration based on a site-specific seismic risk assessment.	*

PART 258 CRITERIA

PART 258 CRITERIA §258.14 SEISMIC IMPACT ZONES (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(3) "Lithified earth material" means all rock, including all naturally occurring and naturally formed aggregates or masses of minerals or small particles of older rock that formed by crystallization of magma or by induration of loose sediments. This term does not include man-made materials, such as fill, concrete, and asphalt, or unconsolidated earth materials, soil, or regolith lying at or near the earth surface.	*(SEE PAGE 113)

PART 258 CRITERIA

PART 258 CRITERIA §258.15 UNSTABLE AREAS	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(a) Owners or operators of new MSWLF units, existing MSWLF units, and lateral expansions located in an unstable area must demonstrate that engineering measures have been incorporated into the MSWLF unit's design to ensure that the integrity of the structural components of the MSWLF unit will not be disrupted. The owner or operator must place the demonstration in the operating record and notify the State Director that it has been placed in the operating record. The owner or operator must consider the following factors, at a minimum, when determining whether an area is unstable:	329 IAC 2-10-1 On or after the effective date of this article, the solid waste boundary of new solid waste land disposal facilities and the additional areas beyond that which has been previously approved for existing solid waste land disposal facilities, shall be prohibited from the following areas: (D) within areas of karst topography, without provisions to collect and contain all of the leachate generated and without a demonstration that the integrity of the landfill will not be damaged by subsidence; (E) over mines, unless it is demonstrated that the integrity of the landfill will not be damaged by subsidence; (INDIANA HAS ADEQUATE REGULATORY LANGUAGE FOR PROHIBITING NEW LANDFILLS AND LATERAL EXPANSIONS TO BE LOCATED IN KARST TERRANES AND OVER MINES; **PROPOSED LANGUAGE WILL BE ADDED TO INCLUDE PROHIBITION OF EXISTING LANDFILLS IN KARST TARRANES AND OVER MINES. LANGUAGE WILL ALSO BE ADDED TO PROHIBIT NEW MSWLF UNITS, LATERAL EXPANSIONS, AND EXISTING MSWLF UNITS IN OTHER UNSTABLE AREAS.)**
(1) On-site or local soil conditions that may result in significant differential settling;	
(2) On-site or local geologic or geomorphologic features; and	
(3) On-site or local human-made features or events (both surface and subsurface).	
(b) For purposes of this section:	
(1) "Unstable area" means a location that is susceptible to natural or human-induced events or forces capable of impairing the integrity of some or all of the landfill structural components responsible for preventing releases from a landfill. Unstable areas can include poor foundation conditions, areas susceptible to mass movements, and Karst terranes.	***(SEE PAGE 113)**

PART 258 CRITERIA

PART 258 CRITERIA §258.15 UNSTABLE AREAS (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(2) "Structural components" means liners, leachate collection systems, final covers, run-on/run-off systems, and any other component used in the construction and operation of the MSWLF that is necessary for protection of human health and the environment.	*(SEE PAGE 113)
(3) "Poor foundation conditions" means those areas where features exist which indicate that a natural or man-induced event may result in inadequate foundation support for the structural components of an MSWLF unit.	*
(4) "Areas susceptible to mass movement" means those areas of influence (i.e., areas characterized as having an active or substantial possibility of mass movement) where the movement of earth material at, beneath, or adjacent to the MSWLF unit, because of natural or man-induced events, results in the downslope transport of soil and rock material by means of gravitational influence. Areas of mass movement include, but are not limited to, landslides, avalanches, debris slides and flows, soil fluction, block sliding, and rock fall.	*
(5) "Karst terranes" means areas where karst topography, with its characteristic surface and subterranean features, is developed as the result of dissolution of limestone, dolomite, or other soluble rock. Characteristic physiographic features present in karst terranes include, but are not limited to, sinkholes, sinking streams, caves, large springs, and blind valleys.	329 IAC 2-2-1(b)(28) "Karst topography" means a topography formed on a carbonate rock formation and dominated by features of solutional origin.

PART 258 CRITERIA

PART 258 CRITERIA §258.16 CLOSURE OF EXISTING MSWLFS	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(a) Existing MSWLF units that cannot make the demonstration specified in §§285.10(a) pertaining to airports, 258.11(a) pertaining to floodplains, or 258.15(a) pertaining to unstable areas, must close by October 9, 1996, in accordance with §258.60 of this part and conduct post-closure activities in accordance with §258.61 of this part.	*(SEE PAGE 113)
(b) The deadline for closure required by paragraph (a) of this section may be extended up to two years if the owner or operator demonstrates to the Director of an approved State that:	*
(1) There is no available alternative disposal capacity;	
(2) There is no immediate threat to human health and the environment.	
Note to Subpart B: Owners or operators of MSWLFs should be aware that a State in which their landfill is located or is to be located, may have adopted a State wellhead protection program in accordance with section 1428 of the Safe Drinking Water Act. Such State wellhead protection programs may impose additional requirements on owners or operators of MSWLFs than those set forth in this part.	
§§258.17 - 258.19 [Reserved]	

PART 258 CRITERIA

SUBPART C – OPERATING CRITERIA §258.20 PROCEDURES FOR EXCLUDING THE RECEIPT OF HAZARDOUS WASTE	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(a) Owners or operators of all MSWLF units must implement a program at the facility for detecting and preventing the disposal of regulated hazardous wastes as defined in Part 261 of this chapter and polychlorinated biphenyls (PCB) wastes as defined in Part 761 of this chapter. This program must include, at a minimum:	*(SEE PAGE 113)
(1) Random inspections of incoming loads unless the owner or operator takes other steps to ensure that incoming loads do not contain regulated hazardous wastes or PCB wastes;	
(2) Records of any inspections;	
(3) Training of facility personnel to recognize regulated hazardous waste and PCB wastes; and	
(4) Notification of State Director of authorized States under Subtitle C of RCRA or the EPA Regional Administrator if in an unauthorized State if a regulated hazardous waste or PCB waste is discovered at the facility.	
(b) For purposes of this section, "regulated hazardous waste" means a solid waste that is a hazardous waste, as defined in 40 CFR 261.3, that is not excluded from regulation as a hazardous waste under 40 CFR 261.4(b) or was not generated by a conditionally exempt small quantity generator as defined in §261.5 of this chapter.	329 IAC 2-3-2 (a) Hazardous wastes are regulated by and shall be treated, stored, and disposed of in accordance with 329 IAC 3. Hazardous waste which is regulated by 329 IAC 3 is not subject to the provisions of this article. (b) No hazardous waste which is regulated by 329 IAC 3 shall be disposed at any solid waste facility regulated under this article. (c) For the purposes of this article, "hazardous waste which is regulated by 329 IAC 3" does not include hazardous waste which is generated in quantities less than one hundred (100) kilograms per month and is therefore excluded from regulation under the hazardous waste management article, 329 IAC 3. Such small quantities of hazardous waste shall be disposed of in accordance with this article. (d) Facilities permitted under 329 IAC 3 are not required to obtain permits under this article for the storage, treatment, or disposal of nonhazardous solid waste where such solid waste is treated or disposed of as a hazardous waste at the receiving hazardous waste facility.

PART 258 CRITERIA

PART 258 CRITERIA §258.21 COVER MATERIAL REQUIREMENTS	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(a) Except as provided in paragraph (b) of this section, the owners or operators of all MSWLF units must cover disposed solid waste with six inches of earthen material at the end of each operating day, or at more frequent intervals if necessary, to control disease vectors, fires, odors, blowing litter, and scavenging.	329 IAC 2-14-13 Sanitary landfills and restricted waste site type I shall: (2) apply and compact no less than six (6) inches of cover over all exposed solid waste: (A) by the end of each operating day, regardless of weather conditions; or (B) in the case of a facility which is open continuously, at least once in every twenty-four (24) hour period, as specified in the permit; 329 IAC 2-2-1(b)(11) "Cover" means any soil or other suitable material approved by the commissioner placed over the solid waste in accordance with 329 IAC 2-14-12(a).
(b) Alternative materials of an alternative thickness (other than at least six inches of earthen material) may be approved by the Director of an approved State if the owner or operator demonstrates that the alternative material and thickness control disease vectors, fires, odors, blowing litter, and scavenging without presenting a threat to human health and the environment.	329 IAC 2-14-12 (b) Cover shall be applied and maintained at solid waste facilities in accordance with the applicable requirements of this rule. Other provisions for cover may be approved by the commissioner if it can be demonstrated that an alternate cover or site design will provide an adequate level of environmental protection. 329 IAC 2-2-1(b)(11) "Cover" means any soil or other suitable material approved by the commissioner placed over the solid waste in accordance with 329 IAC 2-14-12(a).
(c) The Director of an approved State may grant a temporary waiver from the requirement of paragraph (a) and (b) of this section if the owner or operator demonstrates that there are extreme seasonal climatic conditions that make meeting such requirements impractical.	(INDIANA DOES NOT GRANT WAIVERS, THEREFORE, INDIANA IS MORE STRINGENT.)

PART 258 CRITERIA

PART 258 CRITERIA §258.22 DISEASE VECTOR CONTROL	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(a) Owners or operators of all MSWLF units must prevent or control on-site populations of disease vectors using techniques appropriate for the protection of human health and the environment.	329 IAC 2-14-4 (b) Vectors, dust, and odors shall be controlled by effective means so that they do not constitute or contribute to a nuisance or a health hazard.
(b) For purposes of this section, "disease vectors" means any rodents, flies, mosquitoes, or other animals, including insects, capable of transmitting disease to humans.	329 IAC 2-2-1(b)(61) "Vector" means any animal capable of harboring and transmitting microorganisms from one (1) animal to another or to a human.

PART 258 CRITERIA

PART 258 CRITERIA §258.23 EXPLOSIVE GASES CONTROL	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(a) Owners or operators of all MSWLF units must ensure that:	329 IAC 2-14-20(a) Sanitary landfills shall ensure that:
(1) The concentration of methane gas generated by the facility does not exceed 25 percent of the lower explosive limit for methane in facility structures (excluding gas control or recovery system components); and	(1) the concentration of methane generated by the facility does not exceed twenty-five percent (25%) of the lower explosive limit for the gases in facility structures, excluding gas control or recovery system components; and
(2) The concentration of methane gas does not exceed the lower explosive limit for methane at the facility property boundary.	(2) the concentration of methane gas does not exceed the lower explosive limit for gases at the facility property boundary.
(b) Owners or operators of all MSWLF units must implement a routine methane monitoring program to ensure that the standards of paragraph (a) of this section are met.	329 IAC 2-14-20(b) Sanitary landfills shall implement a methane monitoring program approved by the commissioner to ensure that the standards in subsection (a) are met.
(1) The type and frequency of monitoring must be determined based on the following factors:	329 IAC 2-14-20(b) The type and frequency of monitoring shall be determined based on
(i) Soil conditions;	soil conditions,
(ii) The hydrogeologic conditions surrounding the facility;	hydrogeologic conditions,
(iii) The hydraulic conditions surrounding the facility; and	
(iv) The location of facility structures and property boundaries.	and the location of structures and property boundaries.
(2) The minimum frequency of monitoring shall be quarterly.	*(SEE PAGE 113)

PART 258 CRITERIA

PART 258 CRITERIA §258.23 EXPLOSIVE GASES CONTROL (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(c) If methane gas levels exceeding the limits specified in paragraph (a) of this section are detected, the owner or operator must:	329 IAC 2-14-20(c) If methane gas levels exceed the limits in subsection (a), the permittee shall:
(1) Immediately take all necessary steps to ensure protection of human health and notify the State Director;	(1) within twenty-four (24) hours notify the commissioner; and (2) immediately implement all necessary steps to ensure protection of human health.
(2) Within seven days of detection, place in the operating record the methane gas levels detected and a description of the steps taken to protect human health; and	*(SEE PAGE 113)
(3) Within 60 days of detection, implement a remediation plan for the methane gas releases, place a copy of the plan in the operating record, and notify the State Director that the plan has been implemented. The plan shall describe the nature and extent of the problem and the proposed remedy.	*
(4) The Director of an Approved State may establish alternative schedules for demonstrating compliance with paragraphs (c)(2) and (3) of this section.	
(d) For purposes of this section, "lower explosive limit" means the lowest percent by volume of a mixture of explosive gases in air that will propagate a flame at 25°C and atmospheric pressure.	(REFERENCE TECHNICAL DOCUMENT-DRAFT TECHNICAL MANUAL FOR SOLID WASTE DISPOSAL FACILITIES CRITERIA, C-14, APRIL 1992, SEE APPENDIX T.)

PART 258 CRITERIA

PART 258 CRITERIA §258.24 AIR CRITERIA	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(a) Owners or operators of all MSWLFs must ensure that the units do not violate any applicable requirements developed under a State Implementation Plan (SIP) approved or promulgated by the Administrator pursuant to section 110 of the Clean Air Act, as amended.	329 IAC 2-4-2 No person shall cause or allow the storage, containment, processing, or disposal of solid waste in a manner which creates a threat to human health or the environment, including the creating of a fire hazard, vector attraction, air or water pollution, or contamination. IC 13-7-1-4 "Air Pollution" means the presence in, or the threatened discharge into, the atmosphere of one (1) or more contaminants in sufficient quantities and of such characteristics and duration as to be injurious or to threaten to be injurious to human health, plant, or animal life, or property, or to interfere unreasonably with the enjoyment of life or property. (SEE NARRATIVE FOR DESCRIPTION OF AIR PROGRAM RELATING TO SOLID WASTE MANAGEMENT.)
(b) Open burning of solid waste, except for the infrequent burning of agricultural wastes, silvicultural wastes, landclearing debris, diseased trees, or debris from emergency clean-up operations, is prohibited at all MSWLF units.	329 IAC 2-14-9 Open burning of solid waste is prohibited at solid waste land disposal facilities. Burning of solid waste shall take place only in an incinerator permitted under this article and operating in compliance with all applicable air pollution control requirements. (INDIANA IS MORE STRINGENT.)

PART 258 CRITERIA

PART 258 CRITERIA §258.25 ACCESS REQUIREMENTS	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
Owners or operators of all MSWLF units must control public access and prevent unauthorized vehicular traffic and illegal dumping of wastes by using artificial barriers, natural barriers, or both, as appropriate to protect human health and the environment.	329 IAC 2-11-3(b) Applications for sanitary landfills and restricted waste sites I and II shall be accompanied by the following plot plans and cross sections: (1) A plot plan which indicates: (D) fences; (4) A plot plan, with surface contours at intervals of no more than five (5) feet which indicates: (E) protective barriers; 329 IAC 2-11-7(a)(6) a description of the access control at the site. (THE COMMISSIONER REQUIRES THE ITEMS IN §258.25 AS A POLICY WHEN ISSUING A PERMIT. THE PERMIT ENGINEERING CHECKLIST IS A COMPLETE LIST OF ITEMS WHICH INCLUDES CONTROL OF PUBLIC ACCESS, UNAUTHORIZED VEHICULAR TRAFFIC, ILLEGAL DUMPING OF WASTES BY USING ARTIFICIAL BARRIERS, NATURAL BARRIERS, OR BOTH. SEE APPENDIX Y FOR THE REVIEW CHECKLIST.)

PART 258 CRITERIA

PART 258 CRITERIA §258.26 RUN-ON/RUN-OFF CONTROL SYSTEMS	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(a) Owners or operators of all MSWLF units must design, construct, and maintain:	
(1) A run-on control system to prevent flow onto the active portion of the landfill during the peak discharge from a 25-year storm;	329 IAC 2-14-11 (a) Sanitary landfills shall divert surface water from the active fill area and shall minimize surface water contact with solid waste or interference with the daily operation. (THE SURFACE WATER WHICH MUST BE DIVERTED APPLIES TO BOTH RUN-ON, AS WELL AS, RUN-OFF.)
(2) A run-off control system from the active portion of the landfill to collect and control at least the water volume resulting from a 24-hour, 25-year storm.	(THE COMMISSIONER REQUIRES THIS AS A POLICY WHEN ISSUING A PERMIT. MSWLF UNITS MUST INCLUDE A RUN-OFF CONTROL SYSTEM FROM THE ACTIVE PORTION OF THE LANDFILL TO COLLECT AND CONTROL AT LEAST THE WASTE VOLUME RESULTING FROM A 24-HOUR, 25-YEAR STORM. SEE APPENDIX Y FOR THE REVIEW CHECKLIST.)
(b) Run-off from the active portion of the landfill unit must be handled in accordance with §258.27(a) of this part.	(IDEM REQUIRES RUN OFF FROM THE ACTIVE PORTION OF THE MSWLF UNIT MUST BE HANDLED WITHOUT VIOLATING THE WATER QUALITY STANDARDS FOR THE STATE OF INDIANA. SEE APPENDIX X.)

PART 258 CRITERIA

PART 258 CRITERIA §258.27 SURFACE WATER REQUIREMENTS	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
MSWLF units shall not: (a) Cause a discharge of pollutants into waters of the United States, including wetlands, that violates any requirements of the Clean Water Act, including, but not limited to, the National Pollutant Discharge Elimination System (NPDES) requirements, pursuant to section 402. (b) Cause the discharge of a nonpoint source of pollution to waters of the United States, including wetlands, that violates any requirement of an area-wide or State-wide water quality management plan that has been approved under section 208 or 319 of the Clean Water Act, as amended.	329 IAC 2-4-2 No person shall cause or allow the storage, containment, processing, or disposal of solid waste in a manner which creates a threat to human health or the environment, including the creating of a fire hazard, vector attraction, air or water pollution, or contamination. 329 IAC 2-2-1(a)(14) "Water pollution" means: (A) actual or threatened alteration of the physical, thermal, chemical, biological, bacteriological, or radioactive properties of any waters; or (B) the discharge or threatened discharge of any contaminant into any water that does or can create a nuisance or render the waters harmful, detrimental, or injurious to: (i) public health, safety, or welfare; (ii) domestic, commercial, industrial, agricultural, recreational, or other legitimate uses; or (iii) livestock, wild animals, birds, fish, or aquatic life. (THE ABOVE APPLY TO BOTH 258.27(a) AND 258.27 (b). SEE THE NARRATIVE, CHAPTER XIII, FOR A DISCUSSION OF THE 401 CERTIFICATION PROCESS AND APPENDIX X FOR THE WATER QUALITY STANDARDS FOR THE STATE OF INDIANA.)

PART 258 CRITERIA

PART 258 CRITERIA §258.28 LIQUIDS RESTRICTIONS	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(a) Bulk or noncontainerized liquid waste may not be placed in MSWLF units unless:	329 IAC 2-9-4(2) Waste which is or which contains free liquids shall not be accepted for disposal by any sanitary landfill effective September 1, 1989. Free liquid shall be determined utilizing the paint filter liquids test as specified in SW 846: "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," Second Edition, July 1982, as amended April 1984 and April 1985. This prohibition shall not apply to: (A) Incidental liquid or rainwater normally associated with routine solid waste disposal; (B) free liquids in containers equal to or less than five (5) gallons in size not to exceed one (1) cubic yard total volume per disposal; (C) food products which contain free liquids, in containers or packages equal to or less than five (5) gallons in size; (INDIANA HAS CHOSEN A FIVE (5) GALLON CONTAINER BECAUSE THIS IS A COMMON HOUSEHOLD CONTAINER THAT CAN BE PURCHASED AND THAT CAN BE CARRIED BY ONE (1) PERSON. THIS UNIT HAS NOT PRESENTED A COMPLIANCE PROBLEM.) (D) the recycling of leachate generated by the facility where approved by the commissioner; **(PROPOSED REGULATIONS WILL INCLUDED LANGUAGE ADDRESSING GAS CONDENSATE DERIVED FROM THE MSWLF UNIT.)** (AS A POLICY, THE COMMISSIONER ONLY APPROVES LEACHATE RECIRCULATION AT MSWLF UNITS WITH COMPOSITE LINERS AND LEACHATE COLLECTION SYSTEMS. SEE APPENDIX Y FOR THE ENGINEERING PERMIT REVIEW CHECKLIST.)
(1) The waste is household waste other than septic waste; or	
(2) The waste is leachate or gas condensate derived from the MSWLF unit and the MSWLF unit, whether it is a new or existing MSWLF or lateral expansion, is designed with a composite liner and leachate collection system as described in §258.40 (a)(2) of this part. The owner or operator must place the demonstration in the operating record and notify the State Director that it has been placed in the operating record.	
(b) Containers holding liquid waste may not be placed in a MSWLF unit unless:	329 IAC 2-9-4(2) (SEE ABOVE)
(1) The container is a small container similar in size to that normally found in household waste;	329 IAC 2-9-4(2)(B) (SEE ABOVE)
(2) The container is designed to hold liquids for use other than storage; or	329 IAC 2-9-4(2)(B) AND (C) (SEE ABOVE)
(3) The waste is household waste.	*(SEE PAGE 113)

PART 258 CRITERIA

PART 258 CRITERIA §258.28 LIQUIDS RESTRICTIONS (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(c) For purposes of this section:	
(1) "Liquid waste" means any waste material that is determined to contain "free liquids" as defined by Method 9095 (Paint Filter Liquids Test), as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Pub. No. SW-846).	329 IAC 2-9-4(2) Free liquids shall be determined utilizing the paint filter liquids test as specified in SW 846: "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," Second Edition, July 1982, as amended April 1984 and April 1985.
(2) "Gas condensate" means the liquid generated as a result of gas recovery process(es) at the MSWLF unit.	*(SEE PAGE 113)

PART 258 CRITERIA

PART 258 CRITERIA §258.29 RECORDKEEPING REQUIREMENTS	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(a) The owner or operator of a MSWLF unit must record and retain near the facility in an operating record or in an alternative location approved by the Director of an approved State the following information as it becomes available:	329 IAC 2-14-8(a) Solid waste land disposal facilities shall maintain on-site an up-to-date copy of the plans and specifications approved by the commissioner in granting the permit. (b) Solid Waste land disposal facilities shall maintain on-site a plot plan of the solid waste land disposal facility. The plot plan shall be updated quarterly. The plot plan shall describe the following: (1) Areas of excavation. (2) Areas of current filling. (3) Areas under intermediate cover. (4) Filled areas lacking final cover. (5) Finished areas (with final cover, contoured and seeded).
(1) Any location restriction demonstration required under Subpart B of this part;	*(SEE PAGE 113)
(2) Inspection records, training procedures, and notification procedures required in §258.20 of this part;	*
(3) Gas monitoring results from monitoring and any remediation plans required by §258.23 of this part;	*
(4) Any MSWLF unit design documentation for placement of leachate or gas condensate in a MSWLF unit as required under §258.28(a)(2) of this part;	*
(5) Any demonstration, certification, finding monitoring, testing, or analytical data required by Subpart E of this part;	329 IAC 2-1-3(a) Any permittee required to monitor under this article or by any permit issued pursuant to this article, shall maintain all records of all monitoring information and monitoring activities, including: (1) the date, exact place, and time of the sampling or measurements; (2) the person(s) who performed the sampling or measurements; (3) the date(s) analyses were performed; (4) the person(s) who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of such measurements or analyses.
(6) Closure and post-closure care plans and any monitoring, testing, or analytical data as required by §§258.60 and 258.61 of this part; and	329 IAC 2-15-3(a) The permittee must have a written closure plan. The closure plan must be submitted with the permit application in accordance with 329 IAC 2-8 and be approved by the commissioner as part of the permit. The approved closure plan will become a condition of the permit. (b)(3)(D)Certification of closure including any testing necessary for such certification.

PART 258 CRITERIA

PART 258 CRITERIA §258.29 RECORDKEEPING REQUIREMENTS (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
	329 IAC 2-15-8(a) The permittee must have a written post-closure plan. The post-closure plan must be submitted with the permit application in accordance with 329 IAC 2-8, and be approved if acceptable by the commissioner as part of the permit. The approved post-closure plan will become a condition of the permit. If the plan is determined to be unacceptable , the commissioner shall identify the items needed to make it complete. 329 IAC 2-15-7(a)(2) Inspection of the facility at least twice per year with a written report on the condition of the facility to be submitted to the commissioner.
(7) Any cost estimates and financial assurance documentation required by Subpart G of this part.	329 IAC 2-12-2(a) The permittee must establish financial responsibility for closure of the facility. The permittee must choose from the options specified in this subsection. 329 IAC 2-15-3(a) The permittee must have a written closure plan. The closure plan must be submitted with the permit application in accordance with 329 IAC 2-8 and be approved by the commissioner as part of the permit. The approved closure plan will become a condition of the permit. 329 IAC 2-15-3(b)(6) The closure plan shall list a closure cost estimate equal to the costs specified by subdivision (5) plus the product of the total area of the site permitted for filling and the cost per unit area specified by subdivision (4). Closure costs shall be calculated based on the cost necessary for the work to be performed by a third party. 329 IAC 2-15-8(a) The permittee must have a written post-closure plan. The post-closure plan must be submitted with the permit application in accordance with 329 IAC 2-8, and be approved if acceptable by the commissioner as part of the permit. The approved post-closure plan will become a condition of the permit. If the plan is determined to be unacceptable, the commissioner shall identify the items needed to make it complete. 329 IAC 2-15-8(b)(4) A post-closure cost estimate in accordance with 329 IAC 2-12-3. Post-closure costs shall be calculated based on the cost necessary for the work to be performed by a third party. For post-closure maintenance of final cover and vegetation the amount per acre shall be ten percent (10%) of the cost calculated under section 3(b)(4) of this rule multiplied by the total acreage of the site permitted for filling. IC 13-7-32-6 (a) The amount of financial responsibility a person must establish under section 4 of this chapter for a hazardous waste landfill or a solid waste landfill must: (1) be the greater of: (A) fifteen thousand dollars ($15,000) for each acre or part of an acre covered by the hazardous waste

landfill or solid waste landfill; or

(B) an amount determined by the commissioner that is sufficient to close the hazardous waste landfill or solid waste landfill in a manner that:

(i) minimizes the need for further maintenance; and

(ii) provides reasonable, foreseeable, and necessary maintenance during post-closure; and

(2) provide assurance of proper post-closure maintenance and monitoring for at least thirty (30) years after the hazardous waste landfill or solid waste landfill has ceased operations.

(INDIANA DOES NOT ALLOW ANY SMALL COMMUNITY EXEMPTIONS.)

*(SEE PAGE 113)

(8) Any information demonstrating compliance with small community exemption as required by §258.1(f)(2).

(b) The owner/operator must notify the State Director when the documents from paragraph (a) of this section have been placed or added to the operating record, and all information contained in the operating record must be furnished upon request to the State Director or be made available at all reasonable times for inspection by the State Director.

(c) The Director of an approved State can set alternative schedules for recordkeeping and notification requirements as specified in paragraphs (a) and (b) of this section, except for the notification requirements in §258.10(b) and §258.55(g)(1)(iii).

§§258.30 - 258.39 [Reserved]

PART 258 CRITERIA

SUBPART D -- DESIGN CRITERIA §258.40 DESIGN CRITERIA	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(a) New MSWLF units and lateral expansions shall be constructed:	*(SEE PAGE 113)
(1) In accordance with a design approved by the Director of an approved State or as specified in §258.40(e) for unapproved States. The design must ensure that the concentration values listed in Table 1 of this section will not be exceeded in the uppermost aquifer at the relevant point of compliance, as specified by the Director of an approved State under paragraph (d) of this section, or	*
(2) With a composite liner, as defined in paragraph (b) of this section	
and a leachate collection system that is designed and constructed to maintain less than a 30-cm depth of leachate over the liner.	329 IAC 2-10-3(1)(A)(iv) The system shall be designed to limit the leachate level above the base of the landfill to a maximum of one (1) foot under the conditions that would be present after the final cover has been placed at the landfill.
(b) For purposes of this section, "composite liner" means a system consisting of two components; the upper component must consist of a minimum 30-mil flexible membrane liner (FML), and the lower component must consist of at least a two-foot layer of compacted soil with a hydraulic conductivity of no more than 1×10^{-7} cm/sec. FML components consisting of High Density Polyethylene (HDPE) shall be at least 60-mil thick. The FML component must be installed in direct and uniform contact with the compacted soil component.	*

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PART 258 CRITERIA §258.40 DESIGN CRITERIA (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(c) When approving a design that complies with paragraph (a)(1) of this section, the Director of an approved State shall consider at least the following factors:	*(SEE PAGE 113)
(1) The hydrogeologic characteristics of the facility and surrounding land;	
(2) The climatic factors of the area; and	
(3) The volume and physical and chemical characteristics of the leachate.	
(d) The relevant point of compliance specified by the Director of an approved State shall be no more than 150 meters from the waste management unit boundary and shall be located on land owned by the owner of the MSWLF unit. In determining the relevant point of compliance, State Director shall consider at least the following factors:	329 IAC 2-16-1(i) The "monitoring boundary of the facility" is defined by the vertical plane provided by the monitoring devices hydraulically downgradient from the facility. The downgradient monitoring devices which constitute the monitoring boundary of the facility shall be located within fifty (50) feet of the solid waste boundary, or the property line, whichever is closer to the solid waste boundary, except where fifty (50) feet is not possible because of site topography or geology. In the case of existing facilities that have ground water monitoring devices approved by the commissioner prior to the effective date of this article, those approved devices shall define the monitoring boundary of the facility.
(1) The hydrogeologic characteristics of the facility and surrounding land;	
(2) The volume and physical and chemical characteristics of the leachate;	
(3) The quantity, quality, and detection, of flow of ground water;	
(4) The proximity and withdrawal rate of the ground-water users;	

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PART 258 CRITERIA §258.40 DESIGN CRITERIA (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(5) The availability of alternative drinking water supplies;	
(6) The existing quality of the ground water, including other sources of contamination and their cumulative impacts on the ground water and whether groundwater is currently used or reasonably expected to be used for drinking water;	
(7) Public health, safety, and welfare effects; and	
(8) Practicable capability of the owner or operator.	
(e) If EPA does not promulgate a rule establishing the procedures and requirements for State compliance with RCRA section 4005(c)(1)(B) by October 9, 1993, owners and operators in unapproved States may utilize a design meeting the performance standard in § 258.40(a)(1) if the following conditions are met:	(NOT APPLICABLE)
(1) The State determines the design meets the performance standard in § 258.40(a)(1);	
(2) The State petitions EPA to review its determination; and	
(3) EPA approves the State determination or does not disapprove the determination within 30 days.	

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TABLE 1

Chemical	MCL (mg/l)
Arsenic	0.05
Barium	1.0
Benzene	0.005
Cadmium	0.01
Carbon tetrachloride	0.005
Chromium (hexavalent)	0.05
2,4-Dichlorophenoxy acetic acid	0.1
1,4-Dichlorobenzene	0.075
1,2-Dichloroethane	0.005
1,1-Dichloroethylene	0.007
Endrin	0.0002
Fluoride	4
Lindane	0.004
Lead	0.05
Mercury	0.002
Methoxychlor	0.1
Nitrate	10
Selenium	0.01
Silver	0.05
Toxaphene	0.005
1,1,1-Trichloromethane	0.2
Trichloroethylene	0.005
2,4,5-Trichlorophenoxy acetic acid	0.01
Vinyl Chloride	0.002

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SUBPART E – GROUND-WATER MONITORING AND CORRECTIVE ACTION §258.50 APPLICABILITY	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
	SUBPART E--GROUND WATER MONITORING AND CORRECTIVE ACTION (DUE TO THE COMPLEXITY OF THE GROUND WATER MONITORING AND CORRECTIVE ACTION PROGRAM, IDEM HAS DEVELOPED THE FOLLOWING SUMMARY OF INDIANA'S GROUND WATER MONITORING AND CORRECTIVE ACTION REQUIREMENTS. THIS SUMMARY WAS DONE INSTEAD OF THE SIDE-BY-SIDE COMPARISON. AS DESCRIBED BELOW, THERE ARE SEVERAL AREAS WHERE IDEM BELIEVES ITS MONITORING REQUIREMENTS ARE SUBSTANTIALLY IN COMPLIANCE WITH THE FEDERAL REQUIREMENTS AND OTHER AREAS WHERE IDEM WILL REVISE ITS CURRENT REQUIREMENTS TO BE AT LEAST AS STRINGENT AS THE FEDERAL CRITERIA.)
(a) The requirements in this part apply to MSWLF units, except as provided in paragraph (b) of this section. (b) Ground-water monitoring requirements under §258.51 through §258.55 of this Part may be suspended by the Director of an approved State for a MSWLF unit if the owner or operator can demonstrate that there is no potential for migration of hazardous constituents from that MSWLF unit to the uppermost aquifer (as defined in §258.2) during the active life of the unit and the post-closure care period. This demonstration must be certified by a qualified ground-water scientist and approved by the Director of an approved State, and must be based upon: (1) Site-specific field collected measurements, sampling, and analysis of physical, chemical, and biological processes affecting contaminant fate and transport, and (2) Contaminant fate and transport predictions that maximize contaminant migration and consider impacts on human health and environment.	SECTION 258.50 APPLICABILITY (329 IAC 2-16-1(a) REQUIRES THAT ALL NEW MUNICIPAL SOLID WASTE LANDFILLS AND LATERAL EXPANSIONS ESTABLISH GROUND WATER MONITORING PRIOR TO RECEIPT OF WASTE. 329 IAC 2-16-1 (b) REQUIRES THAT ALL EXISTING FACILITIES MUST INSTALL GROUND WATER MONITORING DEVICES BY SEPTEMBER 1,1989. ALL EXISTING FACILITIES CURRENTLY HAVE GROUND WATER MONITORING. 329 IAC 2-16-3 REQUIRES GROUND WATER MONITORING TO BE CONDUCTED THROUGHOUT THE ACTIVE LIFE AND THE POST-CLOSURE CARE PERIOD OF THE FACILITY. IDEM DOES NOT ALLOW SUSPENSION OF GROUND WATER MONITORING FOR ANY REASON. THEREFORE, IDEM BELIEVES ITS REQUIREMENTS ARE IN SUBSTANTIAL COMPLIANCE WITH SECTION 258.50 OF THE FEDERAL CRITERIA AND HAS ALREADY EXCEEDED THE SCHEDULES FOR ESTABLISHING GROUND WATER MONITORING IN THE FEDERAL REQUIREMENTS.)

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PART 258 CRITERIA §258.50 APPLICABILITY (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(c) Owners and operators of MSWLF units must comply with the ground-water monitoring requirements of this part according to the following schedule unless an alternative schedule is specified under paragraph (d) of this section:	
(1) Existing MSWLF units and lateral expansions less than one mile from a drinking water intake (surface or subsurface) must be in compliance with the ground-water monitoring requirements specified in §§258.51 - 258.55 by October 9, 1994;	
(2) Existing MSWLF units and lateral expansions greater than one mile but less than two miles from a drinking water intake (surface or subsurface) must be in compliance with the ground-water monitoring requirements specified in §§258.51 - 258.55 by October 9, 1995;	
(3) Existing MSWLF units and lateral expansions greater than two miles from a drinking water intake (surface or subsurface) must be in compliance with the ground-water monitoring requirements specified in §§258.51 - 258.55 by October 9, 1996.	

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PART 258 CRITERIA §258.50 APPLICABILITY (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(4) New MSWLF units must be in compliance with the ground-water monitoring requirements specified in §§258.51 - 258.55 before waste can be placed in the unit.	
(d) The Director of an approved State may specify an alternative schedule for the owners or operators of existing MSWLF units and lateral expansions to comply with the ground-water monitoring requirements specified in §§258.51 - 258.55. This schedule must ensure that 50 percent of all existing MSWLF units are in compliance by October 9, 1994 and all existing MSWLF units are in compliance by October 9, 1996. In setting the compliance schedule, the Director of an approved State must consider potential risks posed by the unit to human health and the environment. The following factors should be considered in determining potential risk:	
(1) Proximity of human and environmental receptors;	
(2) Design of the MSWLF unit;	
(3) Age of the MSWLF unit;	
(4) The size of the MSWLF unit;	

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PART 258 CRITERIA §258.50 APPLICABILITY (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(5) Types and quantities of wastes disposed including sewage sludge; and	
(6) Resource value of the underlying aquifer, including:	
(i) Current and future uses;	
(ii) Proximity and withdrawal rate of users; and	
(iii) Ground-water quality and quantity.	
(e) Once established at a MSWLF unit, ground-water monitoring shall be conducted throughout the active life and post-closure care period of that MSWLF unit as specified in §258.61.	
(f) For the purposes of this subpart, a qualified ground-water scientist is a scientist or engineer who has received a baccalaureate or post-graduate degree in the natural sciences or engineering and has sufficient training and experience in ground-water hydrology and related fields as may be demonstrated by State registration, professional Certifications, or completion of accredited university programs that enable that individual to make sound professional judgements regarding ground-water monitoring, contaminant fate and transport, and corrective-action.	

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PART 258 CRITERIA §258.50 APPLICABILITY (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(g) The Director of an approved State may establish alternative schedules for demonstrating compliance with §258.51(d)(2),	
pertaining to notification of placement of certification in operating record;	
§258.54(c)(1), pertaining to notification that statistically significant increase (SSI) notice is in operating record;	
§258.54(c)(2) and (3), pertaining to an assessment monitoring program;	
§258.55(b), pertaining to sampling and analyzing appendix II constituents; §258.55(d)(1), pertaining to placement of notice (appendix II constituents detected) in record and notification of notice in record; §258.55(d)(2), pertaining to sampling for appendix I and II to this part;	
§258.55(g), pertaining to notification (and placement of notice in record) of SSI above ground-water protection standard;	
§§258.55(g)(1)(iv) and 258.56(a), pertaining to assessment of corrective measures; §258.57(a), pertaining to selection of remedy and notification of placement in record; §258.58(c)(4), pertaining to notification of placement in record (alternative corrective action measures); and §258.58(f), pertaining to notification of placement in record (certification of remedy completed).	

PART 258 CRITERIA

PART 258 CRITERIA §258.51 GROUND-WATER MONITORING SYSTEMS	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(a) A ground-water monitoring system must be installed that consists of a sufficient number of wells, installed at appropriate locations and depths, to yield ground-water samples from the uppermost aquifer (as defined in §258.2) that:	SECTION 258.51 GROUND WATER MONITORING SYSTEMS
(1) Represent the quality of background ground water that has not been affected by leakage from a unit.	(329 IAC 2-16-1(c) REQUIRES THAT A SUFFICIENT NUMBER OF WELLS BE INSTALLED AT APPROPRIATE LOCATIONS AND DEPTHS TO YIELD GROUND WATER SAMPLES FROM THE UPPERMOST AQUIFER THAT REPRESENT THE QUALITY OF BOTH BACKGROUND WATER THAT HAS NOT BEEN AFFECTED BY LEACHATE FROM THE FACILITY AND QUALITY OF GROUND WATER PASSING THE MONITORING BOUNDARY OF THE FACILITY. IT IS IDEM'S POLICY TO MONITOR THE UPPER MOST AQUIFER AND/OR SIGNIFICANT POTENTIAL LEACHATE MIGRATION PATHWAYS. A MINIMUM OF 4 MONITORING WELLS ARE REQUIRED FOR THE AQUIFER BEING MONITORED, ONE (1) UPGRADIENT OF THE WASTE MANAGEMENT AREA AND THREE (3) DOWNGRADIENT. THE SPECIFIC GEOLOGY MAY ALLOW FOR MODIFICATIONS TO THE BASIC SCHEME. FOR EXAMPLE, IF A PORTION OF THE LANDFILL FOOTPRINT OVERLIES A SMALL AQUIFER ONLY PARTIALLY, SEVERAL MONITORING SCENARIOS ARE POSSIBLE. THE AREAL EXTENT OF THE AQUIFER IN RELATIONSHIP TO THE LANDFILL FOOTPRINT MAY JUSTIFY ONLY ONE (1) DOWNGRADIENT WELL. IT MAY BE IMPOSSIBLE TO ESTABLISH A BACKGROUND WELL FOR SUCH AN AQUIFER, HOWEVER, A MINIMUM OF TWO (2) AQUIFERS WOULD BE MONITORED. OTHER SCHEMES ARE ALSO POSSIBLE. AS A POLICY, THE NUMBER OF WELLS FOR GROUND WATER MONITORING FOR EACH LANDFILL IS BASED ON THE SIZE OF THE LANDFILL AND THE GEOLOGY. ALL OPERATING LANDFILLS HAVE AT LEAST FOUR (4) MONITORING WELLS. MOST LANDFILLS HAVE MORE THAN FOUR (4) WELLS AND MAY MONITOR MORE THAN ONE AQUIFER.
A determination of background quality may include sampling of wells that are not hydraulically upgradient of the waste management area where:	
(i) Hydrogeologic conditions do not allow the owner or operator to determine what wells are hydraulically upgradient; or	
(ii) Sampling at other wells will provide an indication of background ground-water quality that is as representative or more representative than that provided by the upgradient wells; and	THE MONITORING BOUNDARY OF THE FACILITY, ESTABLISHED IN 329 IAC 2-16-1(j), MUST BE WITHIN FIFTY (50) FEET OF THE SOLID WASTE BOUNDARY OR THE PROPERTY BOUNDARY, WHICHEVER IS CLOSER TO THE SOLID WASTE BOUNDARY. IDEM'S TECHNICAL GUIDANCE TO LANDFILL OWNERS/OPERATORS ENSURES THAT WELLS ARE CASED, SCREENED, AND THAT ANNULAR SPACE ABOVE THE SAMPLING DEPTH IS SEALED. IN ADDITION, MONITORING DEVICES MUST BE OPERATED AND MAINTAINED SO THAT THEY PERFORM TO DESIGN SPECIFICATIONS THROUGHOUT THE LIFE OF THE MONITORING PROGRAM. 329 IAC 2-16-1 (g) REQUIRES THAT IF A MONITORING DEVICE (DEFINED IN 329 IAC 2-

PART 258 CRITERIA

PART 258 CRITERIA §258.51 GROUND-WATER MONITORING SYSTEMS (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(2) Represent the quality of ground water passing the relevant point of compliance specified by Director of an approved State under §258.40(d) or at the waste management unit boundary in unapproved States. The downgradient monitoring system must be installed at the relevant point of compliance specified by the Director of an approved State under §258.40(d) or at the waste management unit boundary in unapproved States that ensures detection of ground-water contamination in the uppermost aquifer. When physical obstacles preclude installation of ground-water monitoring wells at the relevant point of compliance at existing units, the down-gradient monitoring system may be installed at the closest practicable distance hydraulically down-gradient from the relevant point of compliance specified by the Director of an approved State under §258.40 that ensure detection of groundwater contamination in the uppermost aquifer.	16-1-(h) AS GROUND WATER MONITORING WELLS, SUCTION LYSIMETERS, MOISTURE PROBES, AND SIMILAR MONITORING DEVICES) FAILS TO PROPERLY FUNCTION, THE PERMITTEE MUST NOTIFY IDEM WITHIN 10 DAYS OF DISCOVERY AND REPAIR OR REPLACE THE DEVICE WITHIN 60 DAYS OF NOTIFYING IDEM. AS PART OF THE PERMIT APPLICATION PROCESS, A PROPOSAL FOR THE NUMBER, SPACING, AND DEPTHS OF THE MONITORING DEVICES MUST BE SUBMITTED TO IDEM (329 IAC 2-16-1(c)(2)). THIS PROPOSAL MUST BE CERTIFIED BY A REGISTERED PROFESSIONAL ENGINEER OR CERTIFIED PROFESSIONAL GEOLOGIST, AS REQUIRED UNDER 329 IAC 2-11-6(a). THE PROPOSAL WILL THEN BE REVIEWED AS PART OF THE PERMIT REVIEW, AND IF CONSIDERED APPROPRIATE, APPROVED BY THE COMMISSIONER OF IDEM. THEREFORE, IDEM BELIEVES ITS REQUIREMENTS ARE IN SUBSTANTIAL COMPLIANCE WITH SECTION 258.51 OF THE FEDERAL CRITERIA.)
(b) The Director of an approved State may approve a multi-unit ground-water monitoring system instead of separate ground-water monitoring systems for each MSWLF unit when the facility has several units, provided the multi-unit ground-water monitoring system meets the requirement of §258.51(a) and will be as protective of human health and the environment as individual monitoring systems for each MSWLF unit, based on the following factors:	
(1) Number, spacing, and orientation of the MSWLF units;	

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PART 258 CRITERIA §258.51 GROUND-WATER MONITORING SYSTEMS (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(2) Hydrogeologic setting;	
(3) Site history;	
(4) Engineering design of the MSWLF units, and	
(5) Type of waste accepted at the MSWLF units.	
(c) Monitoring wells must be cased in a manner that maintains the integrity of the monitoring well bore hole. This casing must be screened or perforated and packed with gravel or sand, where necessary, to enable collection of ground-water samples. The annular space (i.e., the space between the bore hole and well casing) above the sampling depth must be sealed to prevent contamination of samples and the ground water.	
(1) The owner or operator must notify the State Director that the design, installation, development, and decommission of any monitoring wells, piezometers and other measurement, sampling, and analytical devices documentation has been placed in the operating record; and	
(2) The monitoring wells, piezometers, and other measurement, sampling, and analytical devices must be operated and maintained so that they perform to design specifications throughout the life of the monitoring program.	

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PART 258 CRITERIA §258.51 GROUND-WATER MONITORING SYSTEMS (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(d) The number, spacing, and depths of monitoring systems shall be:	
(1) Determined based upon site-specific technical information that must include thorough characterization of:	
(i) Aquifer thickness, ground-water flow rate, ground-water flow direction including seasonal and temporal fluctuations in ground-water flow; and	
(ii) Saturated and unsaturated geologic units and fill materials overlying the uppermost aquifer, materials comprising the uppermost aquifer, and materials comprising the confining unit defining the lower boundary of the uppermost aquifer; including, but not limited to: thicknesses, stratigraphy, lithology, hydraulic conductivities, porosities and effective porosities.	

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PART 258 CRITERIA §258.53 GROUND-WATER SAMPLING AND ANALYSIS REQUIREMENTS	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(a) The ground-water monitoring program must include consistent sampling and analysis procedures that are designed to ensure monitoring results that provide an accurate representation of ground-water quality at the background and downgradient wells installed in compliance with §258.51(a) of this part. The owner or operator must notify the State Director that the sampling and analysis program documentation has been placed in the operating record and the program must include procedures and techniques for:	SECTION 258.53 GROUND WATER SAMPLING AND ANALYSIS (329 IAC 2-16-2 (a)-(e) REQUIRES THAT THE PERMITTEE DEVELOP AND FOLLOW A GROUND WATER MONITORING PLAN TO INCLUDE SAMPLING AND ANALYSIS PROCEDURES TO ENSURE THAT THE MONITORING RESULTS WILL PROVIDE A RELIABLE INDICATION OF GROUND WATER QUALITY. THE PLAN MUST DISCUSS SAMPLE COLLECTION, QUALITY ASSURANCE, SAMPLE PRESERVATION AND SHIPMENT, AND CHAIN OF CUSTODY CONTROL.
(1) Sample collection;	
(2) Sample preservation and shipment;	
(3) Analytical procedures;	IDEM CURRENTLY ALLOWS SAMPLES TO BE FIELD FILTERED. THIS ISSUE IS CURRENTLY BEING DEBATED AT THE NATIONAL LEVEL. IT APPEARS THAT THE U.S. EPA IS RE-EVALUATING THE FIELD FILTERING REQUIREMENTS UNDER 258.53(b). IDEM WILL WORK WITH THE U.S. EPA ON THIS ISSUE.
(4) Chain of custody control; and	
(5) Quality assurance and quality control.	IDEM CURRENTLY REQUIRES GROUND WATER ELEVATION TO BE MEASURED WITH EACH SAMPLING EVENT PRIOR TO PURGING OF GROUND WATER. THIS IS DONE ACCORDING TO THE SAMPLING AND ANALYSIS PLAN (329 IAC 2-16-2).
(b) The ground-water monitoring program must include sampling and analytical methods that are appropriate for ground-water sampling and that accurately measure hazardous constituents and other monitoring parameters in ground-water samples. Ground-water samples shall not be field-filtered prior to laboratory analysis.	IDEM ALLOWS ANY VALID STATISTICAL TEST OR ANALYSIS (329 IAC 2-16-5). IDEM GEOLOGISTS PREPARES TIME-PLOTS OR "TREND-GRAPHS" FOR EACH PARAMETER ANALYZED AT EACH WELL. OUR INTEREST IS IN OBSERVING WHETHER A PARTICULAR GROUNDWATER PARAMETER IS INCREASING IN CONCENTRATION THROUGH TIME. SIMULTANEOUSLY, GEOLOGISTS REVIEW THE STATISTICAL ANALYSES, SUBMITTED TO IDEM BY THE FACILITIES. MOST FACILITIES ARE USING t-TEST AND PARAMETRIC ANOVA. THE GEOLOGIST PRELIMINARILY REVIEW THE CALCULATIONS FOR THE MEAN, STANDARD DEVIATION, AND VARIANCE TO DETERMINE THE ACCURACY OF THE INFORMATION AND ANALYSIS METHOD. WHEN "OTHER" STATISTICAL TESTS ARE SUBMITTED, THEIR ASSUMPTIONS ARE CHECKED AGAINST TECHNIQUES IN THE LITERATURE AND ACCEPTED IF VALID.

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PART 258 CRITERIA §258.53 GROUND-WATER SAMPLING AND ANALYSIS REQUIREMENTS (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(c) The sampling procedures and frequency must be protective of human health and the environment.	THEREFORE, IDEM BELIEVES THE PRESENT PERFORMANCE STANDARDS FOR ANALYTICAL METHOD MEET THE FEDERAL CRITERIA IN PART 258.53(h). OVERALL, IDEM BELIEVES ITS REQUIREMENTS ARE IN GENERAL COMPLIANCE WITH 258.53, EXCEPT 258.53(b).)
(d) Ground-water elevations must be measured in each well immediately prior to purging, each time ground water is sampled. The owner or operator must determine the rate and direction of ground-water flow each time ground water is sampled. Ground-water elevations in wells which monitor the same waste management area must be measured within a period of time short enough to avoid temporal variations in ground-water flow which could preclude accurate determination of ground-water flow rate and direction.	
(e) The owner or operator must establish background ground-water quality in a hydraulically upgradient or background well(s) for each of the monitoring parameters or constituents required in the particular ground-water monitoring program that applies to the MSWLF unit, as determined under §258.54(a), or §258.55(a) of this part. Background ground-water quality may be established at wells that are not located hydraulically upgradient from the MSWLF unit if it meets the requirements of §258.51(a)(1).	
(f) The number of samples collected to establish ground-water quality data must be consistent with the appropriate statistical procedures determined pursuant to paragraph (g) of this section. The sampling procedures shall be those specified under §258.54(b) for detection monitoring, §258.55(b) and (d) for assessment monitoring, and §258.56(b) of corrective action.	

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PART 258 CRITERIA §258.53 GROUND-WATER SAMPLING AND ANALYSIS REQUIREMENTS (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(g) The owner or operator must specify in the operating record one of the following statistical methods to be used in evaluating ground-water monitoring data for each hazardous constituent. The statistical test chosen shall be conducted separately for each hazardous constituent in each well.	
(1) A parametric analysis of variance (ANOVA) followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method must include estimation and testing of the contrasts between each compliance well's mean and the background mean levels for each constituent.	
(2) An analysis of variance (ANOVA) based on ranks followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method must include estimation and testing of the contrasts between each compliance well's median and the background median levels for each constituent.	
(3) A tolerance or prediction interval procedure in which an interval for each constituent is established from the distribution of the background data, and the level of each constituent in each compliance well is compared to the upper tolerance or prediction limit.	

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PART 258 CRITERIA §258.53 GROUND-WATER SAMPLING AND ANALYSIS REQUIREMENTS (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(4) A control chart approach that gives control limits for each constituent.	
(5) Another statistical test method that meets the performance standards of §258.53(h). The owner or operator must place a justification for this alternative in the operating record and notify the State Director of the use of this alternative test. The justification must demonstrate that the alternative method meets the performance standards of §258.53(h).	
(h) Any statistical method chosen under §258.53(g) shall comply with the following performance standards, as appropriate:	
(1) The statistical method used to evaluate ground-water monitoring data shall be appropriate for the distribution of chemical parameters or hazardous constituents. If the distribution of the chemical parameters or hazardous constituents is shown by the owner or operator to be inappropriate for a normal theory test, then the data should be transformed or a distribution-free theory test should be used. If the distributions for the constituents differ, more than one statistical method may be needed.	

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PART 258 CRITERIA §258.53 GROUND-WATER SAMPLING AND ANALYSIS REQUIREMENTS (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(2) If an individual well comparison procedure is used to compare an individual compliance well constituent concentration with background constituent concentrations or a ground-water protection standard, the test shall be done at a Type I error level no less than 0.01 for each testing period. If a multiple comparisons procedure is used, the Type I experiment wise error rate for each testing period shall be no less than 0.05; however, the Type I error of no less than 0.01 for individual well comparisons must be maintained. This performance standard does not apply to tolerance intervals, prediction intervals, or control charts.	
(3) If a control chart approach is used to evaluate ground-water monitoring data, the specific type of control chart and its associated parameter values shall be protective of human health and the environment. The parameters shall be determined after considering the number of samples in the background data base, the data distribution, and the range of the concentration values for each constituent of concern.	
(4) If a tolerance interval or a predictional interval is used to evaluate ground-water monitoring data, the levels of confidence and, for tolerance intervals, the percentage of the population that the interval must contain, shall be protective of human health and the environment. These parameters shall be determined after considering the number of samples in the background data base, the data distribution, and the range of the concentration values for each constituent of concern.	

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PART 258 CRITERIA §258.53 GROUND-WATER SAMPLING AND ANALYSIS REQUIREMENTS (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(5) The statistical method shall account for data below the limit of detection with one or more statistical procedures that are protective of human health and the environment. Any practical quantitation limit (pql) that is used in the statistical method shall be the lowest concentration level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions that are available to the facility.	
(6) If necessary, the statistical method shall include procedures to control or correct for seasonal and spatial variability as well as temporal correlation in the data.	
(i) The owner or operator must determine whether or not there is a statistically significant increase over background values for each parameter or constituent required in the particular ground-water monitoring program that applies to the MSWLF unit, as determined under §§258.54(a) or 258.55(a) of this part.	
(1) In determining whether a statistically significant increase has occurred, the owner or operator must compare the ground-water quality of each parameter or constituent at each monitoring well designated pursuant to §258.51(a)(2) to the background value of that constituent, according to the statistical procedures and performance standards specified under paragraphs (g) and (h) of this section.	
(2) Within a reasonable period of time after completing sampling and analysis, the owner or operator must determine whether there has been a statistically significant increase over background at each monitoring well.	

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PART 258 CRITERIA §258.54 DETECTION MONITORING PROGRAM	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(a) Detection monitoring is required at MSWLF units at all ground-water monitoring wells defined under §§258.51(a)(1) and (a)(2) of this part. At a minimum, a detection monitoring program must include the monitoring for the constituents listed in appendix I of this part.	SECTION 258.54 DETECTION MONITORING PROGRAM
(1) The Director of an approved State may delete any of the appendix I monitoring parameters for a MSWLF unit if it can be shown that the removed constituents are not reasonably expected to be contained in or derived from the waste contained in the unit.	(329 IAC 2-16-6 REQUIRES ALL FACILITIES TO INSTITUTE A PHASE I MONITORING PROGRAM. THE PURPOSE OF THIS PROGRAM IS TO DETECT RELEASES FROM FACILITIES. THE PERMITTEE MUST SAMPLE MONITORING DEVICES FOR PHASE I PARAMETERS ON A SEMI-ANNUAL BASIS, AS REQUIRED UNDER 329 IAC 2-16-2(f). BACKGROUND LEVELS FOR ALL PARAMETERS MUST BE ESTABLISHED AS DESCRIBED UNDER 329 IAC 2-16-4(a)(4).
(2) The Director of an approved State may establish an alternative list of inorganic indicator parameters for a MSWLF unit, in lieu of some or all of the heavy metals (constituents 1-15 in appendix I to this part), if the alternative parameters provide a reliable indication of inorganic releases from the MSWLF unit to the ground water. In determining alternative parameters, the Director shall consider the following factors:	THE PHASE I PARAMETERS ARE NOT CONSISTENT WITH THE PARAMETERS IDENTIFIED IN APPENDIX 1 OF THE FEDERAL CRITERIA. IN ADDITION, INDIANA DOES NOT CURRENTLY REQUIRE THE MINIMUM NUMBER OF INDEPENDENT SAMPLES REQUIRED UNDER 258.54(b). FINALLY, IDEM REQUIRES ADDITIONAL MONITORING ONLY WHEN THERE HAS BEEN A STATISTICALLY SIGNIFICANT INCREASE OVER THE BACKGROUND LEVEL FOR TWO (2) PHASE I PARAMETERS.
(i) The types, quantities, and concentrations of constituents in waste managed at the MSWLF unit; (ii) The mobility, stability, and persistence of waste constituents or their reaction products in the unsaturated zone beneath the MSWLF unit; (iii) The detectability of indicator parameters, waste constituents, and reaction products in the ground water; and (iv) The concentration or values and coefficients of variation of monitoring parameters or constituents in the groundwater background.	THEREFORE, IDEM BELIEVES ITS REQUIREMENTS ARE NOT IN COMPLIANCE WITH MOST OF THE REQUIREMENTS OF SECTION 258.54 OF THE FEDERAL CRITERIA. **IDEM WILL REVISE ITS REGULATIONS TO INCORPORATE, AT A MINIMUM, THE COMPONENTS OF SECTION 258.54. SPECIFICALLY, IDEM, AT A MINIMUM, WILL REQUIRE OWNERS/OPERATORS TO:** **MONITOR FOR APPENDIX 1 CONSTITUENTS;** **TAKE A MINIMUM OF FOUR INDEPENDENT SAMPLES DURING THE FIRST SAMPLING; EVENT, AND ONE (1) SAMPLE THEREAFTER; AND** **CONDUCT ADDITIONAL MONITORING AND ASSESSMENT OF THE EXTENT OF CONTAMINATION IF THERE IS A STATISTICALLY SIGNIFICANT INCREASE OVER BACKGROUND LEVELS FOR ANY ONE (1) APPENDIX I CONSTITUENT.)**

PART 258 CRITERIA

PART 258 CRITERIA §258.54 DETECTION MONITORING PROGRAM (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(b) The monitoring frequency for all constituents listed in appendix I to this part, or in the alternative list approved in accordance with paragraph (a)(2) of this section, shall be at least semiannual during the active life of the facility (including closure) and the post-closure period. A minimum of four independent samples from each well (background and downgradient) must be collected and analyzed for the appendix I constituents, or the alternative list approved in accordance with paragraph (a)(2) of this section, during the first semiannual sampling event. At least one sample from each well (background and downgradient) must be collected and analyzed during subsequent semiannual sampling events.	
The Director of an approved State may specify an appropriate alternative frequency for repeated sampling and analysis for appendix I constituents, or the alternative list approved in accordance with paragraph (a)(2) of this section, during the active life (including closure) and the post-closure care period. The alternative frequency during the active life (including closure) shall be no less than annual. The alternative frequency shall be based on consideration of the following factors: (1) Lithology of the aquifer and unsaturated zone; (2) Hydraulic conductivity of the aquifer and unsaturated zone; (3) Ground-water flow rates; (4) Minimum distance between upgradient edge of the MSWLF unit and downgradient monitoring well screen (minimum distance of travel); and (5) Resource value of the aquifer.	

PART 258 CRITERIA

PART 258 CRITERIA §258.54 DETECTION MONITORING PROGRAM (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(c) If the owner or operator determines, pursuant to §258.53(g) of this part, that there is a statistically significant increase over background for one or more of the constituents listed in appendix I to this part, or in the alternative list approved in accordance with paragraph (a)(2) of this section, at any monitoring well at the boundary specified under §258.51(a)(2), the owner or operator:	
(1) Must, within 14 days of this finding, place a notice in the operating record indicating which constituents have shown statistically significant changes from background levels, and notify the State director that this notice was placed in the operating record; and	
(2) Must establish an assessment monitoring program meeting the requirements of §258.55 of this part within 90 days except as provided for in paragraph (c)(3) of this section.	
(3) The owner a source other than a MSWLF unit caused the contamination or that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in ground-water quality. A report documenting this demonstration must be certified by a qualified ground-water scientist or approved by the Director of an approved State and be placed in the operating record. If a successful demonstration is made and documented, the owner or operator may continue detection monitoring as specified in this section. If, after 90 days, a successful demonstration is not made, the owner or operator must initiate an assessment monitoring program as required in §258.55.	

PART 258 CRITERIA

PART 258 CRITERIA §258.55 ASSESSMENT MONITORING PROGRAM	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(a) Assessment monitoring is required whenever a statistically significant increase over background has been detected for one or more of the constituents listed in appendix I or in the alternative list approved in accordance with §258.54(a)(2).	SECTION 258.55-.58 ASSESSMENT MONITORING AND CORRECTIVE ACTION PROGRAMS
(b) Within 90 days of triggering an assessment monitoring program and annually thereafter, the owner or operator must sample and analyze the ground water for all constituents identified in appendix II of this part. A minimum of one sample from each downgradient well must be collected and analyzed during each sampling event. For any constituent detected in the downgradient wells as the result of the complete appendix II analysis, a minimum of four independent samples from each well (background and downgradient) must be collected and analyzed to establish background for the new constituents. The Director of an approved State may specify an appropriate subset of wells to be sampled and analyzed for appendix II constituents during assessment monitoring. The Director of an approved State may delete any of the appendix II monitoring parameters for a MSWLF unit if it can be shown that the removed constituents are not reasonably expected to be in or derived from the waste contained in the unit.	(329 IAC 2-16-7 REQUIRES OWNERS/OPERATORS TO INSTITUTE A PHASE II MONITORING PROGRAM IF ANY TWO PARAMETERS IN THE PHASE I PROGRAM WERE DETECTED AT STATISTICALLY SIGNIFICANT INCREASES OVER BACKGROUND. THE PURPOSE OF THE PHASE II PROGRAM IS TO ASSESS THE NATURE AND EXTENT OF CONTAMINATION. A GROUND WATER PROTECTION STANDARD (GWPS) IS ESTABLISHED FOR EACH MONITORING PARAMETER, AS REQUIRED UNDER 329 IAC 2-16-10 (a)(b)(c). IF THE GWPS IS EXCEEDED, THE OWNER/OPERATOR IS REQUIRED TO DEVELOP A CORRECTIVE ACTION PROGRAM. AS PART OF THE CORRECTIVE ACTION PROGRAM, THE OWNER/OPERATOR MUST CONTINUE PHASE II MONITORING OF THE GROUND WATER (329 IAC 2-16-9(b), TAKE ANY INTERIM MEASURES NECESSARY TO PROTECT HUMAN HEALTH AND THE ENVIRONMENT (329 IAC 2-16-9 (c)(5)), AND NOTIFY ALL PERSONS WHO OWN OR RESIDE ON THE PROPERTY THAT OVERLIES THE PLUME OF CONTAMINATION (320 IAC 2-16-9 (c)(3)). BECAUSE OF THE REQUIREMENTS DISCUSSED ABOVE, IDEM BELIEVES ITS REGULATIONS ARE IN COMPLIANCE WITH THE FOLLOWING PARTS OF THE FEDERAL CRITERIA: SECTIONS 258.55(d)(4), 258.55(g)(1)(iii), 258.55(h), 258.56(b), and 258.58(a)(3). IDEM BELIEVES ITS REGULATIONS ARE NOT IN COMPLIANCE WITH ALL OTHER PARTS OF SECTION 258.55-.58 OF THE FEDERAL CRITERIA. **IDEM WILL REVISE ITS REGULATIONS TO BE AT LEAST AS STRINGENT AS THE REQUIREMENTS IN SECTION 258.55-.58. SPECIFICALLY, AT A MINIMUM, IDEM WILL REQUIRE:**
(c) The Director of an approved State may specify an appropriate alternate frequency for repeated sampling and analysis for the full set of appendix II constituents required by §258.55(b) of this part, during the active life (including closure) and post-closure care of the unit considering the following factors:	**A PROGRAM THAT ASSESSES THE NATURE AND EXTENT OF THE RELEASE AND RESTORES THE GROUNDWATER QUALITY TO, AT A MINIMUM, THE EXTENT REQUIRED IN THE FEDERAL CRITERIA;**

PART 258 CRITERIA

PART 258 CRITERIA §258.55 ASSESSMENT MONITORING PROGRAM (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(1) Lithology of the aquifer and unsaturated zone;	**THE MONITORING PARAMETERS LISTED IN APPENDIX II OF THE FEDERAL CRITERIA;**
(2) Hydraulic conductivity of the aquifer and unsaturated zone;	**AN INITIAL ANALYSIS OF ALL APPENDIX II CONSTITUENTS AND SOME FREQUENCY FOR ADDITIONAL ANALYSIS OF THE ENTIRE APPENDIX II;**
(3) Ground-water flow rates;	**A MINIMUM OF FOUR (4) INDEPENDENT SAMPLES DURING THE FIRST SAMPLING EVENT FOR DETECTED CONSTITUENTS;**
(4) Minimum distance between upgradient edge of the MSWLF unit and downgradient monitoring well screen (minimum distance of travel);	**CRITERIA FOR DETERMINING WHEN CLEANUP IS COMPLETE, NOT ACHIEVABLE, OR NOT NECESSARY, CONSIDERING FACTORS OUTLINED IN 258.57(c), AND 258.58(e).)**
(5) Resource value of the aquifer; and	
(6) Nature (fate and transport) of any constituents detected in response to this section.	
(d) After obtaining the results from the initial or subsequent sampling events required in paragraph (b) of this section, the owner or operator must:	
(1) Within 14 days, place a notice in the operating record identifying the appendix II constituents that have been detected and notify the State Director that this notice has been placed in the operating record;	

PART 258 CRITERIA

PART 258 CRITERIA §258.55 ASSESSMENT MONITORING PROGRAM (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(2) Within 90 days, and on at least a semiannual basis thereafter, resample all wells specified by §258.51(a) to this part, conduct analyses for all constituents in appendix I to this part or in the alternative list approved in accordance with §258.54(a)(2), and for those constituents in appendix II to this part that are detected in response to paragraph (b) of this section, and record their concentrations in the facility operating record. At least one sample from each well (background and downgradient) must be collected and analyzed during these sampling events. The Director of an approved State may specify an alternative monitoring frequency during the active life (including closure) and the post closure period for the constituents referred to in this paragraph. The alternative frequency for appendix I constituents, or the alternative list approved in accordance with §258.54(a)(2), during the active life (including closure) shall be no less than annual. The alternative frequency shall be based on consideration of the factors specified in paragraph (c) of this section;	
(3) Establish background concentrations for any constituents detected pursuant to paragraphs (b) or (d)(2) of this section; and	
(4) Establish ground-water protection standards for all constituents detected pursuant to paragraph (b) or (d) of this section. The ground-water protection standards shall be established in accordance with paragraphs (h) or (i) of this section.	

PART 258 CRITERIA

PART 258 CRITERIA §258.55 ASSESSMENT MONITORING PROGRAM (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(e) If the concentrations of all appendix II constituents are shown to be at or below background values, using the statistical procedures in §258.53(g), for two consecutive sampling events, the owner or operator must notify the State Director of this finding and may return to detection monitoring.	
(f) If the concentrations of any appendix II constituents are above background values, but all concentrations are below the ground-water protection standard established under paragraphs (h) or (i) of this section, using the statistical procedures in §258.53(g), the owner or operator must continue assessment monitoring in accordance with this section.	
(g) If one or more appendix II constituents are detected at statistically significant levels above the ground-water protection standard established under paragraphs (h) or (i) of this section in any sampling event, the owner or operator must, within 14 days of this finding, place a notice in the operating record identifying the appendix II constituents that have exceeded the ground-water protection standard and notify the State Director and all appropriate local government officials that the notice has been placed in the operating record. The owner or operator also:	
(1)(i) Must characterize the nature and extent of the release by installing additional monitoring wells as necessary; (ii) Must install at least one additional monitoring well at the facility boundary in the direction of contaminant migration and sample this well in accordance with §258.55(d)(2);	

PART 258 CRITERIA

PART 258 CRITERIA §258.55 ASSESSMENT MONITORING PROGRAM (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(iii) Must notify all persons who own the land or reside on the land that directly overlies any part of the plume of contamination if contaminants have migrated off-site if indicated by sampling of wells in accordance with §258.55(g)(1); and	
(iv) Must initiate an assessment of corrective measures as required by §255.56 of this part within 90 days; or	
(2) May demonstrate that a source other than a MSWLF unit caused the contamination, or that the SSI resulted from error in sampling, analysis, statistical evaluation, or natural variation in ground-water quality.	
A report documenting this demonstration must be certified by a qualified ground-water scientist or approved by the Director of an approved State and placed in the operating record.	
If a successful demonstration is made the owner or operator must continue monitoring in accordance with the assessment monitoring program pursuant to §258.55, and may return to detection monitoring if the appendix II constituents are at or below background as specified in §258.55(e).	
Until a successful demonstration is made, the owner or operator must comply with §258.55(g) including initiating an assessment of corrective measures.	

PART 258 CRITERIA

PART 258 CRITERIA §258.55 ASSESSMENT MONITORING PROGRAM (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(h) The owner or operator must establish a ground-water protection standard for each appendix II constituent detected in the ground-water. The ground-water protection standard shall be:	
(1) For constituents for which a maximum contaminant level (MCL) has been promulgated under section 1412 of the Safe Drinking Water Act (codified) under 40 CFR part 141, the MCL for that constituent;	
(2) For constituents for which MCLs have not been promulgated, the background concentration for the constituent established from wells in accordance with §258.51(a)(1); or	
(3) For constituents for which the background level is higher than the MCL identified under subparagraph (h)(1) of this section or health based levels identified under §258.55(i)(1), the background concentration.	
(i) The Director of an approved State may establish an alternative ground-water protection standard for constituents for which MCLs have not been established. These ground-water protection standards shall be appropriate health based levels that satisfy the following criteria:	

PART 258 CRITERIA

PART 258 CRITERIA §258.55 ASSESSMENT MONITORING PROGRAM (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(1) The level is derived in a manner consistent with Agency guidelines for assessing the health risks of environmental pollutants (51 FR 33992, 34006, 34014, 34028, September 24, 1986);	
(2) The level is based on scientifically valid studies conducted in accordance with the Toxic Substances Control Act Good Laboratory Practice Standards (40 CFR part 792) or equivalent;	
(3) For carcinogens, the level represents a concentration associated with an excess lifetime cancer risk level (due to continuous lifetime exposure) with the 1×10^{-4} to 1×10^{-6} range; and	
(4) For systemic toxicants, the level represents a concentration to which the human population (including sensitive subgroups) could be exposed to on a daily basis that is likely to be without appreciable risk of deleterious effects during a lifetime. For purposes of this subpart, systemic toxicants include toxic chemicals that cause effects other than cancer or mutation.	
(j) In establishing ground-water protection standards under paragraph (i) of this section, the Director of an approved State may consider the following:	
(1) Multiple contaminants in the ground water;	
(2) Exposure threats to sensitive environmental receptors; and	
(3) Other site-specific exposure or potential exposure to ground water.	

PART 258 CRITERIA

PART 258 CRITERIA §258.56 ASSESSMENT OF CORRECTIVE MEASURES	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(a) Within 90 days of finding that any of the constituents listed in appendix II have been detected at a statistically significant level exceeding the ground-water protection standards defined under §258.55(h) or (i) of this part, the owner or operator must initiate an assessment of corrective measures.	
Such an assessment must be completed within a reasonable period of time.	
(b) The owner or operator must continue to monitor in accordance with the assessment monitoring program as specified in §258.55.	
(c) The assessment shall include an analysis of the effectiveness of potential corrective measures in meeting all of the requirements and objectives of the remedy as described under §258.57, addressing at least the following:	
(1) The performance, reliability, ease of implementation, and potential impacts of appropriate potential remedies, including safety impacts, cross-media impacts, and control of exposure to any residual contamination;	
(2) The time required to begin and complete the remedy;	

PART 258 CRITERIA

PART 258 CRITERIA §258.56 ASSESSMENT OF CORRECTIVE MEASURES (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(3) The costs of remedy implementation; and (4) The institutional requirements such as State or local permit requirements or other environmental or public health requirements that may substantially affect implementation of the remedy(s). (d) The owner or operator must discuss the results of the corrective measures assessment, prior to the selection of remedy, in a public meeting with interested and affected parties.	

PART 258 CRITERIA

PART 258 CRITERIA §258.57 SELECTION OF REMEDY	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(a) Based on the results of the corrective measures assessment conducted under §258.56, the owner or operator must select a remedy that, at a minimum, meets the standards listed in paragraph (b) of this section. The owner or operator must notify the State Director, within 14 days of selecting a remedy, a report describing the selected remedy has been placed in the operating record and how it meets the standards in paragraph (b) of this section.	
(b) Remedies must:	
(1) Be protective of human health and the environment;	
(2) Attain the ground-water protection standard as specified pursuant to §§258.55(h) or (i);	
(3) Control the source(s) of releases so as to reduce or eliminate, to the maximum extent practicable, further releases of appendix II constituents into the environment that may pose a threat to human health or the environment; and	
(4) Comply with standards for management of wastes as specified in §258.58(d).	

PART 258 CRITERIA

PART 258 CRITERIA §258.57 SELECTION OF REMEDY (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(c) In selecting a remedy that meets the standards of §258.57(b), the owner or operator shall consider the following evaluation factors:	
(1) The long- and short-term effectiveness and protectiveness of the potential remedy(s), along with the degree of certainty that the remedy will prove successful based on consideration of the following:	
(i) Magnitude of reduction of existing risks;	
(ii) Magnitude of residual risks in terms of likelihood of further releases due to waste remaining following implementation of a remedy;	
(iii) The type and degree of long-term management required, including monitoring, operation, and maintenance;	
(iv) Short-term risks that might be posed to the community, workers, or the environment during implementation of such a remedy, including potential threats to human health and the environment associated with excavation, transportation, and redisposal or containment;	
(v) Time until full protection is achieved;	

PART 258 CRITERIA

PART 258 CRITERIA §258.57 SELECTION OF REMEDY (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(vi) Potential for exposure of humans and environmental receptors to remaining wastes, considering the potential threat to human health and the environment associated with excavation, transportation, redisposal, or containment;	
(vii) Long-term reliability of the engineering and institutional controls; and	
(viii) Potential need for replacement of the remedy.	
(2) The effectiveness of the remedy in controlling the source to reduce further releases based on consideration of the following factors:	
(i) The extent to which containment practices will reduce further releases;	
(ii) The extent to which treatment technologies may be used.	
(3) The ease or difficulty of implementing a potential remedy(s) based on consideration of the following types of factors:	
(i) Degree of difficulty associated with constructing the technology;	

PART 258 CRITERIA

PART 258 CRITERIA §258.57 SELECTION OF REMEDY (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(ii) Expected operational reliability of the technologies;	
(iii) Need to coordinate with and obtain necessary approvals and permits from other agencies;	
(iv) Availability of necessary equipment and specialists; and	
(v) Available capacity and location of needed treatment, storage, and disposal services.	
(4) Practicable capability of the owner or operator, including a consideration of the technical and economic capability.	
(5) The degree to which community concerns are addressed by a potential remedy(s).	
(d) The owner or operator shall specify as part of the selected remedy a schedule(s) for initiating and completing remedial activities. Such a schedule must require the initiation of remedial activities within a reasonable period of time taking into consideration the factors set forth in paragraphs (d) (1-8). The owner or operator must consider the following factors in determining the schedule of remedial activities:	
(1) Extent and nature of contamination;	

PART 258 CRITERIA

PART 258 CRITERIA §258.57 SELECTION OF REMEDY (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(2) Practical capabilities of remedial technologies in achieving compliance with ground-water protection standards established under §§258.55(g) or (h) and other objectives of the remedy;	
(3) Availability of treatment or disposal capacity for wastes managed during implementation of the remedy;	
(4) Desirability of utilizing technologies that are not currently available, but which may offer significant advantages over already available technologies in terms of effectiveness, reliability, safety, or ability to achieve remedial objectives;	
(5) Potential risks to human health and the environment from exposure to contamination prior to completion of the remedy;	
(6) Resource value of the aquifer including:	
(i) Current and future uses;	
(ii) Proximity and withdrawal rate of users;	
(iii) Ground-water quantity and quality;	
(iv) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituent;	

PART 258 CRITERIA

PART 258 CRITERIA §258.57 SELECTION OF REMEDY (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(v) The hydrogeologic characteristic of the facility and surrounding land;	
(vi) Ground-water removal and treatment costs; and	
(vii) The cost and availability of alternative water supplies.	
(7) Practicable capability of the owner or operator.	
(8) Other relevant factors.	
(e) The Director of an approved State may determine that remediation of a release of an appendix II constituent from a MSWLF unit is not necessary if the owner or operator demonstrates to the Director of the approved state that:	
(1) The ground-water is additionally contaminated by substances that have originated from a source other than a MSWLF unit and those substances are present in concentrations such that cleanup of the release from the MSWLF unit would provide no significant reduction in risk to actual or potential receptors; or	
(2) The constituent(s) is present in ground water that:	

PART 258 CRITERIA

PART 258 CRITERIA §258.57 SELECTION OF REMEDY (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(i) Is not currently or reasonably expected to be a source of drinking water; and	
(ii) Is not hydraulically connected with waters to which the hazardous constituents are migrating or are likely to migrate in a concentration(s) that would exceed the ground-water protection standards established under §258.55(h) or (i); or	
(3) Remediation of the release(s) is technically impracticable; or	
(4) Remediation results in unacceptable cross-media impacts.	
(f) A determination by the Director of an approved State pursuant to paragraph (e) of this section shall not affect the authority of the State to require the owner or operator to undertake source control measures or other measures that may be necessary to eliminate or minimize further releases to the ground-water, to prevent exposure to the ground-water, or to remediate the ground-water to concentrations that are technically practicable and significantly reduce threats to human health or the environment.	

PART 258 CRITERIA

PART 258 CRITERIA §258.58 IMPLEMENTATION OF THE CORRECTIVE ACTION PROGRAM	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(a) Based on the schedule established under §258.57(d) for initiation and completion of remedial activities the owner/operator must:	
(1) Establish and implement a corrective action ground-water monitoring program that:	
(i) At a minimum, meet the requirements of an assessment monitoring program under §258.55;	
(ii) Indicate the effectiveness of the corrective action remedy; and	
(iii) Demonstrate compliance with ground-water protection standard pursuant to paragraph (e) of this section.	
(2) Implement the corrective action remedy selected under §258.57; and	
(3) Take any interim measures necessary to ensure the protection of human health and the environment. Interim measures should, to the greatest extent practicable, be consistent with the objectives of and contribute to the performance of any remedy that may be required pursuant to §258.57. The following factors must be considered by an owner or operator in determining whether interim measures are necessary:	

PART 258 CRITERIA

PART 258 CRITERIA §258.58 IMPLEMENTATION OF THE CORRECTIVE ACTION PROGRAM (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(i) Time required to develop and implement a final remedy;	
(ii) Actual or potential exposure of nearby populations or environmental receptors to hazardous constituents;	
(iii) Actual or potential contamination of drinking water supplies or sensitive ecosystems;	
(iv) Further degradation of the ground-water that may occur if remedial action is not initiated expeditiously;	
(v) Weather conditions that may cause hazardous constituents to migrate or be released;	
(vi) Risks of fire or explosion, or potential for exposure to hazardous constituents as a result of an accident or failure of a container or handling system; and	
(vii) Other situations that may pose threats to human health and the environment.	
(b) An owner or operator may determine, based on information developed after implementation of the remedy has begun or other information, that compliance with requirements of §258.57(b) are not being achieved through the remedy selected. In such cases, the owner or operator must implement other methods or techniques that could practicably achieve compliance with the requirements, unless the owner or operator makes the determination under §258.58(c).	

PART 258 CRITERIA

PART 258 CRITERIA §258.58 IMPLEMENTATION OF THE CORRECTIVE ACTION PROGRAM (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(c) If the owner or operator determines that compliance with requirements under §258.57(b) cannot be practically achieved with any currently available methods, the owner or operator must:	
(1) Obtain certification of a qualified ground-water scientist or approval by the Director of an approved State that compliance with requirements under §258.57(b) cannot be practically achieved with any currently available methods;	
(2) Implement alternate measures to control exposure of humans or the environment to residual contamination, as necessary to protect human health and the environment; and	
(3) Implement alternate measures for control of the sources of contamination, or for removal or decontamination of equipment, units, devices, or structures that are:	
(i) Technically practicable; and	
(ii) Consistent with the overall objective of the remedy.	
(4) Notify the State Director within 14 days that a report justifying the alternative measures prior to implementing the alternative measures has been placed in the operating record.	

PART 258 CRITERIA

PART 258 CRITERIA §258.58 IMPLEMENTATION OF THE CORRECTIVE ACTION PROGRAM (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(d) All solid wastes that are managed pursuant to a remedy required under §258.57, or an interim measure required under §258.58(a)(3), shall be managed in a manner:	
(1) That is protective of human health and the environment; and	
(2) That complies with applicable RCRA requirements.	
(e) Remedies selected pursuant to §258.57 shall be considered complete when:	
(1) The owner or operator complies with the ground-water protection standards established under §§258.55(h) or (i) at all points within the plume of contamination that lie beyond the ground-water monitoring well system established under §258.51(a).	
(2) Compliance with the ground-water protection standards established under §§258.55(h) or (i) has been achieved by demonstrating that concentrations of appendix II constituents have not exceeded the ground-water protection standard(s) for a period of three consecutive years using the statistical procedures and performance standards in §258.53(g) and (h). The Director of an approved State may specify an alternative length of time during which the owner or operator must demonstrate that concentrations of appendix II constituents have not exceeded the ground-water protection standard(s) taking into consideration:	

PART 258 CRITERIA

PART 258 CRITERIA §258.58 IMPLEMENTATION OF THE CORRECTIVE ACTION PROGRAM (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE

(i) Extent and concentration of the release(s);

(ii) Behavior characteristics of the hazardous constituents in the ground-water;

(iii) Accuracy of monitoring or modeling techniques, including any seasonal, meteorological, or other environmental variabilities that may affect the accuracy; and

(iv) Characteristics of the ground-water.

(3) All actions required to complete the remedy have been satisfied.

(f) Upon completion of the remedy, the owner or operator must notify the State Director within 14 days that a certification that the remedy has been completed in compliance with the requirements of §258.58(e) has been placed in the operating record. The certification must be signed by the owner or operator and by a qualified ground-water scientist or approved by the Director of an approved State.

(g) When, upon completion of the certification, the owner or operator determines that the corrective action remedy has been completed in accordance with the requirements under paragraph (e) of this section, the owner or operator shall be released from the requirements for financial assurance for corrective action under §258.73.

§258.59 [Reserved]

PART 258 CRITERIA

SUBPART F – CLOSURE AND POST-CLOSURE CARE §258.60 CLOSURE CRITERIA	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(a) Owners or operators of all MSWLF units must install a final cover system that is designed to minimize infiltration and erosion. The final cover system must be comprised of an erosion layer underlain by an infiltration layer as follows:	*(SEE PAGE 113)
(1) The infiltration layer must be comprised of a minimum of 18 inches of earthen material that has a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present, or a permeability no greater than 1×10^{-5} cm/sec, whichever is less, and	
(2) The erosion layer must consist of a minimum 6 inches of earthen material that is capable of sustaining native plant growth.	
(b) The Director of an approved State may approve an alternative final cover design that includes:	*
(1) An infiltration layer that achieves an equivalent reduction in infiltration as the infiltration layer specified in paragraph (a)(1) of this section, and	
(2) An erosion layer that provides equivalent protection from wind and water erosion as the erosion layer specified in (a)(2) of this section.	

PART 258 CRITERIA

PART 258 CRITERIA §258.60 CLOSURE CRITERIA (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(c) The owner or operator must prepare a written closure plan that describes the steps necessary to close all MSWLF units at any point during its active life in accordance with the cover design requirements in §258.60(a) or (b), as applicable. The closure plan, at a minimum, must include the following information:	329 IAC 2-15-3(a) The permittee must have a written closure plan. The closure plan must be submitted with the permit application in accordance with 329 IAC 2-8 and be approved by the commissioner as part of the permit. The approved closure plan will become a condition of the permit. (b) The closure plan must identify the steps necessary to completely close the facility at any point during its intended life in accordance with section 2 of this rule. The plan shall be certified by a registered professional engineer. The closure plan must include the following:
(1) A description of the final cover, designed in accordance with §258.60(a) and the methods and procedures to be used to install the cover;	(INDIANA REQUIRES A DESCRIPTION OF THE FINAL COVER AND THE METHOD AND PROCEDURES USED TO INSTALL THE COVER AS A POLICY. SEE APPENDIX Z, CLOSURE AND POST-CLOSURE PLAN PREPARATION GUIDANCE, PAGE 4, ITEM II AND III.)
(2) An estimate of the largest area of the MSWLF unit ever requiring a final cover as required under §258.60(a) at any time during the active life;	(INDIANA REQUIRES AN ESTIMATE OF THE LARGEST AREA OF THE MSWLF UNIT EVER REQUIRING A FINAL COVER AT ANY TIME DURING THE ACTIVE LIFE AS A POLICY. SEE APPENDIX Z, PAGE 7, ITEM VIII.)
(3) An estimate of the maximum inventory of wastes ever on-site over the active life of the landfill facility; and	*(SEE PAGE 113)
(4) A schedule for completing all activities necessary to satisfy the closure criteria in §258.60.	329 IAC 2-15-3(b)(3) An estimate of the expected year of closure and a schedule for final closure. The schedule must include: (A) the total time required to close the facility; and (B) the time required for completion of intervening closure activities.
(d) The owner or operator must notify the State Director that a closure plan has been prepared and placed in the operating record no later than the effective date of this part, or by the initial receipt of waste, whichever is later.	329 IAC 2-15-3(a) (SEE ABOVE)

PART 258 CRITERIA

PART 258 CRITERIA §258.60 CLOSURE CRITERIA (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(e) Prior to beginning closure of each MSWLF unit as specified in §258.60(f), an owner or operator must notify the State Director that a notice of the intent to close the unit has been placed in the operating record.	(INDIANA REQUIRES AN OWNER OR OPERATOR OF A MSWLF UNIT TO NOTIFY THE COMMISSIONER OF THE INTENT TO CLOSE THE UNIT AS A POLICY. SEE APPENDIX Z, PAGE 5.)
(f) The owner or operator must begin closure activities of each MSWLF unit no later than 30 days after the date on which the MSWLF unit receives the known final receipt of wastes or, if the MSWLF unit has remaining capacity and there is a reasonable likelihood that the MSWLF unit will receive additional wastes, no later than one year after the most recent receipt of wastes. Extensions beyond the one-year deadline for beginning closure may be granted by the Director of an approved State if the owner or operator demonstrates that the MSWLF unit has the capacity to receive additional wastes and the owner or operator has taken and will continue to take all steps necessary to prevent threats to human health and the environment from the unclosed MSWLF unit.	329 IAC 2-15-6(a) Within fifteen (15) days after receiving the final volume of waste, the permittee must initiate final closure of all areas not certified as partially closed. Final closure shall be in accordance with the approved closure plan. (INDIANA IS MORE STRINGENT.)

PART 258 CRITERIA

PART 258 CRITERIA §258.60 CLOSURE CRITERIA (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(g) The owner or operator of all MSWLF units must complete closure activities of each MSWLF unit in accordance with the closure plan within 180 days following the beginning of closure as specified in paragraph (f) of this section. Extensions of the closure period may be granted by the Director of an approved State if the owner or operator demonstrates that closure will, of necessity, take longer than 180 days and he has taken and will continue to take all steps to prevent threats to human health and the environment from the unclosed MSWLF unit.	329 IAC 2-14-13 Sanitary landfills and restricted waste site type I shall: (4) apply and compact final cover of not less than two (2) feet except as more cover may be required under 329 IAC 2-14-19 to any point in the fill: (A) within 180 days of receiving its final waste volume; or (B) when any area of the landfill is filled to its approved elevation; and
(h) Following closure of each MSWLF unit, the owner or operator must notify the State Director that a certification, signed by an independent registered professional engineer or approved by Director of an approved State, verifying that closure has been completed in accordance with the closure plan, has been placed in the operating record.	329 IAC 2-15-5(a) As part of the final closure of a facility, the permittee must submit to the commissioner the following: (1) A certification statement, signed by both the permittee and a registered professional engineer, that the facility has been closed in accordance with the approved closure plan.
(i)(1) Following closure of all MSWLF units, the owner or operator must record a notation on the deed to the landfill facility property, or some other instrument that is normally examined during title search, and notify the State Director that the notation has been recorded and a copy has been placed in the operating record.	(2) Verification that the owner of the property on which the facility is located has recorded a notation on the deed to the facility property, or on some other instrument which is normally examined during title search, that will in perpetuity notify any potential purchaser of the property that the land has been used as a solid waste land disposal facility. At a minimum, the recording must contain: (A) the general types and location of waste; (B) the depth of fill; (C) a plot plan, with surface contours at intervals of two (2) feet, which shall indicate: (i) final land surface water runoff direction; (ii) surface water diversion structures after completion of the operation; and (iii) final grading; and (D) a statement that no construction, installation of wells, pipes, conduits, or septic systems, or any other excavation shall be done on said property without approval by the commissioner.

PART 258 CRITERIA

PART 258 CRITERIA §258.60 CLOSURE CRITERIA (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(2) The notation on the deed must in perpetuity notify any potential purchaser of the property that:	329 IAC 2-15-5(a)(2) (SEE ABOVE)
(i) The land has been used as a landfill facility; and	329 IAC 2-15-5(a)(2) (SEE ABOVE)
(ii) Its use is restricted under §258.61(c)(3).	329 IAC 2-15-5(a)(2)(D) (SEE ABOVE)
(j) The owner or operator may request permission from the Director of an approved State to remove the notation from the deed if all wastes are removed from the facility.	

PART 258 CRITERIA

PART 258 CRITERIA §258.61 POST-CLOSURE CARE REQUIREMENTS	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(a) Following closure of each MSWLF unit, the owner or operator must conduct post-closure care. Post-closure care must be conducted for 30 years, except as provided under paragraph (b) of this section, and consist of at least the following:	IC 13-7-32-6(a)(2) provide assurance of proper postclosure maintenance and monitoring for at least thirty (30) years after the hazardous waste landfill or solid waste landfill has ceased operations.
(1) Maintaining the integrity and effectiveness of any final cover, including making repairs to the cover as necessary to correct the effects of settlement, subsidence, erosion, or other events, and preventing run-on and run-off from eroding or otherwise damaging the final cover;	329 IAC 2-15-7(a) The permittee has the following duties after closure of the facility: (3) Maintenance of the minimum thickness of final cover and vegetation as required by 329 IAC 2-14. (4) Maintenance of the final contours of the facility in accordance with the applicable standards of 329 IAC 2-14 and at a minimum, to provide that no ponding of water occurs on filled areas. (6) Control of vegetation at the site as necessary to enable determination of the need for slope and cover maintenance and leachate outbreak abatement.
(2) Maintaining and operating the leachate collection system in accordance with the requirements in §258.40. The Director of an approved State may allow the owner or operator to stop managing leachate if the owner or operator demonstrates that leachate no longer poses a threat to human health and the environment;	329 IAC 2-15-7(a) (8) Maintenance and monitoring of leachate collection and treatment systems, methane control systems, and water quality monitoring devices. (9) Control of any leachate or gas generated at the facility, as required by 329 IAC 2-14.
(3) Monitoring the ground water in accordance with the requirements of subpart E of this part and maintaining the ground-water monitoring system, if applicable; and	329 IAC 2-15-7(a)(8) (SEE ABOVE)
(4) Maintaining and operating the gas monitoring system in accordance with the requirements of §258.23.	329 IAC 2-15-7(a)(8) and (9) (SEE ABOVE)

PART 258 CRITERIA

PART 258 CRITERIA §258.61 POST-CLOSURE CARE REQUIREMENTS (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(b) The length of the post-closure care period may be:	
(1) Decreased by the Director of an approved State if the owner or operator demonstrates that the reduced period is sufficient to protect human health and the environment and this demonstration is approved by the Director of an approved State; or	
(2) Increased by the Director of an approved State if the Director of an approved State determines that the lengthened period is necessary to protect human health and the environment.	
(c) The owner or operator of all MSWLF units must prepare a written post-closure plan that includes, at a minimum, the following information:	329 IAC 2-15-8(a) The permittee must have a written post-closure plan. The post-closure plan must be submitted with the permit application in accordance with 329 IAC 2-8, and be approved if acceptable by the commissioner as part of the permit. The approved post-closure plan will become a condition of the permit. If the plan is determined to be unacceptable, the commissioner shall identify the items needed to make it complete.
(1) A description of the monitoring and maintenance activities required in §258.61(a) for each MSWLF unit, and the frequency at which these activities will be performed;	329 IAC 2-15-8(b) The post-closure plan must identify the activities which will be carried on after closure, pursuant to section 7 of this rule, and must include at least the following: (1) A description of the planned ground water monitoring activities and the frequency with which they will be performed. (2) A description of the planned maintenance activities and the frequency at which they will be performed.
(2) Name, address, and telephone number of the person or office to contact about the facility during the post-closure period; and	329 IAC 2-15-8(b)(3) The name, address, and phone number of the permittee with responsibility for maintaining the site after closure whom the commissioner may contact about the solid waste facility during the post-closure period.

PART 258 CRITERIA

PART 258 CRITERIA §258.61 POST-CLOSURE CARE REQUIREMENTS (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(3) A description of the planned uses of the property during the post-closure period. Post-closure use of the property shall not disturb the integrity of the final cover, liner(s), or any other components of the containment system, or the function of the monitoring systems unless necessary to comply with the requirements in this part 258. The Director of an approved State may approve any other disturbance if the owner or operator demonstrates that disturbance of the final cover, liner or other component of the containment system, including any removal of waste, will not increase the potential threat to human health or the environment.	*(SEE PAGE 113)
(d) The owner or operator must notify the State Director that a post-closure plan has been prepared and placed in the operating record no later than the effective date of this part, October 9, 1993, or by the initial receipt of waste, whichever is later.	329 IAC 2-15-8(a) The permittee must have a written post-closure plan. The post-closure plan must be submitted with the permit application in accordance with 329 IAC 2-8, and be approved if acceptable by the commissioner as part of the permit. The approved post-closure plan will become a condition of the permit. If the plan is determined to be unacceptable, the commissioner shall identify the items needed to make it complete. 329 IAC 2-7-6(b) Solid waste land disposal facilities which have operating permits in effect on the effective date of this article, shall not operate after September 1, 1989, unless, prior to that date, they have submitted closure and post-closure plans as required by 329 IAC 2-15 and have established financial responsibility for post-closure in accordance with 329 IAC 2-12.
(e) Following completion of the post-closure care period for each MSWLF unit, the owner or operator must notify the State Director that a certification, signed by an independent registered professional engineer or approved by the Director of an approved State, verifying that post-closure care has been completed in accordance with the post-closure plan, has been placed in the operating record.	329 IAC 2-15-9 When the post-closure care requirements of this rule have been completed the permittee shall submit a certification statement signed by both the permittee and a registered professional engineer that the post-closure care requirements have been met and the facility has stabilized. The post-closure certification will be deemed adequate unless within one hundred fifty (150) days of receipt of the post-closure certification, the commissioner issues notice of the deficiency of post-closure, including actions necessary to correct the deficiency.
§§258.62 - 258.69 [Reserved]	

PART 258 CRITERIA

SUBPART G – FINANCIAL ASSURANCE CRITERIA §258.70 APPLICABILITY AND EFFECTIVE DATE	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
	(INDIANA'S PROPOSED REGULATIONS WILL INCLUDE FINANCIAL ASSURANCE FOR CORRECTIVE ACTION OF MSWLF UNITS. IT WILL BE AT LEAST AS STRINGENT AS PART 258.)
(a) The requirements of this section apply to owners and operators of all MSWLF units, except owners or operators who are State or Federal government entities whose debts and liabilities are the debts and liabilities of a State or the United States.	329 IAC 2-12-1(a) This rule shall apply to all solid waste land disposal facilities which are required to have a permit by 329 IAC 2-8-1 and which apply for a permit after the promulgation of this rule or which have operating permits in effect on the effective date of this article. (INDIANA'S RULE APPLIES TO ALL MSWLF UNITS; THEREFORE INDIANA IS MORE STRINGENT.)
(b) The requirements of this section are effective April 9, 1994.	329 IAC 2-12-1(a) (SEE ABOVE)

PART 258 CRITERIA

PART 258 CRITERIA §258.71 FINANCIAL ASSURANCE FOR CLOSURE	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(a) The owner or operator must have a detailed written estimate, in current dollars, of the cost of hiring a third party to close the largest area of all MSWLF units ever requiring a final cover as required under §258.60 at any time during the active life in accordance with the closure plan. The owner or operator must notify the State Director that the estimate has been placed in the operating record.	329 IAC 2-15-3(b)(6) The closure plan shall list a closure cost estimate equal to the costs specified by subdivision (5) plus the product of the total area of the site permitted for filling and the cost per unit area specified by subdivision (4). Closure costs shall be calculated based on the cost necessary for the work to be performed by a third party. 329 IAC 2-15-3(a) The permittee must have a written closure plan. The closure plan must be submitted with the permit application in accordance with 329 IAC 2-8 and be approved by the commissioner as part of the permit. The approved closure plan will become a condition of the permit. (INDIANA REQUIRES THE CLOSURE PLAN TO BE APPROVED AS PART OF THE PERMIT; THEREFORE INDIANA IS MORE STRINGENT.)
(1) The cost estimate must equal the cost of closing the largest area of all MSWLF units ever requiring a final cover at any time during the active life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan (see §258.60(c)(2) of this part).	329 IAC 2-15-3(b)(4) An estimate of the cost per acre of providing final cover and vegetation. Such cost shall be that necessary for providing the following, but shall not be less than five thousand dollars ($5,000) per acre: (A) Two (2) feet of compacted clay soil. (B) Six (6) inches of topsoil. (C) Vegetation (D) Certification of closure including any testing necessary for such certification. 329 IAC 2-15-3(b)(6) The closure plan shall list a closure cost estimate equal to the costs specified by subdivision (5) plus the product of the total area of the site permitted for filling and the cost per unit area specified by subdivision (4). Closure costs shall be calculated based on the cost necessary for the work to be performed by a third party. IC 13-7-32-6 Financial responsibility; amount Sec. 6. (a) The amount of financial responsibility a person must establish under section 4 of this chapter for a hazardous waste landfill or a solid waste landfill must: (1) be the greater of : (A) fifteen thousand dollars ($15,000) for each acre or part of an acre covered by the hazardous waste landfill or solid waste landfill; or (B) an amount determined by the commissioner that is sufficient to close the hazardous waste landfill or solid waste landfill in a manner that: (i) minimizes the need for further maintenance; and (ii) provides reasonable, foreseeable, and necessary maintenance during post-closure; and

(2) During the active life of the MSWLF unit, the owner or operator must annually adjust the closure cost estimate for inflation.

329 IAC 2-12-2(c)

Until final closure of the facility is certified, the permittee must annually review and submit to the commissioner the financial closure estimate derived under this section within thirty (30) days after each anniversary date of the original effective date of the establishment of financial responsibility for closure.

(1) For inflation using an inflation factor derived from the annual implicit price deflator for gross national product as published by the U.S. Department of Commerce in its Survey of Current Business. The inflation factor is the result of the dividing the latest published annual deflator by the deflator for the previous year as follows:

(A) The first revision is made by multiplying the original closure cost estimate by the inflation factor. The result is the revised closure cost estimate.

(B) Subsequent revisions are made by multiplying the latest revised closure cost estimate by the latest inflation factor.

PART 258 CRITERIA

PART 258 CRITERIA §258.71 FINANCIAL ASSURANCE FOR CLOSURE (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(3) The owner or operator must increase the closure cost estimate and the amount of financial assurance provided under paragraph (b) of this section if changes to the closure plan or MSWLF unit conditions increase the maximum cost of closure at any time during the remaining active life.	329 IAC 2-12-2(c)(2) For changes in the closure plan whenever such changes increase the cost of the closure.
(4) The owner or operator may reduce the closure cost estimate and the amount of financial assurance provided under paragraph (b) of this section if the cost estimate exceeds the maximum cost of closure at any time during the remaining life of the MSWLF unit. The owner or operator must notify the State Director that the justification for the reduction of the closure cost estimate and the amount of financial assurance has been placed in the operating record.	329 IAC 2-12-2(d) The permittee may revise the closure cost estimate downward whenever a change in the closure plan decreases the cost of closure, or whenever portions of the facility have been certified for partial closure under 329 IAC 2-15-4. 329 IAC 2-15-4(b) The permittee shall submit to the commissioner a certification signed by both the permittee and a registered professional engineer which specifically identifies the closed areas, and that the partial closure was in accordance with the approved closure plan and the standards of this article. Certifications of partial closure shall not be made for an area until the final cover has been completely provided for that area and vegetation has been established.
(b) The owner or operator of each MSWLF unit must establish financial assurance for closure of the MSWLF unit in compliance with §258.74. The owner or operator must provide continuous coverage for closure until released from financial assurance requirements by demonstrating compliance with §258.60(h) and (i).	329 IAC 2-12-1(b) The permittee for solid waste land disposal facilities regulated by this rule shall provide financial responsibility for closure and post-closure in accordance with 329 IAC 2-7-6 and sections 2 through 5 of this rule. 329 IAC 2-12-6 As part of the acknowledgement of final closure and post-closure, the commissioner shall notify the permittee that he is no longer required to maintain financial responsibility for closure and post-closure once the requirements for closure and post-closure have been fulfilled.

PART 258 CRITERIA

PART 258 CRITERIA §258.72 FINANCIAL ASSURANCE FOR POST-CLOSURE CARE	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(a) The owner or operator must have a detailed written estimate, in current dollars, of the cost of hiring a third party to conduct post-closure care for the MSWLF unit in compliance with the post-closure plan developed under §258.61 of this part. The post-closure cost estimate used to demonstrate financial assurance in paragraph (b) of this section must account for the total costs of conducting post-closure care, including annual and periodic costs as described in the post-closure plan over the entire post-closure care period. The owner or operator must notify the State Director that the estimate has been placed in the operating record.	329 IAC 2-15-8(a) The permittee must have a written post-closure plan. The post-closure plan must be submitted with the permit application in accordance with 329 IAC 2-8, and be approved if acceptable by the commissioner as part of the permit. The approved post-closure plan will become a condition of the permit. If the plan is determined to be unacceptable, the commissioner shall identify the items needed to make it complete. 329 IAC 2-15-8(b)(4) A post-closure cost estimate in accordance with 329 IAC 2-12-3. Post-closure costs shall be calculated based on the cost necessary for the work to be performed by a third party. For post-closure maintenance of final cover and vegetation the amount per acre shall be ten percent (10%) of the cost calculated under section 3(b)(4) of this rule multiplied by the total acreage of the site permitted for filling. IC 13-7-32-6 Financial responsibility; amount (a) The amount of financial responsibility a person must establish under section 4 of this chapter for a hazardous waste landfill or a solid waste landfill must: (1) be the greater of: (A) fifteen thousand dollars ($15,000) for each acre or part of an acre covered by the hazardous waste landfill or solid waste landfill; or (B) an amount determined by the commissioner that is sufficient to close the hazardous waste landfill or solid waste landfill in a manner that: (i) minimizes the need for further maintenance; and (ii) provides reasonable, foreseeable, and necessary maintenance during post-closure; and
(1) The cost estimate for post-closure care must be based on the most expensive costs of post-closure care during the post-closure care period.	329 IAC 2-15-8(b)(4) (SEE ABOVE)
(2) During the active life of the MSWLF unit and during the post-closure care period, the owner or operator must annually adjust the post-closure cost estimate for inflation.	
(3) The owner or operator must increase the post-closure care cost estimate and the amount of financial assurance provided under paragraph (b) of this section if changes in the post-closure plan or MSWLF unit conditions increase the maximum costs of post-closure care.	

PART 258 CRITERIA

PART 258 CRITERIA §258.72 FINANCIAL ASSURANCE FOR POST-CLOSURE CARE (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(4) The owner or operator may reduce the post-closure cost estimate and the amount of financial assurance provided under paragraph (b) of this section if the cost estimate exceeds the maximum costs of post-closure care remaining over the post-closure care period. The owner or operator must notify the State Director that the justification for the reduction of the post-closure cost estimate and the amount of financial assurance has been placed in the operating record.	
(b) The owner or operator of each MSWLF unit must establish, in a manner in accordance with §258.74, financial assurance for the costs of post-closure care as required under §258.61 of this part.	329 IAC 2-12-3(b) The permittee must choose a financial responsibility mechanism which guarantees funds will be available to meet the post-closure requirements of the facility. Funding must equal the amount determined under 329 IAC 2-15-8(b)(4). Funding may be accomplished by initially funding the chosen financial responsibility mechanism in an amount equal to the amount determined under 329 IAC 2-15-8(b)(4). Funding may also be accomplished by making annual payments equal to the amount determined by the formula: $\text{Next payment} = \frac{CE-CV}{Y}$ where CE is the current post-closure cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in-period. Annual funding shall be no later than thirty (30) days after either each annual anniversary date of the first payment into the mechanism or the establishment of the mechanism, if no payments are required.
The owner or operator must provide continuous coverage for post-closure care until released from financial assurance requirements for post-closure care by demonstrating compliance with 258.61(e).	329 IAC 2-12-6 As part of the acknowledgement of final closure and post-closure, the commissioner shall notify the permittee that he is no longer required to maintain financial responsibility for closure and post-closure once the requirement for closure and post-closure have been fulfilled.

PART 258 CRITERIA

PART 258 CRITERIA §258.73 FINANCIAL ASSURANCE FOR CORRECTIVE ACTION	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(a) An owner or operator of a MSWLF unit required to undertake a corrective action program under §258.58 of this part must have a detailed written estimate, in current dollars, of the cost of hiring a third party to perform the corrective action in accordance with the program required under §258.58 of this part. The corrective action cost estimate must account for the total costs of corrective action activities as described in the corrective action plan for the entire corrective action period. The owner or operator must notify the State Director that the estimate has been placed in the operating record.	*(SEE PAGE 113)
(1) The owner or operator must annually adjust the estimate for inflation until the corrective action program is completed in accordance with §258.58(f) of this part.	
(2) The owner or operator must increase the corrective action cost estimate and the amount of financial assurance provided under paragraph (b) of this section if changes in the corrective action program or MSWLF unit conditions increase the maximum costs of corrective action.	

PART 258 CRITERIA

PART 258 CRITERIA §258.73 FINANCIAL ASSURANCE FOR CORRECTIVE ACTION (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(3) The owner or operator may reduce the amount of the corrective action cost estimate and the amount of financial assurance provided under paragraph (b) of this section if the cost estimate exceeds the maximum remaining costs of corrective action. The owner or operator must notify the State Director that the justification for the reduction of the corrective action cost estimate and the amount of financial assurance has been placed in the operating record.	
(b) The owner or operator of each MSWLF unit required to undertake a corrective action program under §258.58 of this part must establish, in a manner in accordance with §258.74, financial assurance for the most recent corrective action program. The owner or operator must provide continuous coverage for corrective action until released from financial assurance requirements for corrective action by demonstrating compliance with §258.58(f) and (g).	*(SEE PAGE 113)

PART 258 CRITERIA

PART 258 CRITERIA §258.74 ALLOWABLE MECHANISMS	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
The mechanisms used to demonstrate financial assurance under this section must ensure that the funds necessary to meet the costs of closure, post-closure care, and corrective action for known releases will be available whenever they are needed. Owners and operators must choose from the options specified in paragraphs (a) through (j) of this section.	329 IAC 2-12-2(a) The permittee must establish financial responsibility for closure of the facility. The permittee must choose from the options specified in this subsection. 329 IAC 2-12-3(a) The permittee must establish financial responsibility for post-closure care of the facility. The permittee must choose from the options as specified in this subsection. 329 IAC 2-12-1(e) Solid waste land disposal facilities which apply for permits after the promulgation of this rule shall provide financial responsibility as required by 329 IAC 2-8-2(a)(9). The documents establishing both the closure and post-closure financial responsibility must be executed by and approved by the commissioner prior to operation of the facility. In addition the financial assurance mechanism must be funded under sections 2(b) and 3(b) of this rule prior to operation. **(INDIANA DOES NOT MATCH ON CORRECTIVE ACTION FOR KNOWN RELEASES. * SEE PAGE 113)**
(a) Trust Fund. (1) An owner or operator may satisfy the requirements of this section by establishing a trust fund which conforms to the requirements of this paragraph. The trustee must be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or State agency. A copy of the trust agreement must be placed in the facility's operating record.	329 IAC 2-12-2(a)(1) TRUST FUND (A) The permittee may satisfy the requirements of this section by establishing a trust agreement in *[sic.]* forms provided by the commissioner or in such other form as approved by the commissioner. (B) All trust agreements must: (iii) Require annual evaluations of the trust to be submitted to the commissioner. (ix) Establish that the trustee is authorized to act as a trustee and is an entity whose operations are regulated and examined by a federal and state of Indiana agency. 329 IAC 2-12-3(a)(1)(A) The permittee must establish a trust agreement on forms provided by the commissioner or in such other form as approved by the commissioner. (B) All trust agreements must conform to the requirements detailed in section 2(a)(1)(B) of this rule, with the exception the term "post-closure" be substituted for the term "closure".
(2) Payments into the trust fund must be made annually by the owner or operator over the term of the initial permit or over the remaining life of the MSWLF unit, whichever is shorter, in the case of a trust fund for closure or post-closure care,	329 IAC 2-12-2(b)(x) Require initial payment into the fund be made within thirty (30) days of the commissioner's approval of the trust agreement, and any subsequent payments be made within thirty (30) days of each anniversary of the initial payment.
or over one-half of the estimated length of the corrective action program in the case of corrective action for known releases. This period is referred to as the pay-in period.	

PART 258 CRITERIA

PART 258 CRITERIA §258.74 ALLOWABLE MECHANISMS (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(3) For a trust fund used to demonstrate financial assurance for closure and post-closure care, the first payment into the fund must be at least equal to the current cost estimate for closure or post-closure care, except as provided in paragraph (j) of this section, divided by the number of years in the pay-in period as defined in paragraph (a)(2) of this section. The amount of subsequent payments must be determined by the following formula: $\text{Next Payment} = \frac{CE-CV}{Y}$ where CE is the current cost estimate for closure or post-closure care (updated for inflation or other changes), CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.	329 IAC 2-12-3(b) The permittee must choose a financial responsibility mechanism which guarantees funds will be available to meet the post-closure requirements of the facility. Funding must equal the amount determined under 329 IAC 2-15-8(b)(4). Funding may be accomplished by initially funding the chosen financial responsibility mechanism in an amount equal to the amount determined under 329 IAC 2-15-8(b)(4). Funding may also be accomplished by making annual payments equal to the amount determined by the formula: $\text{Next payment} = \frac{CE-CV}{Y}$ where CE is the current post-closure cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in-period. Annual funding shall be no later that thirty (30) days after either each annual anniversary date of the first payment into the mechanism or the establishment of the mechanism, if no payments are required.
(4) For a trust fund used to demonstrate financial assurance for corrective action, the first payment into the trust fund must be at least equal to one-half of the current cost estimate for corrective action, except as provided in paragraph (j) of this section, divided by the number of years in the corrective action pay-in period as defined in paragraph (a)(2) of this section. The amount of subsequent payments must be determined by the following formula: $\text{Next Payment} = \frac{RB-CV}{Y}$ where RB is the most recent estimate of the required trust fund balance for corrective action (i.e., the total costs that will be incurred during the second half of the corrective action period), CV is the current value of the trust fund, and Y is the number of years remaining on the pay-in period.	

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PART 258 CRITERIA §258.74 ALLOWABLE MECHANISMS (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(5) The initial payment into the trust fund must be made before the initial receipt of waste or before the effective date of this section (April 9, 1994), whichever is later, in the case of closure and post-closure care,	329 IAC 2-12-1 (c) Solid waste land disposal facilities which have operating permits in effect on the effective date of this article, shall not operate after September 1, 1989, unless, prior to that date, they have established financial responsibility for post-closure by choosing a financial assurance mechanism under section 3(a) of this rule and by funding the same under section 3(b) of this rule. (d) Solid waste land disposal facilities which have operating permits in effect on the effective date of this article, shall not operate after September 1, 1992, unless, prior to that date, they have established financial responsibility for closure by choosing a financial assurance mechanism under section 2(a) of this rule and by funding the same under section 2(b) of this rule. (e) Solid waste land disposal facilities which apply for permits after the promulgation of this rule shall provide financial responsibility as required by 329 IAC 2-8-2(a)(9). The documents establishing both the closure and post-closure financial responsibility must be executed by and approved by the commissioner prior to operation of the facility. In addition the financial assurance mechanism must be funded under sections 2(b) and 3(b) of this rule prior to operation.
or no later than 120 days after the corrective action remedy has been selected in accordance with the requirements of §258.58.	
(6) If the owner or operator establishes a trust fund after having used one or more alternate mechanisms specified in this section, the initial payment into the trust fund must be at least the amount that the fund would contain if the trust fund were established initially and annual payments made according to the specifications of this paragraph and §270.74(a) of this section, as applicable.	
(7) The owner or operator, or other person authorized to conduct closure, post-closure care, or corrective action activities may request reimbursement from the trustee for these expenditures. Requests for reimbursement will be granted by the trustee only if sufficient funds are remaining in the trust fund to cover the remaining costs of closure, post-closure care, or corrective action, and if justification and documentation of the cost is placed in the operating record. The owner or operator must notify the State Director that the documentation of the justification for reimbursement has been placed in the operating record and that reimbursement has been received.	
(8) The trust fund may be terminated by the owner or operator only if the owner or operator substitutes alternate financial assurance as specified in this section	

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or if he is no longer required to demonstrate financial responsibility in accordance with the requirements of §§258.71(b), 258.72(b), or 258.73(b).

329 IAC 2-12-6

As part of the acknowledgement of final closure and post-closure, the commissioner shall notify the permittee that he is no longer required to maintain financial responsibility for closure and post-closure once the requirements for closure and post-closure have been fulfilled.

PART 258 CRITERIA

PART 258 CRITERIA §258.74 ALLOWABLE MECHANISMS (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(b) Surety Bond Guaranteeing Payment or Performance. (1) An owner or operator may demonstrate financial assurance for closure or post-closure care by obtaining a payment or performance surety bond which conforms to the requirements of this paragraph.	329 IAC 2-12-2(a)(2) SURETY BOND (A) The permittee may satisfy the requirements of this section by establishing a surety bond on forms provided by the commissioner or in such other form as approved by the commissioner. (B) All surety bonds must: (i) Establish penal sums in the amount determined by subsection (b). (ii) Provide that the surety will be liable to fulfill the permittee's closure obligations upon notice from the commissioner that the permittee has failed to do so. (iii) Provide that the surety may not cancel the bond without first sending notice of cancellation by certified mail to the permittee and the commissioner at least one hundred twenty (120) days prior to the effective date of the cancellation. (iv) Provide that the permittee may not terminate the bond without prior written authorization by the commissioner. (C) The permittee must establish a standby trust fund to be utilized in the event the permittee fails to fulfill closure obligations and the bond guarantee is exercised. Such trust fund must be established in accordance with the requirements of subsection (a)(1). (D) The surety company issuing the bond must be among those listed as acceptable sureties for federal bonds in Circular 570 of the U.S. Department of the Treasury. (E) The surety will not be liable for deficiencies in the performance of closure by the permittee after the commissioner releases the permittee in accordance with section 6 of this rule. 329 IAC 2-12-3(a)(2) SURETY BOND (A) The permittee must establish a surety bond on forms provided by the commissioner or in such other form as approved by the commissioner. (B) All surety bonds must conform to the requirements detailed in section 2(a)(2)(B) through 2(a)(2)(E) of this rule, with the exception that the term "post-closure" be substituted for the term "closure".
An owner or operator may demonstrate financial assurance for corrective action by obtaining a performance bond which conforms to the requirements of this paragraph.	
The bond must be effective before the initial receipt of waste or before the effective date of this section, (April 9, 1994), whichever is later, in the case of closure and post-closure care,	329 IAC 2-12-1 (c) Solid waste land disposal facilities which have operating permits in effect on the effective date of this article, shall not operate after September 1, 1989, unless, prior to that date, they have established financial responsibility for post-closure by choosing a financial assurance mechanism under section 3(a) of this rule and by funding the same under section 3(b) of this rule.

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(d) Solid waste land disposal facilities which have operating permits in effect on the effective date of this article, shall not operate after September 1, 1992, unless, prior to that date, they have established financial responsibility for closure by choosing a financial assurance mechanism under section 2(a) of this rule and by funding the same under section 2(b) of this rule.

(e) Solid waste land disposal facilities which apply for permits after the promulgation of this rule shall provide financial responsibility as required by 329 IAC 2-8-2(a)(9). The documents establishing both the closure and post-closure financial responsibility must be executed by and approved by the commissioner prior to operation of the facility. In addition the financial assurance mechanism must be funded under sections 2(b) and 3(b) of this rule prior to operation.

or no later than 120 days after the corrective action remedy has been selected in accordance with the requirements of §258.58.

The owner or operator must notify the State Director that a copy of the bond has been placed in the operating record.

329 IAC 2-12-1(e)
(SEE ABOVE)

The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on Federal bonds in Circular 570 of the U.S. Department of the Treasury.

329 IAC 2-12-2(a)(2)(D)
(SEE ABOVE)

(2) The penal sum of the bond must be in an amount at least equal to the current closure, post-closure care or corrective action cost estimate, whichever is applicable, except as provided in §258.74(k).

329 IAC 2-12-2(a)(2)(B)(i)
Establish penal sums in the amount determined by subsection (b).
(INDIANA RULES DO NOT INCLUDE CORRECTIVE ACTION COSTS. * SEE PAGE 113)

(3) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.

329 IAC 2-12-2(a)(2)(B)(ii)
(SEE ABOVE)

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PART 258 CRITERIA §258.74 ALLOWABLE MECHANISMS (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(4) The owner or operator must establish a standby trust fund. The standby trust fund must meet the requirements of §258.74(a) except the requirements for initial payment and subsequent annual payments specified in §258.74(a)(2), (3), (4) and (5).	329 IAC 2-12-2(a)(2)(C) (SEE ABOVE)
(5) Payments made under the terms of the bond will be deposited by the surety directly into the standby trust fund. Payments from the trust fund must be approved by the trustee.	
(6) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner and operator and to the State Director 120 days in advance of cancellation. If the surety cancels the bond, the owner or operator must obtain alternate financial assurance as specified in this section.	329 IAC 2-12-2(a)(2)(B)(iii) (SEE ABOVE)
(7) The owner or operator may cancel the bond only if alternate financial assurance is substituted as specified in this section or if the owner or operator is no longer required to demonstrate financial responsibility in accordance with §§258.71(b), 258.72(b) or 258.73(b).	329 IAC 2-12-2(a)(2)(B)(iv) (SEE ABOVE) 329 IAC 2-12-6 As part of the acknowledgement of final closure and post-closure, the commissioner shall notify the permittee that he is no longer required to maintain financial responsibility for closure and post-closure once the requirements for closure and post-closure have been fulfilled.

PART 258 CRITERIA

PART 258 CRITERIA §258.74 ALLOWABLE MECHANISMS (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(c) Letter of Credit. (1) An owner or operator may satisfy the requirements of this section by obtaining an irrevocable standby letter of credit which conforms to the requirements of this paragraph.	329 IAC 2-12-2(a)(3) LETTER OF CREDIT (A) The permittee may satisfy the requirements of this section by establishing a letter of credit on forms provided by the commissioner or in such other form as approved by the commissioner. (B) All letters of credit must: (i) Establish credit in the amount determined by subsection (b). (ii) Be irrevocable. (iii) Be effective for a period of at least one (1) year and must have automatic extensions for periods of at least one (1) year unless the issuing institution provides written notification of cancellation by certified mail to both the permittee and the commissioner at least one hundred twenty (120) days prior to the effective date of cancellation. (iv) Provide that the institution issuing the letter of credit, upon written notice from the commissioner that the permittee's obligations have not been fulfilled, will deposit funds equal to the amount of credit into a trust fund to be used to ensure permittee's closure obligations are fulfilled. (C) The permittee must establish a standby trust fund to be utilized in the event the permittee fails to fulfill its closure obligations and the letter of credit is utilized. Such trust funds must be established in accordance with the requirements of subsection (a)(1). (D) The issuing institution must be an entity which has the authority to issue letters of credit and whose letters of credit operations are regulated and examined by a federal or state of Indiana agency. 329 IAC 2-12-3(a)(3) LETTER OF CREDIT (A) The permittee must establish a letter of credit on forms provided by the commissioner or in such other form as approved by the commissioner. (B) All letters of credit must conform to the requirements detailed in section 2(a)(3)(B) through 2(a)(3)(D) of this rule, with the exception that the term "post-closure" be substituted for the term "closure".

PART 258 CRITERIA

The letter of credit must be effective before the initial receipt of waste or before the effective date of this section, (April 9, 1994), whichever is later, in the case of closure and post-closure care,

329 IAC 2-12-1(c)

Solid waste land disposal facilities which have operating permits in effect on the effective date of this article, shall not operate after September 1, 1989, unless, prior to that date, they have established financial responsibility for post-closure by choosing a financial assurance mechanism under section 3(a) of this rule and by funding the same under section 3(b) of this rule.

(d) Solid waste land disposal facilities which have operation permits in effect on the effective date of this article, shall not operate after September 1, 1992, unless, prior to that date, they have established financial responsibility for closure by choosing a financial assurance mechanism under section 2(a) of this rule and by funding the same under section 2(b) of this rule.

(e) Solid waste land disposal facilities which apply for permits after the promulgation of this rule shall provide financial responsibility as required by 329 IAC 2-8-2(a)(9). The documents establishing both the closure and post-closure financial responsibility must be executed by and approved by the commissioner prior to operation of the facility. In addition the financial assurance mechanism must be funded under sections 2(b) and 3(b) of this rule prior to operation.

or no later than 120 days after the corrective action remedy has been selected in accordance with the requirements of §258.58.

The owner or operator must notify the State Director that a copy of the letter of credit has been placed in the operating record.

329 IAC 2-12-1(e)
(SEE ABOVE)

The issuing institution must be an entity which has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a Federal or State agency.

329 IAC 2-12-2(a)(3)(D)
(SEE ABOVE)

(2) A letter from the owner or operator referring to the letter of credit by number, issuing institution, and date, and providing the following information: name, and address of the facility, and the amount of funds assured, must be included with the letter of credit in the operating record.

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PART 258 CRITERIA §258.74 ALLOWABLE MECHANISMS (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(3) The letter of credit must be irrevocable and issued for a period of at least one year	329 IAC 2-12-2(a)(3)(B)(ii) (SEE ABOVE) 329 IAC 2-12-2(a)(3)(B)(iii) (SEE ABOVE)
in an amount at least equal to the current cost estimate for closure, post-closure care or corrective action, whichever is applicable, except as provided in §258.74(a).	329 IAC 2-12-2(b) Financial responsibility closure cost estimate: (1) For purposes of establishing financial responsibility, the permittee must have a detailed written estimate of the cost of closing the facility based on: (A) the closure costs derived under 329 IAC 2-15-3(b); and (B) one (1) of the closure estimating standards under subdivision (2). (2) For purposes of this section, "establishment of financial responsibility" means submission of financial responsibility *[sic.]* to the commissioner in the form of one (1) of the options under subsection (a). (3) The permittee must use one (1) of the following closure cost estimating standards: (A) The entire facility closure standard is an amount which equals the estimated total cost of closing the entire facility, less amount representing portions of the facility which have been certified for partial closure in accordance with 329 IAC 2-15-4. (B) The incremental closure standard is an amount which for any year of operation equals the total cost of closing the portion of the facility dedicated to the current year of facility operation, plus all closure amounts from completed portions of the facility from prior years of operation which have not yet been certified for partial closure in accordance with 329 IAC 2-15-4. 329 IAC 2-12-3(b) The permittee must choose a financial responsibility mechanism which guarantees funds will be available to meet the post-closure requirements of the facility. Funding must equal the amount determined under 329 IAC 2-15-8(b)(4). Funding may be accomplished by initially funding the chosen financial responsibility mechanism in an amount equal to the amount determined under 329 IAC 2-15-8(b)(4). Funding may be accomplished by making annual payments equal to the amount determined by the formula: $$\text{Next payment} = \frac{CE-CV}{Y}$$ where CE is the current post-closure cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in-period. Annual funding shall be no later than thirty (30) days after either each annual anniversary date of the first payment into the mechanism or the establishment of the mechanism, if no payments are required. **(INDIANA RULES DO NOT INCLUDE CORRECTIVE ACTION COSTS. * SEE PAGE 113)**

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The letter of credit must provide that the expiration date will be automatically extended for a period of at least one year unless the issuing institution has cancelled the letter of credit by sending notice of cancellation by certified mail to the owner and operator and to the State Director 120 days in advance of cancellation.

If the letter of credit is cancelled by the issuing institution, the owner or operator must obtain alternate financial assurance.

329 IAC 2-12-2(a)(3)(B)(iii)
(SEE ABOVE)

(4) The owner or operator may cancel the letter of credit only if alternate financial assurance is substituted as specified in this section

or if the owner or operator is released from the requirements of this section in accordance with §§258.71(b), 258.72(b) or 258.73(b).

329 IAC 2-12-6

As part of the acknowledgement of final closure and post-closure, the commissioner shall notify the permittee that he is no longer required to maintain financial responsibility for closure and post-closure once the requirements for closure and post-closure have been fulfilled.

PART 258 CRITERIA

PART 258 CRITERIA §258.74 ALLOWABLE MECHANISMS (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(d) Insurance. (1) An owner or operator may demonstrate financial assurance for closure and post-closure care by obtaining insurance which conforms to the requirements of this paragraph.	329 IAC 2-12-2(a)(4) INSURANCE (A) The permittee may satisfy the requirements of this section by providing evidence of insurance on forms provided by the commissioner or on such other forms as approved by the commissioner. (B) All insurance must: (i) Be in the amount determined by subsection (b). (ii) Provide that upon written notification to the insurer by the commissioner that the permittee has failed to perform final closure, the insurer shall make payments in any amount, not to exceed the amount insured, and to any person authorized by the commissioner. (iii) Provide that the permittee must maintain the policy in full force and effect unless the commissioner consents in writing to termination of the policy. (iv) Provide for assignment of the policy to a successor permittee. (v) Provide that the insurer may not cancel, terminate, or fail to renew the policy except for the permittee's *[sic.]* failure to pay the premium. No policy may be cancelled, be terminated, or fail to be renewed unless at least one hundred twenty (120) days prior to such event the commissioner and the permittee are notified by the insurer in writing. (C) The insurer must either be licensed to transact the business of insurance or be eligible to provide insurance as an excess or surplus lines insurer in one (1) or more states. 329 IAC 2-12-3(a)(4) INSURANCE (A) The permittee must provide evidence of insurance on forms provided by the commissioner or on such other form as approved by the commissioner. (B) All insurance must conform to the requirements detailed in section 2(a)(4)(B) through 2(a)(4)(C) of this rule, with the exception that the term "post-closure" be substituted for the term "closure".
The insurance must be effective before the initial receipt of waste or before the effective date of this section, (April 9, 1994), whichever is later.	329 IAC 2-12-1(c) Solid waste land disposal facilities which have operating permits in effect on the effective date of this article, shall not operate after September 1, 1989, unless, prior to that date, they have established financial responsibility for post-closure by choosing a financial assurance mechanism under section 3(a) of this rule and by funding the same under section 3(b) of this rule. (d) Solid waste land disposal facilities which have operating permits in effect on the effective date of this article, shall not operate after September 1, 1992, unless, prior to that date, they have established financial responsibility for closure by choosing a financial assurance mechanism under section 2(a) of this rule and by funding the same under section 2(b) of this rule.

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(e) Solid waste land disposal facilities which apply for permits after the promulgation of this rule shall provide financial responsibility as required by 329 IAC 2-8-2(a)(9). The documents establishing both the closure and post-closure financial responsibility must be executed by and approved by the commissioner prior to operation of the facility. In addition the financial assurance mechanism must be funded under section 2(b) and 3(b) of this rule prior to operation.

At a minimum, the insurer must be licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

329 IAC 2-12-2(a)(4)(C)
(SEE ABOVE)

The owner or operator must notify the State Director that a copy of the insurance policy has been placed in the operating record.

329 IAC 2-12-1(e)
(SEE ABOVE)

(2) The closure or post-closure care insurance policy must guarantee that funds will be available to close the MSWLF unit whenever final closure occurs or to provide post-closure care for the MSWLF unit whenever the post-closure care period begins, whichever is applicable. The policy must also guarantee that once closure or post-closure care begins, the insurer will be responsible for the paying out of funds to the owner or operator or other person authorized to conduct closure or post-closure care, up to an amount equal to the face amount of the policy.

329 IAC 2-12-2(a)(4)(A)
(SEE ABOVE)
329 IAC 2-12-2(a)(4)(B)
(SEE ABOVE)
329 IAC 2-12-3(a)(4)(A)
(SEE ABOVE)
329 IAC 2-12-3(a)(4)(B)
(SEE ABOVE)

(3) The insurance policy must be issued for a face amount at least equal to the current cost estimate for closure or post-closure care, whichever is applicable, except as provided in §258.74(a). The term "face amount" means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer will not change the face amount, although the insurer's future liability will be lowered by the amount of the payments.

329 IAC 2-12-2(a)(4)(B)(i)
(SEE ABOVE)

PART 258 CRITERIA

PART 258 CRITERIA §258.74 ALLOWABLE MECHANISMS (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(4) An owner or operator, or any other person authorized to conduct closure or post-closure care, may receive reimbursements for closure or post-closure expenditures, whichever is applicable. Requests for reimbursement will be granted by the insurer only if the remaining value of the policy is sufficient to cover the remaining costs of closure or post-closure care, and if justification and documentation of the cost is placed in the operating record. The owner or operator must notify the State Director that the documentation of the justification for reimbursement has been placed in the operating record and that reimbursement has been received.	
(5) Each policy must contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer, provided that such consent is not unreasonably refused.	329 IAC 2-12-2(a)(4)(B)(iv) (SEE ABOVE)
(6) The insurance policy must provide that the insurer may not cancel, terminate or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy must, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may cancel the policy by sending notice of cancellation by certified mail to the owner and operator and to the State Director 120 days in advance of cancellation. If the insurer cancels the policy, the owner or operator must obtain alternate financial assurance as specified in this section.	329 IAC 2-12-2(a)(4)(B)(v) (SEE ABOVE)

PART 258 CRITERIA

PART 258 CRITERIA §258.74 ALLOWABLE MECHANISMS (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(7) For insurance policies providing coverage for post-closure care, commencing on the date that liability to make payments pursuant to the policy accrues, the insurer will thereafter annually increase the face amount of the policy. Such increase must be equivalent to the face amount of the policy, less any payments made, multiplied by an amount equivalent to 85 percent of the most recent investment rate or of the equivalent coupon-issue yield announced by the U.S. Treasury for 26-week Treasury securities.	
(8) The owner or operator may cancel the insurance policy only if alternate financial assurance is substituted as specified in this section	
or if the owner or operator is no longer required to demonstrate financial responsibility in accordance with the requirements of §258.71(b), 258.72(b) or 258.73(b).	329 IAC 2-12-6 As part of the acknowledgement of final closure and post-closure, the commissioner shall notify the permittee that he is no longer required to maintain financial responsibility for closure and post-closure once the requirements for closure and post-closure have been fulfilled.
(e) Corporate Financial Test. [reserved]	
(f) Local Government Financial Test. [reserved]	

PART 258 CRITERIA

PART 258 CRITERIA §258.74 ALLOWABLE MECHANISMS (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(g) Corporate Guarantee. [Reserved]	
(h) Local Government Guarantee. [Reserved]	
(i) State Approved Mechanism. An owner or operator may satisfy the requirements of this section by obtaining any other mechanism that meets the criteria specified in §258.74(l), and that is approved by the Director of an approved State.	

PART 258 CRITERIA

PART 258 CRITERIA §258.74 ALLOWABLE MECHANISMS (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(j) State Assumption of Responsibility. If the State Director either assumes legal responsibility for an owner or operator's compliance with the closure, post-closure care and/or corrective action requirements of this part, or assures that the funds will be available from State sources to cover the requirements, the owner or operator will be in compliance with the requirements of this section. Any State assumption of responsibility must meet the criteria specified in §258.74(l).	
(k) Use of Multiple Financial Mechanisms. An owner or operator may satisfy the requirements of this section by establishing more than one financial mechanism per facility. The mechanisms must be as specified in paragraphs (a), (b), (c), (d), (e), (f), (g), (h), (i) and (j) of this section, except that it is the combination of mechanisms, rather than the single mechanism, which must provide financial assurance for an amount at least equal to the current cost estimate for closure, post-closure care or corrective action, whichever is applicable. The financial test and a guarantee provided by a corporate parent, sibling, or grandparent may not be combined if the financial statements of the two firms are consolidated.	329 IAC 2-12-5 A permittee may satisfy the requirements for financial responsibility for both closure and post-closure care for one or more facilities by using a trust fund, surety bond, letter of credit, insurance, or financial test, that meets the specifications for the mechanism in both 329 IAC 2-12-2 and 329 IAC 2-12-3. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for financial responsibility of closure and of post-closure care.

PART 258 CRITERIA

PART 258 CRITERIA §258.74 ALLOWABLE MECHANISMS (Continued)	CITE STATE STATUTE, REGULATION, AND/OR GUIDANCE
(l) The language of the mechanisms listed in paragraphs (a), (b), (c), (d), (e), (f), (g), (h), (i) and (j) of this section must ensure that the instruments satisfy the following criteria:	
(1) The financial assurance mechanisms must ensure that the amount of funds assured is sufficient to cover the costs of closure, post-closure care, and corrective action for known releases when needed;	329 IAC 2-12-2 (SEE ABOVE) 329 IAC 2-12-3 (SEE ABOVE)
(2) The financial assurance mechanisms must ensure that funds will be available in a timely fashion when needed;	
(3) The financial assurance mechanisms must be obtained by the owner or operator by the effective date of these requirements or prior to the initial receipt of solid waste, whichever is later, in the case of closure and post-closure care, and no later than 120 days after the corrective action remedy has been selected in accordance with the requirements of §258.58, until the owner or operator is released from the financial assurance requirements under §§258.71, 258.72 and 258.73.	329 IAC 2-12-1 (c) (SEE ABOVE) 329 IAC 2-12-1(d) (SEE ABOVE) 329 IAC 2-12-1(e) (SEE ABOVE) (INDIANA RULES DO NOT INCLUDE CORRECTIVE ACTION.)
(4) The financial assurance mechanisms must be legally valid, binding, and enforceable under State and Federal law.	IC 13-7-32-4 Except as provided in section 9 of this chapter, a person that applies for a permit to operate a: (1) hazardous waste landfill; (2) solid waste landfill; or (3) transfer station; must establish financial responsibility for the costs of closure and post-closure monitoring and maintenance of the hazardous waste landfill, solid waste landfill, or transfer station.

***Indiana will adopt rules which either incorporate these parts of 40 CFR Part 258 criteria or exceed in stringency these parts of 40 CFR Part 258 criteria. Please see narrative discussion regarding rulemaking procedures and minimum timeframes for rulemaking.**

THE *INDIANA* APPLICATION

FOR

SUBTITLE D AUTHORIZATION

JUNE 1993

APPENDICES

APPENDIX

A

TYPE			QUANTITY
AM	-	Ash Monofill	1
CC	-	Collection Container System	9
CO	-	Composting Site	1
CD	-	Construction/Demolition Site	8
FM	-	Foundry Monofill	1
IP	-	Incinerator-permitted by approved application	3
ML	-	Municipal Landfill	32
MP	-	Medical Waste Processing Facility	1
MT	-	Municipal Transfer Station	12
PL	-	Private Landfill	42
R1	-	Restricted Waste Site Type 1	1
R2	-	Restricted Waste Site Type 2	7
R3	-	Restricted Waste Site Type 3	4
R4	-	Restricted Waste Site Type 4	0
PP	-	Paper Processing/Recycling Facility	1
PT	-	Private Transfer Station	33
SS	-	Scrubber Sludge	0
TP	-	Tire Processing Facility	2

APPENDIX

B

STANDARD OPERATING PROCEDURE (SOP)
SOLID WASTE PERMIT REVIEW
MAILING LABELS/BULK MAILINGS

1. Remove names and addresses from copy of application from Geology or Engineering. The other two applications which may be viewed by the public should remain complete as received. Another option is to photocopy the list of names and addresses from any copy..

2. Send them to Kathleen Anderson. Inform her that this is a <u>new</u> file and give it an SW_ _ _ _ _ name.

3. Send original list of names and addresses to File IIc2d.

4. When the printout of names and addresses is received, proof them.

5. Store in "AAA" drawer in the file cabinet (currently located outside Tracy, Ashly, and George's office). Add new file names to the list of all name and address files which are located at the front of the AAA drawer.

6. If more names and addresses are received, send them to Shelly and inform her that these are to be added to the SW_ _ _ _ _ file.

7. Send public comments to File IIC2b and lists of potentially affected persons (w/o comments) to File IIC2d.

8. Proof the updated printout of the file. It should include all names and addresses from the Files IIC2b and IIC2d and from the list of names and addresses that was submitted in the application.

9. Have labels generated with our mail code on each one (currently 65-45).

10. If list is very large (more than 300), use contract service to put labels on envelopes and stuff with appropriate documents (permit letter, responsiveness summary* and modified Notice of Decision [NOD]). Contact Randy Farrand in Stores and Mails to arrange this. Photocopies must be made in advance of pickup. Envelopes must be stamped with agency's return address.

11. Use Chain of Custody form to accompany pile of to-be-mailed envelopes.

Revised 01-19-93

* Responsiveness summary is used only for new permits and major modifications.

STANDARD OPERATING PROCEDURE
SOLID WASTE PERMIT REVIEW
MINOR MODIFICATIONS & OTHER MISCELLANEOUS SUBMITTALS

1. Date stamp. Glynda Oakes usually does this, but make sure all copies and all sets of plans are stamped.

2. Log in permit tracking log on the same day that it was received or the following work day.

3. If more than one copy of the modification request is received, separate copies on the same day that it was received or the following work day. Add Flow Sheet to each copy and fill in the pertinent information. (No deadline for completeness review exists for these requests). Hand carry (or send if not too bulky) to the appropriate review group (or repository) depending on the submittal:

   a. Engineering - Add red adhesive dots to plans and narrative. Deliver (or send) to Engineering Section Chief (currently Daniela Klesmith). Examples of minor modification requests are:

      1. Requests to use alternative cover
      2. Requests to modify aspects of a transfer station.
      3. Requests to install gas collection system.

   b. Geology - Add green adhesive dots to plans and narrative. Deliver (or send) to Geology Section Chief (currently Dave Becka). Examples of submittals for geology are:

      1. Hydrogeologic studies ("Hydros")
      2.
      3.

   c. Repository - If an extra copy (or copies) exists, add beige adhesive dots to plans and narrative and hand carry to repository. This is usually not the case for these types of submittals, since only one copy is usually received.

4. Once technical review is complete, a letter (in final or rough) will be sent to you from either the Engineering or Geology Section. Do Notice of Decision (NOD) and associated letters and put in a yellow pocket folder. Fill in cover sheet and attach to folder. Send to Tracy Barnes for review, Solid Waste Permit Section Chief (currently Jerry Rud) for review, Solid Waste Permit Branch Chief (currently Pat Carroll) for review, and Assistant Commissioner (Tim Method) for signature. The secretary who supports the Solid Waste Permit Section will mail this set of letters. Only the permit modification or approval letter needs to be mailed via certified mail.

5. Log in the date this letter was mailed on the permit tracking log on the same day that it was received by the Permit Manager or on the following work day. On the MacIntosh, transfer this information to the Effective Permits disc.

6. Remove application from repository and put in IIC1a file.

STANDARD OPERATING PROCEDURE (SOP)
SOLID WASTE PERMIT REVIEW
PERMIT RENEWALS

1. Date stamp as received. Glynda Oakes usually does this, but make sure all copies and all sets of plans are stamped.

2. Log in permit tracking log and on IIMS on the same day that it was received or the following work day. Also, on the WANG Database, change the expiration date to "0 0/0 0/0 0"

3. Separate copies of application on the same day it was received or the following work day. Add Flow Sheet to each copy and fill in pertinent information. The completeness review of these applications (except for Good Character and Needs Portions) is done by the Permit Manager. On the Flow Sheet, note the date when comments must be returned to you, and hand carry copies of the application to the following review groups:

   a. Good Character (GC)-Add beige adhesive dots to the copy with ORIGINAL signatures and deliver to staff member in Solid Waste Permit Section who does GC review (currently Ashly Insco).

   b. (Justification of) Needs-Instead of adding dots to this copy, write "Extra Copy" on it and put it in the repository.

4. Do completeness review of application using appropriate checklist. If only two copies were received, remove Needs and Good Character portion from "Extra Copy" and review the remaining technical information for completeness. Try to keep the beige-dot copy intact.

5. Write initial completeness letter using form document (#0035F) on OPN. Attach comments from three review groups, and send to Solid Waste Permit Section Chief (currently Jerry Rud) for review, and Solid Waste Permit Branch Chief (currently Pat Carroll) for signature. This letter will be mailed via certified mail by the secretary who supports the Solid Waste Permit Section and must be mailed within 30 calendar days from the date of receipt of the application. Log in date on which letter was mailed on permit tracking log and IIMS on the same day that the carbon copy is received by the permit manager or the following work day.

6. When requisition information is received, make sure all copies are date stamped. Then log in, add appropriate dots and hand carry (or send if not too bulky) a copy to each of the review groups. Remind them that the permit manager needs to know if the application is now complete or not. Permit reviews application for completeness including additional information.

7. If application is still not complete, repeat steps 5 (using second completeness letter) and 6.

8. When application is complete, write a letter stating such using form document (#_____) on OPN. Send to Tracy Barnes for review, Solid Waste Permit Section Chief (currently Jerry Rud) for review, and Solid Waste Permit Branch Chief (currently Pat Carroll) for signature. This letter is to be mailed via certified mail by the secretary who supports the Solid Waste Permit Section. Log in the date on which the letter was mailed on the permit tracking log and IIMS on the same day that the carbon copy is received by the permit manager or the following work day. Once the application has been deemed complete, the following should occur:

   a. Send a copy of the complete renewal application to Geology. Add green adhesive dots to plans and narrative. Deliver to Geology Section Chief (currently Dave Becka)*. Log in date sent to Geology.

   b. Retrieve the copy of the application from GC reviewer (with ORIGINAL signatures) and put in respository.

9. When Geology review is complete, send application to Engineering. Log in date sent to Engineering.

10. When Engineering review is complete, send application to appropriate inspector.

11. When all review is complete, have Geology draft the permit renewal letter*. Write Notice of Decision (NOD) using form doucuments (#0016F, 0017F, and 0018F) on OPN.

12. Fill in cover sheet and attach to yellow pocket folder with NOD and associated letters, Good Character Concise Statement (and associated memos), and roughs (with blind carbon copies) to Tracy Barnes for review, Solid Waste Permit Section Chief (currently Jerry Rud) for review, Solid Waste Permit Branch Chief (currently Pat Carroll) for review, and Assistant Commissioner (currently Tim Method) for signature. The secretary who supports the Solid Waste Permit Section will mail this letter (and attachments) via certified mail.

13. Log in the date this letter was mailed on the permit tracking log and IIMS on the same day that it was received by the permit manager or on the following work day. On the MacIntosh, transfer this record to the Effective Permits disc. On the WANG Registrant database, add the expiration date.

14. Remove application from the repository and put in IIC1a file.

Revised 01-20-93

* Exception: Geology review not needed for any processing facility renewals (including incinerators). Also, permit manager drafts the permit letter for transfer station renewal letters using form #0012F.

STANDARD OPERATING PROCEDURE (SOP)
SOLID WASTE PERMIT REVIEW
NEW FACILITIES AND MAJOR MODIFICATIONS

1. Date stamp. Glynda Oakes usually does this, but make sure all copies and all sets of plans are stamped.

2. Log in permit tracking log and on IIMS on the same day that it was received or the following work day.

3. Separate copies of application on the same day it was received or the following work day. (Note exceptions in footnotes)* Add flow sheet to each copy and fill in pertinent information. The most important item is the date when comments on completeness review must be returned to Permit Manager. Then hand carry copies of the application to the following review groups:

    a. Engineering - Add red adhesive dots to plans and narrative. Deliver to Engineering Section Chief (currently Daniela Klesmith)

    b. Geology - Add green adhesive dots to plans and narrative. Deliver to Geology Section Chief (currently Dave Becka).

    c. Good Character (GC) - Add beige adhesive dots to the copy with ORIGINAL signatures and deliver to staff in Solid Waste Permit Section who does GC review (currently Ashly Insco). Keep this copy of the application complete, so that it can be used as a file copy at a later date.

* For applications for new processing facilities, the completeness review is done by the permit manager, so copies do not need to be sent to the Engineering or Geology section. Permitted incinerators should be sent to Engineering for completeness review.
Also, new restricted waste site applications should have the waste characterized (or classified as Type I, II, or III) before completeness review begins. However, if the applicant chooses to go ahead with the technical review of the application before the waste classification is completed, the application should be sent to Engineering and Geology in the normal manner for completeness review.

d. (Justification of) Needs - Instead of adding dots to this copy, write "Extra Copy" on it and put it in the repository. This copy will be mailed or delivered to a library near the proposed facility so keep it separate from the beige dot copy (e.g., put rubber band around it).

4. Write initial completeness letter using form document on OPN (#0035F). Attach comments from the four review groups and send to Solid Waste Permit Section Chief (currently Jerry Rud) for review, and Solid Waste Permit Branch Chief (currently Pat Carroll) for signature. This letter will be mailed via certified mail by secretary who supports the Solid Waste Permit Section and must be mailed within 45 calendar days from date of receipt of the application. Log in date on which letter was mailed on permit tracking log and IIMS on the same day that the carbon copy is received by the permit manager or the next work day.

5. When requested information is received, make sure all copies are date stamped. Then log in, add appropriate dots, and hand carry (or send if not too bulky) a copy to each of the four review groups. Remind them that the permit manager needs to know if the application is now complete or not.

6. If application is still not complete, repeat steps 4 and 5.

7. When application is complete, write a letter stating that using form document (#0035F modified) on OPN. Send to Solid Waste Permit Section Chief (currently Jerry Rud) for review and Solid Waste Branch Chief (currently Pat Carroll) for signature. This letter is to be mailed via certified mail by the secretary who supports the Solid Waste Permit Section. Log in the date on which the letter was mailed on the permit tracking log and IIMS on the same day that the carbon copy is received by the permit manager or the following work day.
Once the application has been deemed complete, the following should occur:

a. Draft Notice of Receipt and associated letters for a public notice which announces the availability of the application at a library near the proposed facility.
(Use NOR form documents #0004F, 0012F, and 0059F)

b. Send (or have an inspector deliver) a complete copy (the "Extra copy") of the application (including Good Character and Needs Statement) to a library near the proposed facility. Remember that the application should be at the library when the notice is published in the newspaper.

c. Remove names and addresses of potentially affected persons (in this case, adjacent property owners) from the engineering or geology copy of the application and send to Kathleen who will enter them into a database for labels at a later date.

d. Make sure the Good Character (beige dots) copy of the application is in the Solid Waste Permit Repository (currently on 8th floor near Laura Lightbody's office).

e. Send the form document (#0080F) to the appropriate inspector informing him/her that an application has been received and that it is available in the repository if they wish to review it.

8. If carbon copies of technical requests for additional information (RAI) are received, log them in on permit tracking log and IIMS on the same day or the following work day.

9. If a public hearing is requested as a result of the NOR being published, set up the public hearing. (See SOP-Public Hearing). Send comments and list of attendees to the IIC2b file.

10. When the permit review is completed and a draft permit is written, write Notice of Decision and associated letters. (Use NOD form documents #0016F, 0017F, and 0018F). Before the permit is mailed, make sure:

a. Good Character review is complete.

b. Needs review is complete.

c. Net Worth review is complete. (Financial Assurance is handled as a pre-operational condition).

d. Labels have been printed for all potentially affected party including:

1. All nearby property owners (from application).

2. All persons who requested to be notified of our final decision at the public hearing (File IIC2b).

3. All persons who submitted comments at the public hearing or mailed them to our office (File IIC2b).

4. Other interested persons (File IIC2d).

11. Fill in cover sheet and attach to yellow pocket folder with NOD and associated letters, Good Character Concise Statement and associated memos,Responsiveness Summary, and roughs (with blind carbon copies) to Solid Waste Permit Section Chief (currently Jerry Rud) for review, Solid Waste Permit Branch Chief (currently Pat Carroll) for review, and Assistant Commissioner (currently Tim Method) for signature. The secretary who supports the Solid Waste Permit Section will mail this letter (and various attachments) via certified mail.

12. Log in the date this letter was mailed on the permit tracking log and IIMS on the same day that it was received by the permit manager or on the following work day. On the MacIntosh, transfer this information to the Effective Permits disc. Add this facility to the WANG Registrant database (Name of facility, location of facility, phone numbers, expiration date, and "Y" in "output" field, etc.)

13. Remove application from repository and put in IIC1a file.

Revised 02-17-93

APPENDIX

C

STANDARD OPERATING PROCEDURE (SOP)
SOLID WASTE PERMIT REVIEW
PLANNING A PUBLIC HEARING

1. Select a date at least 1½ months from today.
Avoid state holidays, local events, Fridays, etc.

2. Select a location. Possibilities are: school auditoria & county courthouse meeting rooms. A standard criteria is to select a room with seating capicity for at or near 200 people and preferrably with no charge.

3. Call responsible party to set up reservation.
Could be school principal or superintendent, or whoever is in charge of reservations for the courthouse meeting room (auditor, county commissioner, etc.) Phone numbers for all schools in state are listed in Indiana Business Directory. Inform them of what equipment you will need. Usually:
   -table in front w/ six chairs
   -podium in front w/ microphone
   -electric cord for court reporter
   -table near entrance (for handouts)

4. Ask Solid Waste Engineering Section to prepare the Fact Sheet (give them a month to do it).

5. Time: Usually begin at 7:00 p.m., but that's only because form documents say that. Usually is left open-ended (per form document), but often schools want it to end at a certain hour due to end of janitor's shift or his/her planned overtime.

6. When all details are set up, the time clock begins ticking: the Notice of Public Hearing must be published (not just mailed) at least 30 days before the hearing. Complete form documents 0046F,0030F, and 0054F. Make sure a copy of the complete application is available at the local library. Check files to see if a copy was sent when the application was NOR'd (public Notice of Receipt (NOR) of application). If not, send a copy with the appropriate inspector or mail and again make sure the application is at the local library when the Notice of Public Hearing is published.

7. When documents are complete, give to Jerry Rud (for review), Pat Carroll (for review), & Tim Method (for signature). Fax to newspaper if time is running short. Remember that some newspapers only publish weekly, not daily and that usually newspapers need 3-5 days to lay out the legal ads.

8. Contact a court reporter. Currently we have a contract with Accurate Reportings (Mrs. Daniels, 848-0088). She usually asks for directions to the hearing location so get them from the school for (you and) the court reporter.

9. The attached note form can be used to keep track of details regarding the hearing.

10. Confirm with court reporter & with school contact perosn a few days before the hearing.

11. Make copies of fact sheet, permit flow diagram, and registration sheets for the anticipated number of attendees. Keep Fact Sheets separate from the permit Flow Sheet. If there is no clue about the number of attendees, make around 100 copies of the fact sheet. All other sheets can be used later, so make many of them.

12. Prepare introduction for Hearing Officer, ~~which is form~~ document (#0063F) → on attached form

Revised 01-19-93

Revised 8-7-92

PUBLIC HEARING

Opening Comments by Hearing Officer

HEARING OFFICER: Good evening. This is a public hearing before the Indiana Department of Environmental Management regarding the (Var. 1) for (Var. 2). My name is (Var. 3) and I have been appointed by the Commissioner to serve as Hearing Officer in this matter. Will the official Reporter designated for the hearing, please stand, raise your right hand and state your name?

REPORTER ANSWER:

HEARING OFFICER: Do you solemnly swear that you will keep complete and accurate notes of all that transpires in this hearing, and prepare a complete transcript thereof from your notes, and faithfully perform all the duties imposed upon you as an official reporter under the laws of the State of Indiana?

REPORTER ANSWER:

HEARING OFFICER: Thank you. The purpose of this public hearing is to receive oral or written comments from everyone interested in the issuance or denial of the permit. The staff of the Department of Environmental Management are not acting as advocates of the permit tonight. The IDEM is not presenting any evidence as to why the permit should or should not be issued, or on what the permit terms and conditions should be if it is issued.

I am here to preside over the hearing, and ensure that a complete transcript is made of the hearing to present to the Commissioner of the Department. Please provide your name and speak loudly and clearly so that the Reporter may accurately transcribe your comments. After everyone has had a chance to comment, the public hearing will be concluded.

Everyone attending tonight should fill out a registration form. These forms allow me to know who wants to speak. Also, if you fill these out with your complete name and address, including the city and zip code, I will ensure that you receive a copy of the final decision in this a form, please do so now, or before leaving the hearing room tonight. If the form is not filled out, you will not receive notice of the final permit decision. The registration forms are located _____.

Oral comments will be heard tonight, but written comments may also be handed to me at this meeting. All comments will be considered by the Agency prior to the decision on the permit. The public comment period will continue until (Var. 4).

Written comments may be mailed to me, Jerry Rud, Office of Solid and Hazardous Waste Management, Indiana Department of Environmental Management, 105 South Meridian Street, P.O. Box 6015, Indianapolis, Indiana 46206-6015.

Comments must be postmarked by (Var. 5). Comments may also be brought to the eighth floor receptionist at the above-mentioned address on or before (Var. 6).

The final notice of decision will explain how to file an appeal of the permit decision. There is a fifteen (15) day time limit for an appeal that is strictly observed.

A responsiveness summary will be prepared and sent to all who submit written comments during this comment period. Others who would like a copy of the responsiveness summary can obtain one by calling AC 317/232-7200 or by indicating that on the registration forms.

A copy of the transcript of this hearing and responsiveness summary and comments will be made a part of the public record in our files. These are available for public inspection and copying during normal office hours.

!0063F 8-7-92 bja

Notes on Public Hearing (PH)

THE EVENT

Scheduled Date _____

Time _____ a.m. p.m.

Location of PH: (building) _____

(address) _____

(city) _____

Host Contact Person _____

Host Phone Number _____

REASON FOR THE EVENT

Solid Waste Facility _____

Facility Location _____

_____

Type of Application _____

HEARING OFFICER (HO)

Name _____

Date Confirmed as HO _____

SW Person who confirmed details with HO _____

COURT REPORTER

Name of Firm _____

Contact Person and Phone Number _____

Date Confirmed (within a week before PH) _____

Contact for Confirmation _____

Variable Sheet for 0063P

Variable 1: Type of application:
(a) acreage expansion
(b) height increase
(c) construction/operating
(d) Other _____

Variable 2: Facility Name: _____

Variable 3: Hearing Officer's Name: _____

Variable 4: End of comment period: _____

Variable 5: End of comment period: _____

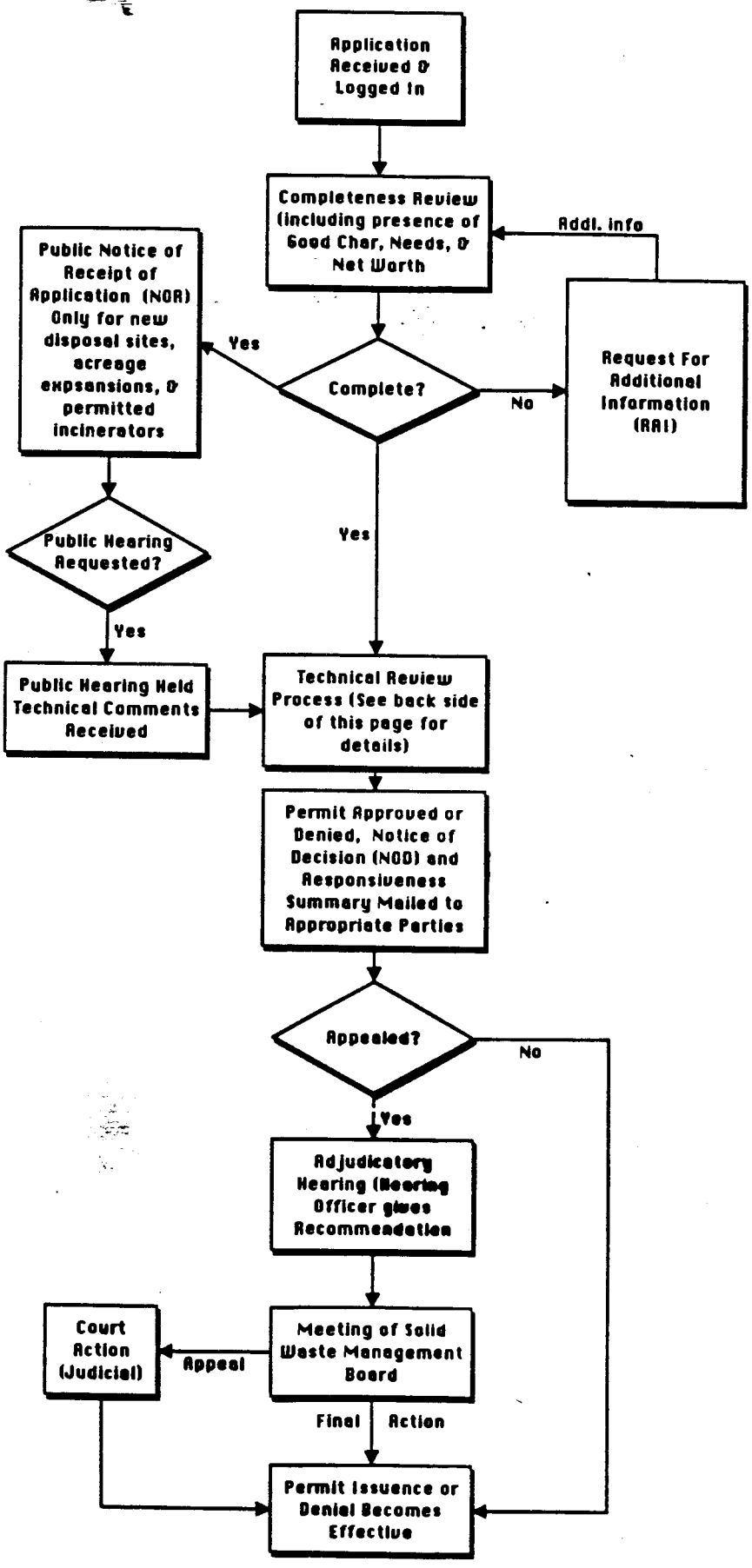
Variable 6: End of comment period: _____

!0063P 8-7-92 bja

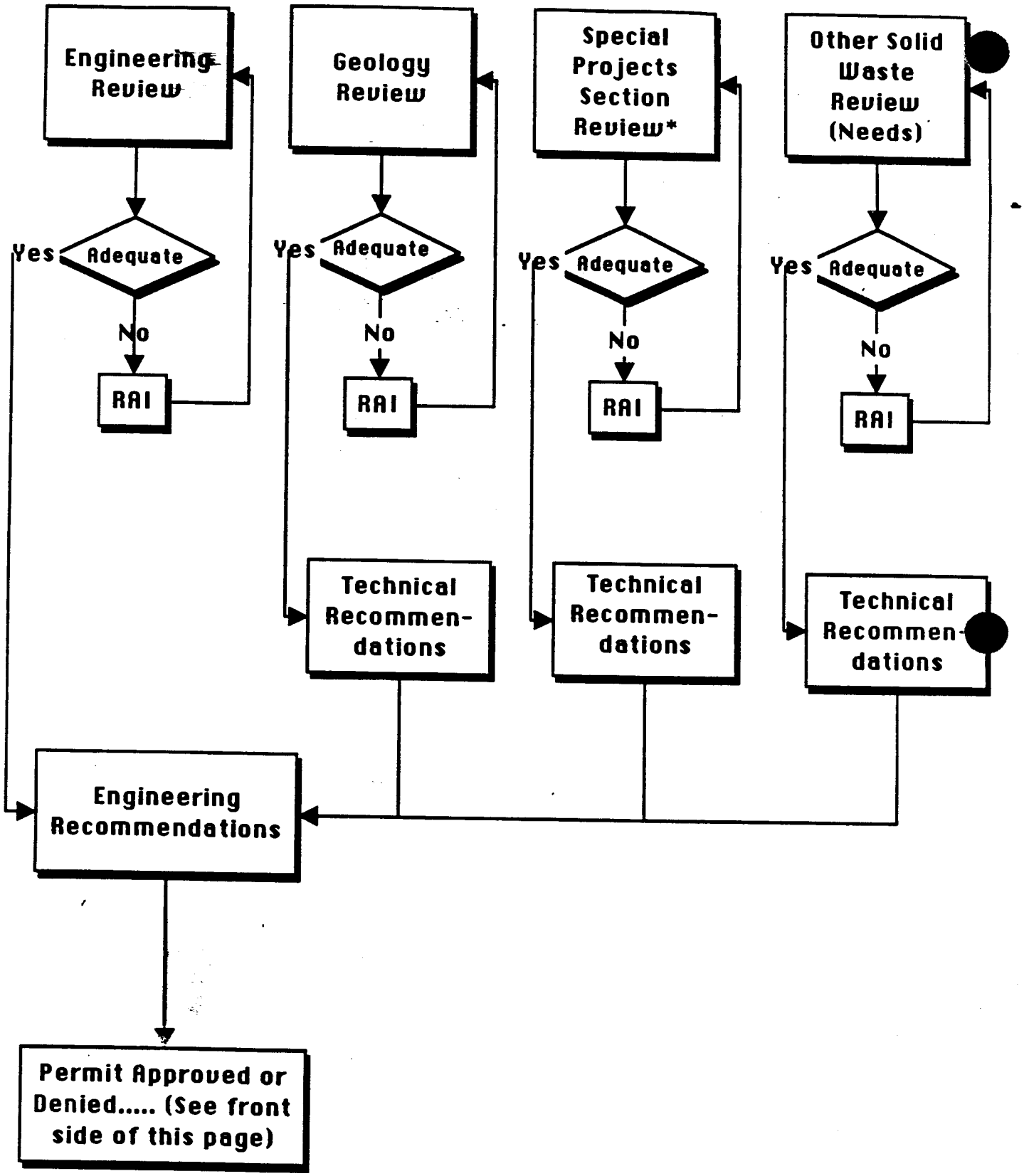
APPENDIX

D

Indiana Department of Environmental Management
Solid Waste Permit Application Review Process



Generalized Technical Review Process



*Good Character and Waste Characterization (as appropriate)

APPENDIX

E

INDIANA DEPARTMENT OF EN T

105 South Meridian Street
P.O. Box 6015
Indianapolis 46206-6015
Telephone 317/232-8603

M E M O R A N D U M

TO: All Proposed and Permitted Solid Waste Facilities

SUBJECT: Additional Requirements for Solid Waste Permit Applications Per New Legislation

As many of you are aware, legislation passed in March 1990, requires from one to three additional information submittals for review before permit renewals, new (construction/operating) permits, permit transfers and major permit modifications can be granted.

If you currently have a permit in our review system or are planning to submit an application for review, this letter will serve as notification of the additional items needed to complete your application. Please send this information to the Solid Waste Management Branch Chief at the above address. If you have already submitted information to satisfy these additional requirements, please review the descriptions on the next page to assure you have completed all of the necessary forms.

The requirements for the character disclosure statement and net worth statement do not apply to government entities. The following is a list of which requirements apply to which permit actions.

PERMIT RENEWALS

Character disclosure statement

NEW (CONSTRUCTION/OPERATING) PERMITS

Character disclosure statement
Net worth statement (not required for solid waste processing facilities)
Demonstration of need

MAJOR MODIFICATIONS TO EXISTING PERMITS

Major modifications are those who propose an increase in disposal capacity:

Character disclosure statement
Demonstration of need

PERMIT TRANSFER

Character disclosure statement

The following is a description of the information which must be submitted to satisfy each of the requirements:

Character Disclosure, IC 13-7-10.2

A copy of House Enrolled Act (HEA) No. 1472 is attached which describes the information to be submitted. Also attached are three forms which must be completed, and returned to IDEM. The first one is a form developed by staff to assist in putting together the information required in the legislation. Please initial the appropriate blank for each required item of information and, when so indicated by you, attach the information which specifically identifies and describes that particular disclosure. A character disclosure statement must be executed under oath or affirmation, and the last page of this form provides a place to do that. The second form is a "Request for Limited Criminal History Information" which must have the blanks at the top of the form filled in. The third form is an "Authorization to Release Criminal History Information" and must be filled-in, signed, and notarized. Please note that character disclosure statements are required not only of applicants but of all person defined as "Responsible Parties".

Demonstration of Need, IC 13-7-10-1.5

The legislation relative to demonstration of need is also contained in HEA No. 1472. Also attached is a copy of the "Need Rule" which has been final adopted by the Solid Waste Management Board. The proposed rule provides an outline of the information which must be submitted as a demonstration of need.

Net Worth IC 13-7-22-2

The legislation relative to the Net Worth Statement is contained in HEA 1388 (attached). In brief, the legislation requires that an independent certified public accountant audit, and issue an unqualified opinion for, a statement of financial position which has been prepared using generally accepted accounting principles. Before the permit may be granted, the statement must indicate that, at the end of the calendar year or fiscal year immediately proceeding the year in which the permit would be issued, the applicant had a positive net worth of at least $250,000. In addition, the applicant must, under oath or affirmation, state that there are no unsatisfied and nonappealable judgements requiring the payment of money by the applicant.

PRINTING CODE. Amendments: Whenever an existing statute (or a section of the Indiana Constitution) is being amended, the text of the existing provision will appear in this style type, additions will appear in this style type, and deletions will appear in ~~this style type~~.

Additions: Whenever a new statutory provision is being enacted (or a new constitutional provision adopted), the text of the new provision will appear in this style type. Also, the word NEW will appear in that style type in the introductory clause of each SECTION that adds a new provision to the Indiana Code or the Indiana Constitution.

HOUSE ENROLLED ACT No. 1472

AN ACT to amend the Indiana Code concerning the environment.

Be it enacted by the General Assembly of the State of Indiana:

SECTION 1. IC 13-7-10.2 IS ADDED TO THE INDIANA CODE AS A NEW CHAPTER TO READ AS FOLLOWS:

Chapter 10.2. Good Character Requirements for Solid Waste Management Board Permits

Sec. 1. As used in this chapter, "applicant" means an individual, a corporation, a partnership, or a business association that applies for the issuance, renewal, transfer, or major modification of a permit described in IC 13-7-10-1(e).

Sec. 2. As used in this chapter, "responsible party" means:

(1) an officer, a corporation director, or a senior management official of a corporation, partnership, or business association that is an applicant; or

(2) an individual, a corporation, a partnership, or a business association that owns, directly or indirectly, at least a twenty percent (20%) interest in the applicant.

Sec. 3. (a) Before an application for the issuance, renewal, transfer, or major modification of a permit described in IC 13-7-10-1(e) may be granted, the applicant

and each person who is a responsible party with respect to the applicant must submit to the department:

(1) a disclosure statement that meets the requirements set forth in subsection (b) and is executed under subsection (c); or

(2) all of the following:

(A) The information concerning legal proceedings that is required under section 13 or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78a et seq.) and that the applicant or responsible party has reported under form 10-K.

(B) A description of all judgments that have been entered against the applicant or responsible party in a proceeding described in subsection (b)(3) and that have imposed upon the applicant or responsible party a fine or penalty described in subsection (b)(3)(A).

(C) A description of all judgments of conviction entered against the applicant or responsible party within five (5) years before the date of submission of the application for the violation of any state or federal environmental protection law.

(b) In a disclosure statement required under this section, the applicant or responsible party shall set forth the following information:

(1) The name, business address, and social security number of the applicant or responsible party.

(2) A description of the applicant's or responsible party's experience in managing the type of waste that will be managed under the permit.

(3) A description of all civil and administrative complaints against the applicant or responsible party for the violation of any state or federal environmental protection law that:

(A) have resulted in a fine or penalty of more than ten thousand dollars ($10,000) within five (5) years before the date of the submission of the application; or

(B) allege an act or omission that constitutes a material violation of the state or federal environmental protection law and that presented a substantial endangerment to the public health or the environment.

(4) A description of all pending criminal complaints alleging the violation of any state or federal

environmental protection law that have been filed against the applicant or responsible party within five (5) years before the date of submission of the application.

(5) A description of all judgments of criminal conviction entered against the applicant or responsible party within five (5) years before the date of submission of the application for the violation of any state or federal environmental protection law.

(6) A description of all judgments of criminal conviction of a felony constituting a crime of moral turpitude under the laws of any state or the United States that are entered against the applicant or responsible party within five (5) years before the date of submission of the application.

(7) The location of all facilities at which the applicant or responsible party manages the type of waste that would be managed under the permit to which the application refers.

(c) A disclosure statement submitted under subsection (a)(1) must be executed under oath or affirmation and be subject to the penalty for perjury under IC 35-44-2-1.

(d) The department may investigate and verify the information set forth in a statement required under this section.

Sec. 4. (a) The commissioner may deny an application for the issuance, renewal, transfer, or major modification of a permit described in IC 13-7-10-1(e) if the commissioner finds that:

(1) the applicant or a responsible party has intentionally misrepresented or concealed any material fact in a statement required under section 3 of this chapter;

(2) a civil or administrative complaint described in section 3(b)(3) of this chapter has been filed against the applicant or a responsible party within five (5) years before the date of submission of the application;

(3) a criminal complaint described in section 3(b)(4) of this chapter has been filed against the applicant or a responsible party within five (5) years before the date of submission of the application;

(4) a judgment of criminal conviction described in section 3(b)(5) or section 3(b)(6) has been entered against the applicant or a responsible party within five (5) years before the date of submission of the application; or

(5) the applicant or a responsible party has knowingly and repeatedly violated any state or federal environmental protection laws.

(b) Before making a determination to deny an application for the issuance, renewal, transfer, or major modification of a permit under subsection (a), the commissioner shall consider the following mitigating factors:

(1) The nature and details of the acts attributed to the applicant or responsible party.

(2) With respect to:

(A) a civil or an administrative complaint referred to in subsection (a)(2); or

(B) a criminal complaint referred to in subsection (a)(3);

whether the matter has been resolved.

(3) With respect to:

(A) a civil or an administrative complaint referred to in subsection (a)(2);

(B) a criminal complaint referred to in subsection (a)(3); or

(C) a judgment of conviction referred to in subsection (a)(4);

whether any appeal is pending.

(4) The degree of culpability of the applicant or responsible party.

(5) The applicant's or responsible party's cooperation with the state or federal agencies involved in the investigation of the activities involved in complaints and convictions referred to in subsection (a)(2) through (a)(5).

(6) The applicant's or responsible party's dissociation from any other persons or entities convicted of acts referred to in subsection (a)(2) through (a)(5).

(7) Prior or subsequent self-policing or internal education programs established by the applicant to prevent activities referred to in subsection (a).

(8) Whether the best interests of the public will be served by denial of the permit.

(9) Any demonstration of good citizenship by the applicant or responsible party.

(c) In taking action under this chapter on an application for the issuance, renewal, transfer, or major modification of a permit described in IC 13-7-10-1(e), the commissioner shall make separately stated findings of fact

to support the action taken. The findings of ultimate fact must be accompanied by a concise statement of the underlying basic facts of record to support the findings. However, when the commissioner denies an application, the commissioner is not required to explain the extent to which any of the mitigating factors set forth in subsection (b) influenced the commissioner's determination to deny the application.

(d) Provided, however, a denial under this section may not be based solely upon pending complaints disclosed under sections 3(b)(3)(B) or 3(b)(4) of this chapter.

Sec. 5. (a) This section does not apply to the transfer of ownership of a facility from a permittee whose business derives less than fifty percent (50%) of its gross revenue from the management of solid waste to a prospective owner whose business derives less than fifty percent (50%) of its gross revenue from the management of solid waste.

(b) If there is a prospective change of ownership in a facility for which a permit described in IC 13-7-10-1(e) is required, the prospective owner, at least one hundred eighty (180) days before the proposed change in ownership, may submit to the commissioner a disclosure statement that includes the information required by section 3(b) of this chapter and that was executed under section 3(c) of this chapter. The commissioner shall review the disclosure statement and may investigate and verify the information set forth in the disclosure statement. If the commissioner determines that the information disclosed by the disclosure statement and any investigation by the commissioner would require the commissioner to deny the prospective owner's permit application if the prospective owner were applying for a permit under section 3 of this chapter, the commissioner shall disapprove the transfer of ownership of the facility to the prospective owner.

Sec. 6. IC 4-21.5 governs determinations, notice, hearings, and appeal of determinations under this chapter.

Sec. 7. The solid waste management board may adopt rules under IC 4-22-2 to administer this chapter.

SECTION 2. IC 13-7-10-1.5 IS ADDED TO THE INDIANA CODE AS A NEW SECTION TO READ AS FOLLOWS: Sec. 1.5. (a) A person that applies for a permit described in section 1(e) of this chapter that concerns solid waste management facility must demonstrate that there is a local or regional need in Indiana for the facility.

(b) A person that applies for a permit referred to in subsection (a) must submit the following information to the department along with the permit application:

(1) A description of the area that would be served by the solid waste management facility.

(2) A description of existing solid waste management facilities in the area that would be served by the solid waste management facility.

(3) A description of the need that would be fulfilled by constructing the solid waste management facility.

(c) If the department determines that there is not a local or regional need in Indiana for the solid waste management facility, the person referred to in subsection (a) shall not receive a permit described under section 1(e) of this chapter.

(d) The solid waste management board shall adopt rules under IC 4-22-2 to implement this section.

SECTION 3. IC 13-7-31 IS ADDED TO THE INDIANA CODE AS A NEW CHAPTER TO READ AS FOLLOWS:

Chapter 31. Municipal Waste Transportation

Sec. 1. This chapter does not apply to a vehicle used exclusively to transport municipal waste within the boundaries of real property owned or leased by the generator of the municipal waste.

Sec. 2. (a) As used in this chapter, "municipal waste" means any garbage, refuse, industrial lunchroom or office waste, and other material resulting from the operation of residential, municipal, commercial, or institutional establishments and from community activities.

(b) The term does not include the following:

(1) Special waste, as defined in 329 IAC 2-21-1 in effect on January 1, 1990.

(2) Hazardous waste regulated under IC 13-7-8.5 or under the federal Solid Waste Disposal Act (42 U.S.C. 6901 et seq.) in effect on January 1, 1990.

(3) Infectious waste, as defined in IC 16-1-9.7-3.

(4) Wastes that result from the combustion of coal and that are referred to in IC 13-1-12-9.

(5) Materials that are being transported to a facility for reprocessing or reuse.

(c) As used in subsection (b)(5), "reprocessing or reuse" does not include:

(1) incineration; or

(2) placement in a landfill.

Sec. 3. (a) As used in this chapter, "municipal waste collection and transportation vehicle" means a truck or railroad car used to transport municipal waste from a solid waste generator or a solid waste processing facility to a:

(1) solid waste processing facility in Indiana; or

(2) solid waste disposal facility in Indiana.

(b) The term does not include a vehicle used to transport municipal waste from a residence if the vehicle is owned or leased by an individual who lives in the residence.

Sec. 4. As used in this chapter, "solid waste disposal facility" means a facility at which solid waste is:

(1) deposited on or beneath the surface of the ground as an intended place of final location; or

(2) incinerated.

Sec. 5. As used in this chapter, "solid waste processing facility" means a facility at which solid waste is prepared for:

(1) disposal;

(2) incineration;

(3) recovery; or

(4) transportation.

Sec. 6. As used in this chapter, "vehicle" refers to a municipal waste collection and transportation vehicle.

Sec. 7. As used in this chapter, "railroad car" means a vehicle that can be used for the transportation of municipal waste on a railroad.

Sec. 8. The department shall operate a municipal waste collection and transportation vehicle licensing and inspection program.

Sec. 9. A person may not operate a municipal waste collection and transportation vehicle that is not licensed to operate under this chapter.

Sec. 10. A license issued under this chapter:

(1) shall be carried at all times on the municipal waste collection and transportation vehicle for which the license is issued; and

(2) is valid for a period of time specified by the department but not more than five (5) years from the date the license is issued.

Sec. 11. A municipal waste collection and transportation vehicle may be inspected by the department. The department may inspect a vehicle that is not moving, but may not stop a vehicle that is in motion on

a public highway (as defined in IC 9-1-1-2(q)) to conduct an inspection.

Sec. 12. (a) This section applies to the transportation of municipal waste from solid waste processing facilities.

(b) A municipal waste collection and transportaion vehicle that is transporting municipal waste from a solid waste processing facility must have attached to it placards that indicate that the vehicle is carrying municipal waste.

(c) A shipment of municipal waste in a municipal waste collection and transportation vehicle must be accompanied by a municipal waste transportation manifest.

(d) A manifest required under subsection (c) must include the following information:

(1) The amount in pounds of municipal waste transported in the vehicle.

(2) The name and address of the solid waste processing facility from which the municipal waste is transported.

(3) The destination of the municipal waste.

(4) The name of the person transporting the municipal waste.

(e) The owner or operator of the solid waste processing facility from which municipal waste is to be transported shall prepare the manifest required by subsection (c) and deliver it to the operator of the vehicle, who shall carry it while transporting the municipal waste. The vehicle operator shall present the manifest to the owner or operator of the facility to which the municipal waste is transported, who shall retain one (1) copy of the manifest and send one (1) copy to the department.

(f) The definition of "manifest" set forth in IC 13-7-1-14 does not apply to this section.

Sec. 13. The rules adopted by the solid waste management board under section 17 of this chapter shall restrict a municipal waste collection and transportation vehicle from uses other than the collection and transportation of municipal waste.

Sec. 14. A solid waste disposal facility or a solid waste processing facility may not accept a shipment of municipal waste:

(1) from a municipal waste collection and transportation vehicle that has not been licensed under this chapter; and

(2) that is not accompanied by a municipal waste transportation manifest required under section 12 of this chapter.

Sec. 15. A solid waste processing facility may not transport municipal waste to another solid waste processing facility or a solid waste disposal facility unless the municipal waste is accompanied by a municipal waste manifest.

Sec. 16. This chapter does not preclude, restrict, or supersede the right of:

(1) a county in Indiana;

(2) a municipality in Indiana; or

(3) a solid waste management district established under Indiana law;

to regulate or license a solid waste collection and transportation vehicle under authority granted by statute or by an ordinance adopted under IC 36.

Sec. 17. The solid waste management board shall adopt rules under IC 4-22-2 to implement this chapter.

SECTION 4. (a) The solid waste management board shall adopt the rules required by IC 13-7-10-1.5(d), as added by this act, before January 1, 1991.

(b) The solid waste management board shall adopt the rules required by IC 13-7-31-17, as added by this act, before January 1, 1991.

(c) This SECTION expires January 1, 1991.

SECTION 5. Because an emergency exists, this act takes effect as follows:

SECTIONS 1 through 2 ..... Upon passage

SECTION 3 ..... January 1, 1991

SECTION 4 ..... Upon passage

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
SOLID WASTE FACILITY PERMIT CHARACTER DISCLOSURE STATEMENT

INSTRUCTIONS FOR COMPLETION

The solid waste facility permit character disclosure statement form shall be used to submit the disclosure statement as required by IC 13-7-10.2. The statute requires that each permit applicant and responsible party submit a character disclosure statement prior to the issuance of an original permit, a permit renewal, a major modification of the permit or a permit transfer. Each applicant and responsible party shall submit a separate disclosure statement for each facility and/or company which is required to submit a character disclosure statement.

SECTION A: FACILITY INFORMATION

For all submissions, place the name and address of the facility in the spaces provided. Indicate, in the space provided, the reason or reasons for the submission of the disclosure statement.

SECTION B: APPLICANT INFORMATION

For all submissions, place the name of the applicant, the business address of the applicant and the social security number (or federal tax number if the applicant is not an individual) of the applicant in the spaces provided. An applicant is an individual, a corporation, a partnership, or a business association that applies for the issuance, renewal, transfer, or major modification of a permit described in IC 13-7-10-1(e). This includes solid waste landfills, processing facilities and incinerators. For the purposes of the disclosure statement, the applicant is the person or company in whose name the permit is issued. Each applicant shall complete the required information; attach additional pages as necessary.

SECTION C: RESPONSIBLE PARTY INFORMATION

For all submissions, place the name of the responsible party, the business address of the responsible party, the social security number (or federal tax number if the responsible party is not an individual) of the responsible party and the relationship of the responsible party to the applicant in the spaces provided. For purposes of the disclosure statement, a responsible party may be an officer, a corporation director, or a senior management official of a corporation, partnership, or business association that is an applicant. A responsible party may also be an individual, a corporation, a partnership, or a business association that owns, directly or indirectly, at least a twenty percent (20%) interest in the applicant. Each responsible party shall complete the required information; attach additional pages as necessary.

SECTION D: DISCLOSURE STATEMENT

Each operator and responsible party shall provide his/her name and indicate whether they are an operator or a responsible party in the spaces provided.

SECTION D1:

Section D1 shall be completed by indicating the appropriate responses to Items A through C by placing the initials of the person filling out the form in the spaces provided. For the purposes of completing the section, Not Applicable is taken to be a negative response to a request for information in Items A through C. Section D1 may be used **only** by those applicants and/or responsible parties which file a Form 10-K with the Securities and Exchange Commission. **At no time may an individual complete Section D1 to satisfy the character disclosure requirements.** Any information provided on additional pages should be identified by the appropriate item letter.

SECTION D2:

Section D2 shall be completed by indicating the appropriate responses to Items A through G by placing the initials of the person filling out the form in the spaces provided. For the purposes of completing the section, Not Applicable is taken to be a negative response to a request for information in Items A through G. The information requested in Item H will be used to complete a Request for Limited Criminal History Information if additional information concerning an operator or responsible party is determined to be necessary. Any information provided on additional pages should be identified by the appropriate item letter.

SECTION E: SIGNATORIES

Each applicant and responsible party shall complete a Section E, **in original**, for **each** disclosure statement that is submitted. In addition, each completed Section E shall include a properly completed and notarized Acknowledgement.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
SOLID WASTE FACILITY PERMIT CHARACTER DISCLOSURE STATEMENT

This form shall be used to submit the character disclosure statement, as required by IC 13-7-10.2, for a solid waste permit. Upon completion of this form, return this form with all additional materials to the following address:

ATTENTION: SWFP Character Disclosure
Office of Solid and Hazardous Waste Management
Indiana Department of Environmental Management
105 South Meridian Street
Post Office Box 6015
Indianapolis, Indiana 46206-6015

SECTION A: FACILITY INFORMATION

Facility Name _____

Mailing Address _____
Street

_____
City County State Zip Code

This statement is for the purposes of:

____ a new permit
____ a permit modification
____ a permit renewal
____ a permit transfer.

SECTION B: APPLICANT INFORMATION

The applicant may be an individual, a corporation, a partnership, or a business association that applies for the issuance, renewal, transfer, or major modification of a permit described in IC 13-7-10-1(e). Each applicant shall complete the following information; attach additional pages as necessary.

Applicant Name _____

Business Address _____
Street

_____
City County State Zip Code

Social Security Number _____
(or Federal Tax Number if Applicant is not an individual)

SECTION C: RESPONSIBLE PARTY INFORMATION

A responsible party may be an officer, a corporation director, or a senior management official of a corporation, partnership, or business association that is an applicant. A responsible party may also be an individual, a corporation, a partnership, or a business association that owns, directly or indirectly, at least a twenty percent (20%) interest in the applicant. Each responsible party shall complete the following information; attach additional pages as necessary.

Responsible Party Name _____

Business Address _____
Street

_____
City County State Zip Code

Social Security Number _____
(or Federal Tax Number if Responsible Party is not an individual)

Relationship to Applicant _____

Responsible Party Name _____

Business Address _____
Street

_____
City County State Zip Code

Social Security Number _____
(or Federal Tax Number if Responsible Party is not an individual)

Relationship to Applicant _____

Responsible Party Name _____

Business Address _____
Street

_____
City County State Zip Code

Social Security Number _____
(or Federal Tax Number if Responsible Party is not an individual)

Relationship to Applicant _____

SECTION D: DISCLOSURE STATEMENT

Each Applicant and Responsible Party identified in Sections B and C shall complete a separate Section D and Section E. The Section D requirement may be satisfied by providing all information required by either Section D1 or Section D2. Please indicate that the required item has been provided or does not apply by initialing in the space provided.

THIS DISCLOSURE STATEMENT IS PROVIDED FOR:

Name (print or type)_____

Acting as Applicant or Responsible Party (specify) _____

SECTION D1:

A) The information concerning legal proceedings that is required under Section 13 or 15(d) of the Securities Exchange Act of 1934(15 U.S.C 78a et seq.) and that the applicant or responsible party has reported under Form 10-K.

Not Applicable _____ Provided _____

B) A description of all judgments that have been entered against the applicant or responsible party in a civil or administrative complaint for the violation of any state or federal environmental protection law and that have imposed upon the applicant or responsible party a fine or penalty of more than ten thousand dollars ($10,000) within five (5) years before the date of the submission of the application.

Not Applicable _____ Provided _____

C) A description of all judgments of conviction entered against the applicant or responsible party for the violation of any state or federal environmental protection law within five (5) years before the date of the submission of the application.

Not Applicable _____ Provided _____

SECTION D2:

A) A description of the applicant's or responsible party's experience in managing the type of waste that will be managed under the Permit. Include the name and business address for employers, the State Permit number for the facility, the type of work experience and the length of time employed.

Not Applicable _____ Provided _____

B) A description of all civil or administrative complaints against the applicant or responsible party for the violation of any state or federal environmental protection law that have resulted in a fine or penalty of more than ten thousand dollars ($10,000) within five (5) years before the date of the submission of the application.

Not Applicable _____ Provided _____

C) A description of all civil or administrative complaints against the applicant or responsible party for the violation of any state or federal environmental protection law that allege an act or omission that constitutes a material violation of state or federal environmental protection law and that presented a substantial endangerment to the public health or the environment.

Not Applicable _____ Provided _____

D) A description of all pending criminal complaints alleging the violation of any state or federal environmental protection law that have been filed against the applicant or responsible party within five (5) years before the date of submission of the application.

Not Applicable _____ Provided _____

E) A description of all judgments of criminal conviction entered against the applicant or responsible party within five (5) years before the date of submission of the application for the violation of any state or federal environmental law.

Not Applicable _____ Provided _____

F) A description of all judgments of criminal conviction of a felony constituting a crime of moral turpitude under the laws of any state or the United States that are entered against the applicant or responsible party within five (5) years before the date of submission of the application.

Not Applicable _____ Provided _____

G) The location of all facilities at which the applicant or responsible party manages the type of waste that would be managed under the permit to which the application refers. Include the facility name, business address, any permit numbers and the type of facility.

Not Applicable _____ Provided _____

H) The following information will be used by IDEM to complete a Request for Limited Criminal History Information if additional information concerning an operator or responsible party is determined to be necessary.

Date of birth _____ Sex _____ Race _____

SECTION E: SIGNATORIES

I affirm that all information contained in this disclosure statement and any attachments is, to the best of my knowledge, true and accurate. I also realize that any information provided in this disclosure statement that was knowingly incorrect may subject me to the penalty for perjury under IC 35-44-2-1.

_____ _____

APPLICANT/RESPONSIBLE PARTY DATE

ACKNOWLEDGEMENT

State of _____)
) SS
County of _____)

Before me, the undersigned, a Notary Public in and for said County and State, personally appeared _____ known by me to be the person who executed the foregoing instrument, signed the same and acknowledged to me that he/she did so sign the same, and that the same is his/her free act and deed and that the statements made in the foregoing instrument are true.

IN WITNESS WHEREOF, I have set my hand and official seal this _____ day of _____, 19____.

I am a resident of _____ County, _____.

Notary Public

My Commission Expires:

2 DEMOGRAPHIC INFORMATION/ FACILITIES INVENTORY

An important part of the planning process is compiling baseline data on existing population, waste types and quantities, and waste disposal facilities. That baseline information - for calendar year 1992 - will form the basis for projecting population and waste disposal needs for the full 20-year study period, 1992 through 2011.

For five, 10, and 20 years after the district's plan is adopted, HEA 1240 requires you to:

- predict the total population,
- describe the origin, content, and weight of the solid waste to be generated,
- describe the number and type of waste management facilities needed, and
- assess current and future waste management problems.

Plans can be reassessed at any time; however, they are required to be reviewed every five years. Any changes made to help districts accomplish solid waste management goals require that the plan go through the approval process again.

Unless you have conducted a formal waste characterization study for your district, you may use national averages to estimate the content of residential and commercial wastes. You may use the data from "Characterization of Municipal Solid Waste in the United States, 1960 to 2000," prepared by Franklin & Associates for the United States Environmental Protection Agency, 1990. If you believe other data better represent the wastes generated in your district, feel free to use them; in that case, please document your sources.

2.1
POPULATION
Instructions

1, 2, 3

Provide population projections for each county in the district for the entire planning period, calendar years 1992 through 2011. The projections for Indiana counties (Appendix A) may be used, or you may use your own projections; if you do, please indicate the source.

2.2
WASTE GENERATION
Instructions

4 For "Alpha County" compute the residential and commercial waste to be generated during the study period, 1992 through 2011. NOTE: For illustrative purposes only, we have omitted several years from the table. You may want to print your table in LANDSCAPE orientation, two rows of 10 years each, to present the computations for all years of the study period on a single page.

The base year, calendar year 1992, will be the first full year for which complete landfill disposal quantity information will be available. That data will for the basis for projecting future waste quantities according to the USEPA's daily per capita generation rates. The 1988 rates are provided below. These figures are updated annually and districts should use the most recent figures when calculating projections. To obtain the most recent figures, contact IDEM at 1-800-451-6027 or (317) 232-3210.

RESIDENTIAL/COMMERCIAL WASTE GENERATION RATES*
Pounds Per Capita Per Day (PCD)

1992	3.72	1997	3.86	2002	4.00	2007	2.14
1993	3.75	1998	3.88	2003	4.03	2008	4.17
1994	3.75	1999	3.91	2004	4.06	2009	4.21
1995	3.80	2000	3.94	2005	4.09	2010	4.24
1996	3.85	2001	3.97	2006	4.11	2011	4.27

If you use another basis for these projections, please explain in a footnote to your table.

5 Compute the industrial waste generated in the district for the baseline year. We recommend conducting a survey to determine representative actual quantities of industrial waste being generated (a sample form is included in Appendix D.) The per capita rates shown above <u>should not be used</u> to project industrial waste generation. Those projections may be based on your assessment of the likely economic growth and industrial distribution in the district, or on some other reasonable measure that you determine. Please explain your rationale in a footnote to your table.

6 The sub-total is the amount of waste generated in Alpha County. Repeat these computations as necessary for each county in the district.

7 Show the total waste generated in the district on this line.

POINTS TO REMEMBER:

HEA 1240 mandates reducing the amount of waste incinerated and landfilled. This may be achieved by employing strategies such as waste minimization, recycling, composting, etc. The state has already taken action to reduce or eliminate some wastes. For example, HEA 1391 prohibits disposal of lead acid batteries in landfills. Certain recyclables - including yard waste - may also be banned from landfill disposal. Be sure to count your projected reduction of these materials toward the state goals.

In your industrial survey, be sure to ask about industrial wastes recycled, because these amounts should also be credited toward the state goals.

Please include a copy of your survey instrument in an appendix to your district plan.

*Developed from Table 6, "Characterization of Municipal Solid Waste in the United States, 1960 to 2000 (update 1987)" USEPA, 1988.

POPULATION

	BASE YEAR 1992	1993	1994	1995	1996	1997	1998 ----->	2011
1 Alpha County.....	90,000	90,400	90,900	91,400	91,900	92,400	92,900 ----->	99,400
2 Beta County.....	60,000	60,300	60,600	60,900	61,200	61,500	61,800 ----->	65,700
3 Total District.....	150,000	150,700	151,500	152,300	153,100	153,900	154,700 ----->	165,100

2.2
WASTE GENERATION

	BASE YEAR 1992	1993	(Tons per Year) 1994	1995	1996	1997	1998 ----->	2011
Alpha County								
4 Residential & Commercial Waste.....	61,100	61,800	62,600	63,400	64,200	65,000	65,800 ----->	77,200
5 Industrial Waste.....	35,000	35,400	35,900	36,400	36,900	37,400	37,900 ----->	44,500
6 Sub-Total.....	96,100	97,200	98,500	99,800	101,100	102,400	103,700 ----->	121,700
Beta County								
4 Residential & Commercial Waste.....	40,700	41,200	41,700	42,200	42,800	43,300	43,800 ----->	51,000
5 Industrial Waste.....	19,000	19,200	19,400	19,600	19,900	20,100	20,300 ----->	23,600
6 Sub-Total.....	59,700	60,400	61,100	61,800	62,700	63,400	64,100 ----->	74,600
7 Total Waste Generated in District.....	155,800	157,600	159,600	161,600	163,800	165,800	167,800 ----->	196,300

7 Total waste generated in district (carried forward from schedule 2.2).

8 Show current recycling by industry for the base year, using data obtained from a survey of industries in the district. (IDEM will not allow credit for recycling by industry unless it is substantiated by such a survey.) Then, project future recycling for the study period as described in 2.2, item 5.

9 Include privately and publicly owned/operated facilities that are available to the public. These may include curbside collection, drop-off and buy back centers, etc. Compute recycling for the base year, as well as future projections based on your estimates of growth plus increases needed to meet the state goals.

10 In a footnote, provide a narrative description of any other programs.

11 The sub-total, the sum of 8, 9, and 10, is the amount of recycling projected to occur in the district. In a footnote to this schedule, provide a breakdown of recyclables by type.

12 The anticipated reduction in waste resulting from waste minimization and reduction programs* to be conducted or promoted by the district should be included here. The district's management plan (Part 3) should include a narrative of how these results are to be achieved.

13 The amount of yard waste which is diverted from final disposal should be listed here.

14 MSW composting includes processed municipal solid waste and may include yard waste. If so, do not include yard waste on line 13 (no double counting!) Enter the net reduction: the amount composted, less the residue that goes to final disposal. If sludge is used in a co-composting process, do not count the sludge as part of the MSW.

15 Indiana HB 1391 prohibits lead acid batteries from being disposed of in anything other than a hazardous waste disposal site and requires retailers to accept batteries for recycling. Lead acid batteries entering the waste stream amount to about one battery per ten persons per year with the average weight being 36 pounds. The quantity of waste batteries recycled should be accounted for on this line.

16 Tires entering the waste stream amount to about one tire per person per year. The average weight of a tire is about 23 pounds. Anticipated decreases in the quantity of tires entering the waste stream should be included here. (Note that Indiana HEA 1391 establishes programs for dealing with waste tire piles.)

17 Add other waste reduction programs proposed by the district and include a narrative description in the district plan, Part 3.

18 Total all waste reduction, reuse, and recycling activities (lines 11-17).

19 The percentage of waste diverted from final disposal for each future year is calculated by dividing the amount of waste reduction shown on line 18 by the total waste generated in the district for the base year 1992 (line 7).

20 The total waste generated within the district is line 7 less line 18.

POINTS TO REMEMBER:

- The amount of waste that the district must finally dispose of (Schedule 2.4) is the net of: 1) the amount generated within the district, 2) and the amount imported into the district, less the amount exported from the district. Estimate the amount of waste in each category to assess the needs of your district and your neighbors and to assess the impact of waste from outside the state.

- Future increases in waste amounts reduced should be estimated based upon the management programs proposed by the district. Note that the state goals are stated in terms of reducing the amount of waste disposed of by incineration or landfilling. Therefore incineration is not a recognized means of waste reduction for meeting the state goals.

*As defined in HEA 1391, Sections 20 and 21. "Waste Minimization means a process that leads to
- preventing the creation of waste or
- a diminution in the volume of waste.
Waste Reduction means a process that leads to the prevention of the creation of waste.

	BASE YEAR 1992	1993	1994	1995	1996	1997	1998 ----->	2011
	(Tons per Year)							
7 Total Waste Generated in District	155,800	157,600	159,600	161,600	163,800	165,800	167,800 ----->	196,300
Recycling:								
8 Industrial	10,900	11,000	11,200	11,300	11,500	13,900	16,400 ----->	24,700
9 Publicly Available	4,700	9,500	14,400	19,400	24,600	27,400	27,700 ----->	32,400
10 Other	500	510	520	530	540	550	560 ----->	690
11 Sub-Total	16,100	21,010	26,120	31,230	36,640	41,850	44,660 ----->	57,790
12 Waste Reduction	200	200	200	200	200	220	240 ----->	970
13 Yard Waste	3,100	6,300	9,600	12,900	16,400	19,900	21,800 ----->	25,500
14 MSW Composting	1,600	1,600	1,600	1,600	16,400	16,600	16,800 ----->	19,600
15 Lead Acid Batteries	270	270	270	270	280	280	280 ----->	300
16 Tires	1,730	1,730	1,740	1,750	1,760	1,770	1,780 ----->	1,900
17 Other	310	320	320	320	330	330	340 ----->	390
18 Total	(23,310)	(31,430)	(39,850)	(48,270)	(72,010)	(80,950)	(85,900)----->	(106,450)
19 Recycling and Reduction as % of District Waste	15%	20%	26%	31%	46%	52%	55%----->	68%
STATE RECYCLING AND REDUCTION GOALS					35%		50% year 2001	
20 Waste from District for Disposal	132,490	126,170	119,750	113,330	91,790	84,850	81,900 ----->	89,850

ORIGIN AND DESTINATION OF WASTE FOR DISPOSAL
Instructions

20 Waste from district for disposal (carried forward from Schedule 2.3)

21, 22
Show the amount of MSW the district expects to send to other districts in Indiana. Show the amount for each district if more than one. The total should include incinerator ash, compost residue, etc., as appropriate.

23, 24
Show the amount of waste sent from the district into other state(s) for disposal. Show the amount for each state if more than one. The total should include incinerator ash, compost residue etc. as appropriate.

25 This is the total waste exported from the district for disposal elsewhere.

26 This is the amount of waste originating and disposed of in the district. (line 20 less line 25).

27, 28
Show the amount of MSW (including incinerator ash, compost residue, etc.) the district expects to receive from other districts in Indiana. Show the amount for each district if more than one.

29, 30
The amount of MSW (including incinerator ash, compost residue, etc.) the district expects receiving from other state(s). Show the amount for each state if more than one.

31 Waste imported into the district from other districts and from out of state.

32 Total the waste for final disposal in the district (line 26 plus line 31).

33 This is the total waste disposed of in the district by incineration (may include waste that is imported from other districts or from out of state).

34 The net of the total amount of waste for final disposal, less the amount incinerated, is the amount of waste to be landfilled for final disposal (line 32 minus line 33).

35 Add incinerator ash residue that is landfilled within the district.

36 Total the amount of waste landfilled in the district (line 34 plus line 35).

	BASE YEAR 1992	1993	1994	1995	1996	1997	1998 ----->	2011
	(Tons per Year)							
20 Waste from District for Disposal	132,490	126,170	119,750	113,330	91,790	84,850	81,900 ----->	89850
Waste for Disposal Out of District								
Sent to Other District(s):								
21 District A	4,000	4,100	4,200	4,300	4,400	4,500	4,600 ----->	5,900
22 District B	1,200	1,200	1,200	1,200	1,200	1,200	1,200 ----->	1,200
Sent to Other State(s):								
23 State A	2,000	2,000	2,000	2,000	2,000	2,000	2,000 ----->	2,000
24 State B	17,500	17,800	18,100	18,400	18,700	19,000	19,300 ----->	23,200
25 Total	24,700	25,100	25,500	25,900	26,300	26,700	27,100 ----->	32,300
Waste for Disposal In District:								
26 Originating In District	107,790	101,070	94,250	87,430	65,490	58,150	54,800 ----->	57,550
Originating in Other District(s):								
27 District A	25,000	25,400	25,800	26,200	26,600	27,000	27,400 ----->	33,200
28 District B	5,000	5,100	5,200	5,300	5,400	5,500	5,600 ----->	6,900
Originating Out of State:								
29 State A	2,000	2,000	2,000	2,000	2,000	2,000	2,000 ----->	2,000
30 State B	17,500	17,800	18,100	18,400	18,700	19,000	19,300 ----->	23,200
31 Sub-Total Imported Waste	49,500	50,300	51,100	51,900	52,700	53,500	54,300 ----->	65,300
32 Total Waste Managed in District	157,290	151,370	145,350	139,330	118,190	111,650	109,100 ----->	122,850
Waste Incinerated								
33 in District	0	0	0	0	0	0	91,250 ----->	91,250
34 Net	157,290	151,370	145,350	139,330	118,190	111,650	17,850 ----->	31,600
35 Ash Residue	0	0	0	0	0	0	25,550 ----->	25,550
Waste Landfilled in								
36 District	157,290	151,370	145,350	139,330	118,190	111,650	43,400 ----->	57,150

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An important element of your planning for future solid waste management needs is determining what facilities are in place today. In addition, this information will be useful to IDEM in assessing the current status of Indiana's waste management facilities in light of emerging federal and state regulations.

In this subsection you will be asked to provide basic data about the disposal and management facilities operating in your district today.

For ease of completion, we suggest that you remove the forms (right-hand pages) and reproduce enough copies to prepare a draft and final version. Then, return the pages to the manual for easy reference to the instructions applying to each item. You will notice that each form contains space to report on one or more facilities; if your district contains more facilities than provided for on a form, reproduce additional sheets as necessary. The forms are designed to be prepared on a typewriter using double line spacing. However, if you are using an automated word processing system, the easiest approach may be to retype the forms along with the data being reported. For that reason, we have attempted to keep the material to be typed to a minimum, with explanatory and instructional material on the left-hand pages. When retyping the forms, please use double spacing; one-inch top, bottom, right, and left margins; and 12-pitch type size.

When the inventory is complete, number the pages sequentially in the upper right corner, beginning with 2.5-1, 2.5-2, etc.

We have tried to keep the information requested as consistent as possible for all of the facilities cataloged. However, since there are differences among their purposes and operations, you will need to compile slightly different data for each type of facility.

OVERVIEW OF EXISTING SOLID WASTE MANAGEMENT FACILITIES/PROGRAM

Instructions

This page summarizes the information on the existing solid waste programs in your district. While it is presented as the first page of this subsection, you may find it more convenient to complete this page after you have finished the facilities inventory.

1 Facility - The facilities to be summarized are listed in the lefthand column.

2 Number - list the number of facilities of each type.

3 Design capacity - where applicable, state the total capacity the facilities were designed to accommodate (tons or tons per day [tpd]).

4 Remaining capacity - state the remaining capacity based on historical data.

5 Quantity in base year - state the total amount managed from January 1 to December 31 of the base year.

1 Facility	2 Number	3 Design Capacity	4 Remaining Capacity (tons)	5 Quantity in Base Year ____
Landfills				
Collection Services		N/A	N/A	
Transportation Services		N/A	N/A	
Transfer Station			N/A	
Incinerators/ Waste-to-Energy Facilities			N/A	
Recycling Programs		N/A	N/A	
Compost Facilities		N/A	N/A	
Solid Waste Collection Centers			N/A	

1 Name - name of the landfill.

2 Site address - street address or site location.

3 Mailing address - location of management and address for business correspondence. Include ZIP code. (May be same as 2.)

4 Owner - name owner of record (private or municipal entity).

5 Operator - name entity or individual responsible for day-to-day operations of the facility.

6 Permit number - self-explanatory.

7 Waste types - list the types of currently waste accepted at this landfill; for example, MSW, demolition/construction debris, asbestos, yard waste, other (specify).

8 Phone - operator's telephone number (include area code).

9 Original design capacity - state in tons the facility's intended capacity when it was put into service

10 Remaining capacity (tons) - state the current expected capacity based on the most recent professional estimate.

11 Remaining life (years) - state the current expected lifespan based on the most recent professional estimate.

12 Quantity accepted in base year - state the total amount managed from January 1 to December 31 of the base year.

13 Access - is this landfill open to the public, or is it restricted to use by a single entity or waste type? Answer <u>public</u> or <u>captive</u> (dedicated to a single entity that generates and disposes of its own waste.)

14 List the name, registration, and company of the professional who developed the estimates for items 10 and 11. Include the date that estimate was completed.

1 Name

2 Site Address

3 Mailing Address

4 Owner

5 Operator

6 Permit No.

7 Waste Types Accepted

8 Phone

***

9 Original Design Capacity (tons)

10 Remaining Capacity (tons)

11 Remaining Life (years)

12 Quantity Accepted in Base Year ____ (tons)

13 Access

14 Current Capacity Estimated By

Date

---

1 Name

2 Site Address

3 Mailing Address

4 Owner

5 Operator

6 Permit No.

7 Waste Types Accepted

8 Phone

***

9 Original Design Capacity (tons)

10 Remaining Capacity (tons)

11 Remaining Life (years)

12 Quantity Accepted in Base Year ____ (tons)

13 Access

14 Current Capacity Estimated By

Date

1 Name - name of the collection service.

2 Address - location of management and address for business correspondence. Include ZIP code.

3 Owner - name owner of record (private or municipal entity).

4 Operator - name entity or individual responsible for day-to-day operations of the service.

5 Permit number - self-explanatory.

6 Phone - owner's business telephone number (include area code).

7 Quantity collected in base year - state the total amount collected from January 1 to December 31 of the base year.

1 Name
2 Address
3 Owner
4 Operator
5 Permit No.
6 Phone
7 Quantity Collected in Base Year ____ (tons)

---

1 Name
2 Address
3 Owner
4 Operator
5 Permit No.
6 Phone
7 Quantity Collected in Base Year ____ (tons)

---

1 Name
2 Address
3 Owner
4 Operator
5 Permit No.
6 Phone
7 Quantity Collected in Base Year ____ (tons)

---

1 Name
2 Address
3 Owner
4 Operator
5 Permit No.
6 Phone
7 Quantity Collected in Base Year ____ (tons)

---

1 Name
2 Address
3 Owner
4 Operator
5 Permit No.
6 Phone
7 Quantity Collected in Base Year ____ (tons)

Transportation services provide bulk hauling of MSW. Transporters most commonly haul material from transfer stations to landfills or other disposal facilities. Transportation modes can include trailer trucks, rail cars, or river barges.

1 Name - name of the transportation service.

2 Address - location of management and address for business correspondence. Include ZIP code.

3 Owner - name owner of record (private or municipal entity).

4 Operator - name entity or individual responsible for day-to-day operations of the service.

5 Permit number - self-explanatory.

6 Phone - business telephone number (include area code).

7 Type - list types of transport vehicles used; for example, trailer trucks, rail cars, barges, other (list).

8 Quantity collected in base year - state the total amount collected from January 1 to December 31 of the base year.

1 Name
2 Address
3 Owner
4 Operator
5 Permit No.
6 Phone
7 Type
8 Quantity Transported in Base Year ____ (tons)

---

1 Name
2 Address
3 Owner
4 Operator
5 Permit No.
6 Phone
7 Type
8 Quantity Transported in Base Year ____ (tons)

---

1 Name
2 Address
3 Owner
4 Operator
5 Permit No.
6 Phone
7 Type
8 Quantity Transported in Base Year ____ (tons)

---

1 Name
2 Address
3 Owner
4 Operator
5 Permit No.
6 Phone
7 Type
8 Quantity Transported in Base Year ____ (tons)

---

1 Name
2 Address
3 Owner
4 Operator
5 Permit No.
6 Phone
7 Type
8 Quantity Transported in Base Year ____ (tons)

1 Name - name of the facility.

2 Site address - street address or site location.

3 Mailing address - location of management and address for business correspondence. Include ZIP code. (May be same as 2.)

4 Owner - name owner of record (private or municipal entity).

5 Operator - name entity or individual responsible for day-to-day operations of the facility.

6 Permit number - self-explanatory.

7 Phone - operator's telephone number (include area code).

8 Functions - state the types of services provided at this facility; for example, transfer only, accepts recyclables from the public, retrieves recyclables from received wastes, etc.

9 Design capacity (tpd) - state the maximum daily capacity the facility can manage.

10 Quantity received in the base year (tpd and total) - state the average daily tonnage from January 1 to December 31 of the base year and the total tonnage for that period.

1 Name
2 Site Address
3 Mailing Address
4 Owner
5 Operator

6 Permit No.
7 Phone
8 Functions

***

9 Design Capacity (tpd)

10 Quantity Received in Base Year ____ (tpd) (total)

---

1 Name
2 Site Address
3 Mailing Address
4 Owner
5 Operator

6 Permit No.
7 Phone
8 Functions

***

9 Design Capacity (tpd)

10 Quantity Received in Base Year ____ (tpd) (total)

---

1 Name
2 Site Address
3 Mailing Address
4 Owner
5 Operator

6 Permit No.
7 Phone
8 Functions

***

9 Design Capacity (tpd)

10 Quantity Received in Base Year ____ (tpd) (total)

INCINERATORS/WASTE-TO-ENERGY FACILITIES
Instructions

All incinerators and waste-to-energy facilities should be included in this inventory, including large hospital incinerators (7 TPD or more), and industrial and commercial facilities. All of these facilities should have permits.

1 Name - name of the facility.

2 Site address - street address or site location.

3 Mailing address - location of management and address for business correspondence. Include ZIP code. (May be same as 2.)

4 Owner - name owner of record (private or municipal entity).

5 Permit number - self-explanatory.

6 Phone - operator's telephone number (include area code).

7 Operator - name entity or individual responsible for day-to-day operations of the facility.

8 Product - if some type of energy recovery is employed, describe the type; for example, electricity, district heating, steam sales. If no energy is produced, enter "none."

9 Design capacity (tpd) - state the maximum daily capacity the facility can manage.

10 Quantity processed in the base year (tpd and total) - state the average daily tonnage from January 1 to December 31 of the base year and the total tonnage for that period.

11 Ash for disposal (tons) - state the annual tonnage of residual ash for disposal.

12 Ash disposal sites - list the names and locations of all ash disposal facilities used.

1 Name
2 Site Address
3 Mailing Address
4 Owner
5 Permit No.
6 Phone
7 Operator
8 Product

***

9 Design Capacity (tpd)
10 Quantity Processed in the Base Year ____ (tpd) (total)
11 Ash for Disposal (tpy)
12 Ash Disposal Sites

---

1 Name
2 Site Address
3 Mailing Address
4 Owner
5 Permit No.
6 Phone
7 Operator
8 Product

***

9 Design Capacity (tpd)
10 Quantity Processed in the Base Year ____ (tpd) (total)
11 Ash for Disposal (tpy)
12 Ash Disposal Sites

---

1 Name
2 Site Address
3 Mailing Address
4 Owner
5 Permit No.
6 Phone
7 Operator
8 Product

***

9 Design Capacity (tpd)
10 Quantity Processed in the Base Year ____ (tpd) (total)
11 Ash for Disposal (tpy)
12 Ash Disposal Sites

PUBLICLY AVAILABLE RECYCLING SERVICES
Instruction

1 Name - name of the facility.

2 Address - location of management and address for business correspondence. Include ZIP code.

3 Owner - name owner of record (private or municipal entity).

4 Operator - name entity or individual responsible for day-to-day operations of the facility.

5 Phone - operator's telephone number (include area code).

6 Description - describe the type of service provided; for example, drop-off centers, reverse vending machines, processing facilities (materials recovery/intermediate processing centers), etc. Include not-for-profit entities such as Goodwill and Salvation Army outlets.

7 Processing capacity (tpd) - state daily processing capacity.

8 Total quantity collected in the base year - state total tonnage.

9 Itemize total materials collected in the base year - state tonnage of materials processed by type. Total should be same as in 8 above.

PUBLICLY AVAILABLE RECYCLING SERVICES

1 Name

2 Address

3 Owner

4 Operator

5 Phone

6 Description

***

7 Daily Processing Capacity (tpd)

8 Total Quantity Collected in the Base Year ____ (tons)

9 Itemize Materials Collected in the Base Year ____

Material	Tons	Material	Tons	Material	Tons
Aluminum		Clothing		Other (list)	
Glass		Appliances			
Paper		Yard Waste			
Corrugated		Tires			
Plastic		Batteries			
Ferrous Metals					

---

1 Name

2 Address

3 Owner

4 Operator

5 Phone

6 Description

***

7 Daily Processing Capacity (tpd)

8 Total Quantity Collected in the Base Year ____ (tons)

9 Itemize Materials Collected in the Base Year ____

Material	Tons	Material	Tons	Material	Tons
Aluminum		Clothing		Other (list)	
Glass		Appliances			
Paper		Yard Waste			
Corrugated		Tires			
Plastic		Batteries			
Ferrous Metals					

1 Name - name of the facility.

2 Site address - street address or site location.

3 Mailing address - location of management and address for business correspondence. Include ZIP code. (May be same as 2.)

4 Owner - name owner of record (private or municipal entity).

5 Operator - name entity or individual responsible for day-to-day operations of the facility.

6 Permit number - self-explanatory.

7 Phone - operator's telephone number (include area code).

8 Materials composted - specify yard waste, MSW, other.

9 Quantity processed in 1992 - state total in tons.

10 Product - list product or products resulting from composting process (mulch, landfill cover material, etc.)

11 Residue for disposal - state tonnage of material not converted to useful product that remains for final disposal (landfilling or incineration).

12 Disposal sites - list sites and locations.

1 Name
2 Site Address
3 Mailing Address
4 Owner
5 Operator
6 Permit No.
7 Phone
8 Materials Composted

***

9 Quantity Processed in the Base Year ____ (tons)
10 Product
11 Residue for Disposal (tons)
12 Disposal Sites

---

1 Name
2 Site Address
3 Mailing Address
4 Owner
5 Operator
6 Permit No.
7 Phone
8 Materials Composted

***

9 Quantity Processed in the Base Year ____ (tons)
10 Product
11 Residue for Disposal (tons)
12 Disposal Sites

---

1 Name
2 Site Address
3 Mailing Address
4 Owner
5 Operator
6 Permit No.
7 Phone
8 Materials Composted

***

9 Quantity Processed in the Base Year ____ (tons)
10 Product
11 Residue for Disposal (tons)
12 Disposal Sites

SOLID WASTE COLLECTION DEPOTS
Instructions

This is a collection center that receives MSW from the general public. These facilities are usually found in rural areas where curbside collection service may not be available.

1 Name - name of the facility.

2 Site address - street address or site location.

3 Mailing address - location of management and address for business correspondence. Include ZIP code. (May be same as 2.)

4 Owner - name owner of record (private or municipal entity).

5 Operator - name entity or individual responsible for day-to-day operations of the facility.

6 Permit number - self-explanatory.

7 Phone - operator's telephone number (include area code).

8 Materials - specify materials accepted such as household trash, yard waste, recyclables, other (specify).

9 Attendant - is there an attendant on site to accept materials? Please answer yes or no.

10 Quantity in the base year - state total tonnage accepted.

1 Name
2 Site Address
3 Mailing Address
4 Owner
5 Operator
6 Permit No.
7 Phone
8 Materials

***

9 Attendant?
10 Quantity Collected in the Base Year ____ (tons)

---

1 Name
2 Site Address
3 Mailing Address
4 Owner
5 Operator
6 Permit No.
7 Phone
8 Materials

***

9 Attendant?
10 Quantity Collected in the Base Year ____ (tons)

---

1 Name
2 Site Address
3 Mailing Address
4 Owner
5 Operator
6 Permit No.
7 Phone
8 Materials

***

9 Attendant?
10 Quantity Collected in the Base Year ____ (tons)

1 Name
2 Site Address
3 Mailing Address
4 Owner
5 Operator

6 Permit No.
7 Phone
8 Materials

***

9 Attendant?

10 Quantity Collected in the Base Year ____ (tons)

---

1 Name
2 Site Address
3 Mailing Address
4 Owner
5 Operator

6 Permit No.
7 Phone
8 Materials

***

9 Attendant?

10 Quantity Collected in the Base Year ____ (tons)

---

1 Name
2 Site Address
3 Mailing Address
4 Owner
5 Operator

6 Permit No.
7 Phone
8 Materials

***

9 Attendant?

10 Quantity Collected in the Base Year ____ (tons)

1 Name - name of the facility

2 Site location - street address if known.

3 Mailing address - location of management and address for business correspondence. Include ZIP code. (May be same as 2.)

4 Owner - name owner of record (private or municipal entity).

5 Operator - name entity or individual responsible for day-to-day operations of the facility.

6 Phone - operator's telephone number (include area code).

7 Size of site (acres).

8 Approximate number of tires.

1 Name
2 Site Location
3 Mailing Address
4 Owner
5 Operator
6 Phone
7 Size - Acres
8 Number of Tires

***

1 Name
2 Site Location
3 Mailing Address
4 Owner
5 Operator
6 Phone
7 Size - Acres
8 Number of Tires

***

1 Name
2 Site Address
3 Mailing Address
4 Owner
5 Operator
6 Phone
7 Size - Acres
8 Number of Tires

***

1 Site location.

2 Owner - name owner of record (private or municipal entity).

3 Size of site (acres).

1 Location

2 Owner

3 Size (acres)

***

1 Location

2 Owner

3 Size (Acres)

***

1 location

2 Owner

3 Size (acres)

***

MAP OF EXISTING FACILITIES
Instructions

Please prepare a map of the district showing the existing facilities in the preceding inventory. Use a scale of 1:_____ and indicate the facilities using this key:

1) Landfill
2) Transfer Station
3) Incinerator
4) Waste-to-Energy
5) Recycling Center
6) Compost Facility
7) Collection Depots

Please include the map as an Appendix of your plan document.

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PROJECTION OF NEEDED FACILITIES/ACTIVITIES

1 Type
2 Location
3 Material Processed
4 Existing/New
5 Capacity (tpd) (tpy) (total tons)
6 Year to Begin Operations

---

1 Type
2 Location
3 Material Processed
4 Existing/New
5 Capacity (tpd) (tpy) (total tons)
6 Year to Begin Operations

---

1 Type
2 Location
3 Material Processed
4 Existing/New
5 Capacity (tpd) (tpy) (total tons)
6 Year to Begin Operations

---

1 Type
2 Location
3 Material Processed
4 Existing/New
5 Capacity (tpd) (tpy) (total tons)
6 Year to Begin Operations

PROJECTION OF NEEDED FACILITIES/ACTIVITIES

1 Type
2 Location
3 Material Processed
4 Existing/New
5 Capacity (tpd) (tpy) (total tons)
6 Year to Begin Operations

---

1 Type
2 Location
3 Material Processed
4 Existing/New
5 Capacity (tpd) (tpy) (total tons)
6 Year to Begin Operations

---

1 Type
2 Location
3 Material Processed
4 Existing/New
5 Capacity (tpd) (tpy) (total tons)
6 Year to Begin Operations

---

1 Type
2 Location
3 Material Processed
4 Existing/New
5 Capacity (tpd) (tpy) (total tons)
6 Year to Begin Operations

[Insert discussion here, adding additional pages as necessary]

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TITLE 329
SOLID WASTE MANAGEMENT BOARD

Proposed Rule
LSA Document # 90-103

Digest

Amends 329 IAC 2-2-1 by adding a definition of "major modification". Adds 329 IAC 2-8-12 to establish criteria for demonstration of local or regional solid waste facility need. Effective 30 days after filing with the secretary of state.

329 IAC 2-2-1
329 IAC 2-8-12

SECTION 1. 329 IAC 2-2-1 IS AMENDED TO READ AS FOLLOWS:

329 IAC 2-2-1 Definitions

Authority: IC 13-1-12-8; IC 13-7-7-5; IC **13-7-10.2**
Affected: IC 13-1-3; IC 13-1-12-1; IC 13-7; IC 16-1-9.5-1; IC 25-17.5-1; IC 25-31; IC 36-9-30;

Sec. 1. (a) In addition to the definitions in subsection (b), the definitions found in IC 13-1-12 apply throughout this article:

(1) "Commissioner" refers to the commissioner of the department created under IC 13-7-2-11 (the department of environmental management).

(2) "Contaminant" means any solid, semisolid, liquid, or gaseous matter, or any odor, radioactive material, pollutant as defined in the Federal Waste Pollution Control Act, hazardous waste as defined by the Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.), as amended, or any combination thereof, from whatever source, that:

(A) is injurious to human health, plant or animal life, or property;

(B) interferes unreasonably with the enjoyment of life or property; or

(C) is otherwise violative of this article or rules adopted under this article.

(3) "Department" refers to the department of environmental management created under IC 13-7-2.

(4) "Disposal" means the discharge, deposit, injection, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that the solid waste or hazardous waste or any constituent of

the waste may enter the environment or be emitted into the air or discharged into any waters, including ground waters. (P.L. 143-1985, SECTION 77.

(5) "Garbage" means all putrescible animal solid, vegetable solid, and semisolid wastes resulting from the processing, handling, preparation, cooking, serving, or consumption of food or food materials.

(6) "Hazardous waste" means a solid waste or combination of solid wastes that, because of its quantity, concentration or physical, chemical, or infectious characteristics, may:

(A) cause or significantly contribute to an increase in mortality or increase in serious irreversible, or incapacitating reversible illness; or

(B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

(7) "Incinerator" means an engineered apparatus designed for the burning of solid waste under the effect of controls of temperature, retention time, air, and other combustion factors.

(8) "Open burning" means the combustion of any matter in the open or in an open dump.

(9) "Open dump" means the consolidation of solid waste from one (1) or more sources or the disposal of solid waste at a single disposal site that does not fulfill the requirements of a sanitary landfill or other land disposal method as prescribed by law or regulations, and that is established and maintained without cover and without regard to the possibilities of contamination of surface or subsurface water resources.

(10) "Person" means an individual, partnership, copartnership, firm, company, corporation, association, joint stock company, trust, estate, municipal corporation, city, school city, town, school town, school district, school corporation, county, any consolidated unity of government, political subdivision, state agency, or any other legal entity.

(11) "Recovery" means obtaining materials or energy for commercial or industrial use from solid waste or hazardous waste.

(12) "Solid waste" means any garbage, refuse, sludge from a waste treatment plant, sludge from a water supply treatment plant, sludge from an air pollution control facility, or other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, or agricultural operations or from community activities. However, the term "solid waste" does not include:

(A) solid or dissolved material in domestic sewage or solid or dissolved materials in irrigation return flows or industrial discharges, which are point source subject to permits under Section

402 of the Federal Water Pollution Control Act Amendments (33 U.S.C. 1342);

(B) source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.); or

(C) manures or crop residues return to the soil at the point of generation as fertilizers or soil conditioners as part of a total farm operation. (P.L. 143-1985, SECTION 90.)

(13) "Solid waste management" means the systematic administration of activities that provide for the collection, source separation, storage, transportation, transfer, processing, treatment, and disposal of solid waste. (P.L. 143-1985, SECTION 91.)

(14) "Water pollution" means:

(A) actual or threatened alteration of the physical, thermal, chemical, biological, bacteriological, or radioactive properties of any waters; or

(B) the discharge or threatened discharge of any contaminant into any water that does or can create a nuisance or render the waters harmful, detrimental, or injurious to:

(i) public health, safety, or welfare;

(ii) domestic, commercial, industrial, agricultural, recreational, or other legitimate uses; or

(iii) livestock, wild animals, birds, fish, or aquatic life.

(15) "Waters" means the accumulations of water, surface and underground, natural and artificial, public and private, or parts thereof, that are wholly or partially within, flow through, or border upon this state. The term does not include any private pond or any off-stream pond, reservoir, or facility built for reduction or control of pollution or cooling of water prior to discharge unless the discharge from the pond reservoir, or facility causes or threatens to cause water pollution.

(b) The following definitions apply throughout this article:

(1) "Access roads" means roads which lead to the entrance of a solid waste processing or disposal facility, normally, a county, state, or federal highway.

(2) "Airport" means a public use airport open to the public without prior permission and without restrictions within the physical capacities of available facilities and military airports.

(3) "Aquifer" means a geologic formation, group of formations, or part of a formation, that is capable of yielding a significant amount of ground water.

(4) "Base flood" means a flood that has a one percent (1%) or greater chance of recurring in any year or a flood of a magnitude equaled or exceeded once in one hundred (100) years on the average over a

significantly long period. In any given one hundred (100) year interval such a flood may not occur, or more than one (1) such flood may occur.
(5) "Bedrock" means cemented or consolidated earth materials, exposed on the earth's surface or underlying unconsolidated earth materials.
(6) "Board" means the solid waste management board as defined in IC 13-1-12-1.
(7) "Cell" means a volume of solid waste completely enclosed by cover.
(8) "Certified professional geologist" means a professional geologist certified by the state of Indiana pursuant to IC 25-17.5-1.
(9) "Collection container system" means a group of containers for solid waste collection from noncommercial, nonindustrial, and noninstitutional sources, and made available for use by the general public, such as ~~countywide~~ **county wide** collection box systems.
(10) "Construction/demolition site" means a solid waste land disposal facility designed and operated to accommodate large volumes of solid waste, having minimal potential for ground water contamination.
(11) "Cover" means any soil or other suitable material approved by the commissioner placed over the solid waste in accordance with 329 IAC 2-14-12(a).
(12) "Current closure cost estimate" means the original closure cost estimate or the most recent revision thereof made in accordance with 329 IAC 2-12.
(13) "Current post-closure cost estimate" means the original post-closure cost estimate or the most recent revisions thereof made in accordance with 329 IAC 2-12.
(14) "Daily cover" means that cover applied to the working face of the solid waste land disposal facility on a daily basis.
(15) "Dwelling" means any building which people inhabit on a regular or seasonal basis. The term shall include schools, hospitals, residences, factories, and offices.
(16) "Equivalent hydraulic conductivity" means the hydraulic conductivity averaged in such a manner as to represent the overall ability of a material to transmit flow .
(17) "Final closure" or "closure" means those activities to be completed at the end of waste acceptance at a facility, including certification required by 329 IAC 2-15-5, but not including those activities required after said certification.
(18) " "Final cover" means any cover of a type, thickness, elevation, and slope approved by the commissioner for the termination of filling in an area.
(19) "Flood plain" means the areas adjoining a river, stream, or lake which are inundated by the base flood as determined by the Indiana department of natural resources.
(20) "Floodway" means the channel of a river or stream and those

portions of the flood plain adjoining the channel which are reasonably required to efficiently carry and discharge the peak flow from the base flood as determined by the Indiana department of natural resources.

(21)"Generating facility" means the location at or on which one (1) or more solid wastes are generated, such as a large manufacturing plant which may have more than one (1) source of solid waste at the plant location.

(22) "Grading" means the contouring of land so that surface water flow and erosion are controlled according to a predetermined plan.

(23) "Ground water" means water below the land surface in the zone of saturation.

(24) "Hydraulic gradient" means the head loss per unit length where the head loss is expressed in terms of the unit length so as to produce a dimensionless value.

(25) "Industrial process waste" includes, but is not limited to, oil, lubricants, resins, chemical catalysts, distillation bottoms, ink, paint sludges, grinding sludges, incinerator ash, core sand, metallic dust sweepings, material which may create asbestos dust, contaminated or recalled wholesale or retail products.

(26) "Infectious waste" means waste that epidemiologic evidence indicates is capable of transmitting a dangerous communicable disease (as defined by rule adopted under IC 16-1-9.5-1). Infectious waste includes the following:

(A) Pathological wastes, including tissue, organs, body parts, and blood or body fluids in liquid or semiliquid form that are removed during surgery, biopsy, or autopsy.

(B) Biological cultures and associated biologicals.

(C) Contaminated sharps.

(D) Infectious agent stock and associated biologicals.

(E) Blood and blood products in liquid or semiliquid form.

(F) Laboratory animal carcasses, body parts, and bedding.

(G) Wastes (as defined under P.L 123-1988, SECTION 8).

(27) "Infectious waste incinerator" means a solid waste incinerator that is used to burn infectious ~~wastes~~ waste or mixture of infectious and noninfectious solid waste.

(28) "Karst topography" means a topography formed on a carbonate rock formation and dominated by features of solutional origin.

(29) "Leachate" means liquid that has passed through or emerged from solid waste and contains soluble, suspended, immiscible, or miscible materials removed from such wastes.

(30) "Legal description" means a legal description of the real property, to include the county, township, range, and section numbers and, if applicable, the metes and bounds description, together with the acreage thereof.

(31) "Lift" means a layer of cells covering a designated area of a solid waste land disposal facility.

(32) "Locally useful aquifer" means an aquifer which, based on productivity, quality, depth, and alternate sources available, is a source or a probable source of water for any user or potential user within one (1) mile of a particular location.

(33) **"Major Modification" means any change in a permitted solid waste facility which would increase the facilitys' permitted capacity to process or dispose of solid waste.**

~~(33)~~ **(34)** "Normal water line" means the average normal water level, where established through the Indiana department of natural resources, or the average boundary of the water as evidenced by either water level records or changes in the character of vegetation and soil due to the presence of the water.

~~(34)~~ **(35)** "On-site roads" means roads for the passage of vehicles from a facility entrance to the disposal area.

~~(35)~~ **(36)** "Operating personnel" means persons necessary to properly operate a solid waste land disposal or processing facility.

~~(36)~~ **(37)** "Partial closure" means those activities required at the end of waste acceptance for a facility or area of a facility to include the placement of final cover and the establishment of vegetation in accordance with approved closure plans, but exclusive of monitoring and maintenance activities required under post-closure care.

~~(37)~~ **(38)** "Permittee" means any person to whom a solid waste facility permit has been issued.

~~(38)~~ **(39)** "Pollution control waste" includes but is not limited to, liquid, solid, ~~semi-solid~~ **semisolid**, or gaseous waste generated as a direct or indirect result or the removal of contaminants from air, water, or land, such as water and waste water treatment sludges, baghouse dust, scrubber sludges, and chemical spill, or remedial activity cleanup wastes.

~~(39)~~ **(40)** "Post-closure" means the monitoring and maintenance activities required after final closure of a facility.

~~(40)~~ **(41)** "Post-closure cost estimate" means the original written estimate, in current dollars, or the total cost of post-closure monitoring and maintenance of the facility during the entire post-closure care period, in accordance with the post-closure plan.

~~(41)~~ **(42)** "Processing" means the method, system, or other handling of solid waste so as to change its chemical, biological, or physical form or to render it more amenable for disposal or recovery of materials or energy, or the transfer of solid waste materials but excluding the transportation of solid waste.

~~(42)~~ **(43)** "Registered professional engineer" means a professional engineer registered by the state of Indiana pursuant to IC 25-31.

~~(43)~~ (44) "Residue" means solid or semi-solid materials remaining after incineration or processing, including but not limited to, ash, ceramics, glass, metal, and organic substances.

~~(44)~~ (45) "Resource recovery" means the processing of solid waste into commercially valuable materials or energy.

~~(45)~~ (46) "Restricted waste site" means a solid waste land disposal facility designed and operated to accommodate specific types of waste as specified in 329 IAC 2-9.

~~(46)~~ (47) "Salvaging" means the controlled and organized removal of materials from solid waste for utilization.

~~(47)~~ (48) "Sanitary landfill" means a solid waste land disposal facility designed to accommodate general types of solid waste, excluding waste regulated by 329 IAC 3, and operated by spreading the waste in thin layers, compacting it to the smallest practical volume, and covering it with cover material at the end of each working day.

~~(48)~~ (49) "Scavenging" means the uncontrolled and unauthorized removal of materials from solid waste.

~~(49)~~ (50) "Site" means the land area on which the permitted facility is situated.

~~(50)~~ (51) "Sludge" means any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility.

~~(51)~~ (52) "Soil borings" means the drilling of holes in the earth for the purpose of identifying soil types, subsurface materials, and water table level.

~~(52)~~ (53) "Solid waste boundary" means the outermost perimeter of the solid waste fill area, as it would exist at the time of closure, as projected in the facility's closure plan.

~~(53)~~ (54) "Solid waste facility" or "facility" means all contiguous land and structures, other appurtenances, and improvements on the land, used for processing, storing in conjunction with processing or disposal, or disposing of solid waste, and may consist of several processing, storage, or disposal operational units, e.g., one (1) or more landfills, surface impoundments, or combinations thereof.

~~(54)~~ (55) "Solid waste land disposal facility" means a solid waste facility in or upon the land into which solid waste is disposed. Permitted solid waste land disposal facilities shall be classified into one (1) of the following types:

(A) Sanitary landfill.

(B) Construction/demolition sites.

(C) Restricted waste sites.

~~(55)~~ (56) "Solid waste processing facility" means a solid waste facility upon which is located a solid waste incinerator, transfer station, solid waste baler, solid waste shredder, resource recovery system, composting facility, or garbage grinding facility.

~~(56)~~ (57) "Surface impoundment" means a facility or part of a facility which is a natural topographic depression, manmade excavation, or diked area formed primarily of earthen materials (although it may be lined with manmade materials), which holds or is designed to hold an accumulation of liquid wastes or wastes containing free liquids, and which is not an injection well. Examples of surface impoundments are holding, storage, settling, and aeration pits, pounds, and lagoons.

~~(57)~~ (58) "Surface water" means water present on the surface of the earth, including:

(A) streams;
(B) lakes;
(C) ponds;
(D) rivers;
(E) swamps;
(F) marshes; or
(G) rainwater present on the earth.

~~(58)~~ (59) "Transfer station" means a facility at which solid waste is transferred into larger capacity vehicles or containers for further transportation but shall not include neighborhood recycling collection centers or transfer activities at generating facilities.

~~(59)~~ (60) "Twenty-five (25) year, twenty-four (24) hour precipitation event" means the maximum twenty-four (24) hour precipitation event with the probable recurrence interval of once in twenty-five (25) years as defined by the Indiana department of natural resources.

~~(60)~~ (61) "Vector" means any animal capable of harboring and transmitting microorganisms from one (1) animal to another or to a human.

~~(61)~~ (62) "Wash-out" means the carrying away of solid waste by water of the base flood.

~~(62)~~ (63) "Water course" means the path taken by flowing surface water.

~~(63)~~ (64) "Water table" means the upper surface at which the fluid pressure of the ground water is equal to atmospheric pressure.

~~(64)~~ (65) "Wetlands" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

~~(65)~~ (66) "Working face" means that portion of a solid waste land disposal facility where the solid waste is deposited. *(Solid Waste Management Board; 329 IAC 2-2-1; filed Nov 10, 1988, 5:15 p.m., incorporated matters filed Dec 7, 1988, 11:00 a.m., refiled Jan 11, 1989, 1:00 p.m.; errata filed Jan 11, 1989, 1:00 p.m.)*

SECTION 2. 329 IAC 2-8-12 IS ADDED ADDED TO READ AS FOLLOWS:

329 IAC 2-8-12 Demonstration and determination of need requirements

Authority: IC 13-1-12-8; IC 13-7-7-5; IC 13-7-10-1.5
Affected: IC 13-1-3; IC 13-7; IC 13-9.5; IC 36-9-30

Sec. 12. (a) This section applies to all permits for new solid waste facilities or major modifications of permits issued after March 20, 1990.

(b) In accordance with subsection (a), and in addition to other permit application requirements outlined in this rule, the following are also required:

(1) A description of the anticipated area that would be served by the facility as indicated bythe following:
  (A) Solid waste management district(s) if established.
  (B) County, counties or portions thereof.
  (C) County, counties and state if the area includes portions outside of Indiana.
(2) A description of the existing solid waste management facilities which serve the same described area.
(3) A description of the need, that would be fulfilled by constructing the proposed facility, as follows:
  (A) For facilities proposed in areas with approved district solid waste management plans, a description of the need identified in the district solid waste management plan required by IC 13-9.5.
  (B) For facilities proposed in areas without approved district solid waste management plans, a description of need for the proposed area to be served.
(4) A description of recycling, composting, or other activities which the facility would operate within the proposed area of service.
(5) A description of the additional disposal capacity which the facility, if permitted, would provide for the proposed area of service.

(o) Additional information as requested by the commissioner.

(c) The commissioner shall review the submitted application and accompanying materials in accordance with provisions of this rule. If it is determined that there is not a local or regional need in Indiana for the solid waste management facility, the commissioner shall deny the permit application. *(Solid Waste Management Board; 329 IAC 2-8-12)*

PRINTING CODE. Amendments: Whenever an existing statute (or a section of the Indiana Constitution) is being amended, the text of the existing provision will appear in this style type, additions will appear in this style type, and deletions will appear in ~~this style type~~.

Additions: Whenever a new statutory provision is being enacted (or a new constitutional provision adopted), the text of the new provision will appear in this style type. Also, the word NEW will appear in that style type in the introductory clause of each SECTION that adds a new provision to the Indiana Code or the Indiana Constitution.

HOUSE ENROLLED ACT No. 1388

AN ACT to amend the Indiana Code concerning the environment.

Be it enacted by the General Assembly of the State of Indiana:

SECTION 1. IC 13-7-8.6-3, AS AMENDED BY P.L.8-1989, SECTION 69, IS AMENDED TO READ AS FOLLOWS: Sec. 3. (a) The Indiana hazardous waste facility site approval authority is created and constitutes a public instrumentality of the state. The exercise by the authority of the powers conferred by this chapter is an essential governmental function.

(b) The authority consists of five (5) statewide members appointed by the governor and four (4) local members. The statewide members shall serve a term of four (4) years.

(c) A vacancy in the office of a member, other than by expiration, shall be filled in like manner as the original appointment for the remainder of the term for statewide members and for the duration of the duties and responsibilities of the local members.

(d) In making appointments to the statewide membership, the governor shall select residents of this state recognized around the state for their judgment, integrity, and credibility. One (1) member shall represent business and industry, one (1) shall represent labor, and one (1) shall represent agriculture. The fourth statewide member shall be a hydrogeologist who has

practiced in this state for at least five (5) years. The fifth statewide member shall be a biologist, chemist, limnologist, or toxicologist and a member of:

(1) the science faculty of an institution of higher learning in this state; or

(2) the staff of scientists of an independent research organization in this state.

The governor may remove any statewide member for cause and shall annually appoint one (1) of the statewide members as chairperson.

(e) Five (5) members (statewide or local) of the authority constitute a quorum for the authority to conduct business. However, the affirmative vote of a majority of the membership is necessary for a final decision on a certificate application. A vacancy in the membership of the authority does not impair the right of the quorum to act.

(f) All members of the authority, including members of the executive council, shall be reimbursed for their traveling expenses and other expenses actually incurred in the performance of their duties, as provided in the state travel policies and procedures established by the department of administration and approved by the budget agency. The members who are not state employees are also entitled to the minimum salary per diem provided by IC 4-10-11-2.1(b) for attendance of authority meetings. All reimbursement for expenses shall be as provided by law.

(g) The four (4) local members shall be appointed from the county in which a proposed facility is to be located, as follows:

(1) Two (2) residents of a **the largest** city or town closest to or **in the township** containing the proposed facility shall be appointed to the authority by the executive of the city or town, **or, if there is no city or town in the township, two (2) residents of the township containing the proposed facility shall be appointed to the authority by the township trustee.**

(2) Two (2) residents of the unincorporated portion of the county in which the facility is to be located, one (1) of whom may be the county health officer, shall be appointed by the executive of that county.

If the affected city is a consolidated city, all four (4) local members shall be appointed by the executive of that city. The local members shall serve until the certificate is granted, denied, or no longer subject to their review. The authority constituted for a specific certificate application may be recalled to rehear an application upon an order from the Indiana court of appeals or the supreme court for a rehearing.

(h) No member of the authority may be a member or an employee of or be associated with the board, the department, or the staffs of those agencies.

SECTION 2. IC 13-7-22-2 IS ADDED TO THE INDIANA CODE AS A NEW SECTION TO READ AS FOLLOWS: Sec. 2. (a) As used in this section, "applicant" means an individual, a corporation, a partnership, or a business association that applies for an original permit for the construction or operation of a landfill.

(b) As used in this section, "landfill" means a solid waste disposal facility at which solid waste is deposited on or beneath the surface of the ground as an intended place of final location.

(c) Before an original permit for the construction or operation of a landfill may be granted, the applicant must submit a statement of financial position that meets the following requirements:

(1) The statement must have been prepared in accordance with generally accepted accounting principles.

(2) The statement must have been audited by an independent certified public accountant.

(3) The accountant referred to in subdivision (2) must have issued an unqualified opinion as to the statement.

(4) The statement must indicate that, at the end of the calendar year or fiscal year immediately preceding the year in which the permit would be issued, the applicant had a positive net worth of at least two hundred fifty thousand dollars ($250,000).

(d) Before an original permit for the construction or operation of a landfill may be granted, the applicant or a person authorized to act for the applicant under this subsection must submit a statement in which the applicant or authorized person swears or affirms, subject to the penalty for perjury set forth in IC 35-44-2-1, that, to the best of the applicant's or authorized person's knowledge, there are no unsatisfied and nonappealable judgments requiring the payment of money by the applicant.

(e) If the applicant is a subsidiary corporation, the submission of the statement of financial position of the ultimate parent shall satisfy the requirement under subsection (c) if the applicant has been a subsidiary of the parent for at least one (1) year before the submission of the statement of financial position.

(f) The department may investigate and verify the information contained in the statements required under this section.

(g) The commissioner may deny an application for an original permit for the construction or operation of a landfill if the commissioner finds that:

(1) the applicant does not have a positive net worth of at least two hundred fifty thousand dollars ($250,000); or

(2) there are one (1) or more unsatisfied and nonappealable judgments requiring the payment of money by the applicant.

(h) For the purposes of this section, real property in which the applicant has an interest must be valued at the property's fair market value as determined under the assumption that the permit application will not be granted.

(i) The solid waste management board may adopt rules under IC 4-22-2 to administer this section.

SECTION 3. This act applies to:

(1) a permit application that is filed on or after the effective date of this act;

(2) a permit application that was filed before the effective date of this act but was not granted or denied by the commissioner of the department of environmental management before the effective date of this act; and

(3) a permit application that was filed before the effective date of this act and that was granted by the commissioner of the department of environmental management before the effective date of this act if the commissioner's action in granting the permit was appealed to the solid waste management board and that appeal is pending on the effective date of this act.

SECTION 4. Because an emergency exists, this act takes effect upon passage.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live

Evan Bayh
Governor
Kathy Prosser
Commissioner

105 South Meridian Street
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Telephone 317-232-8603
Environmental Helpline 1-800-451-6027

To Whom It May Concern:

Re: Typical Information Required for
Demonstration of Need for Solid Waste Facilities

The demonstration of need for Solid Waste facilities must be supported by information required by the Indiana Administrative Code, 329 IAC 2-8-12. Specifically the following information is required to complete the demonstration of need. Please note, the enclosed guidelines from the Indiana Solid Waste Management Plan, Volume II and the affected Solid Waste Management District(s) may be of some assistance in preparing the information requested according to the following format.

1. A geographic description and narrative of the anticipated area* that would be served by the facility as indicated by the following:

   a. Proposed or existing solid waste management district(s) or portions thereof as required by IC-13-9.5.

   b. Municipality, County, Counties, Facilities or portions thereof, and counties and state if the anticipated service area includes portions outside of Indiana.

   c. A scale map with anticipated service area and proposed facility identified.

   d. Maximum one-way haul distance from facility to anticipated area served.

*NOTE: For some types of facilities, the anticipated service area may be an individual waste generation unit.

2. Identification of the existing solid waste management facilities which accept the solid wastes identified in item 3 and which serve the anticipated service area identified in item 1 to include: (Note, a generic table is included as an example.)

   a Name of the facility.

   b. Location of the facility.

   c. Type of facility.

   d. Type of waste permitted to be received by the facility.

e. The permitted disposal or processing capacity of the facility, and annual disposal or processed quantities.

f. The estimated remaining useful life of the current facility, and estimated closure date.

g. A scale map with existing solid waste management facilities located.

3. Identify the needs for the anticipated service area, with an inventory and a description of each source of solid waste and total quantities to be accepted at the proposed facility to include:

a. Type of solid waste source (i.e. currently generated, public, restricted, and/or proposed).

b. SWM District letters of agreement or support for the facility; or for "captive" sites, notification to the District that the facility will accept a solid waste stream(s).

c. Recycling/composting actions and % reduction in disposed quantities. e.g. Material recycling contracts and agreements.

d. Solid waste inventory of anticipated service area for designated base year. Residential, commercial, manufacturing, medical, etc. depending on the types of waste to be accepted by the facility.

Volume & Type (Municipal, residential, commercial, manufacturing etc.) of source/generator.

% Allocation from each source category
i.e. in-plant, in-county or SWM district, out-of-state, etc.

Estimated total daily and annual volume of solid waste generated in anticipated service area for current calendar year.

e. Projected solid waste generation rate increases. Identify any assumptions and effects of assumptions on generation rates. Refer to 327 IAC 2-14-8 for solid waste weight calculations.

f. Projected useful life of facility/total waste disposal or processing capacity proposed.

4. A description of where the solid waste proposed for the facility is currently going.

You should be aware that the information supplied relative to "need" may be incorporated into a permit condition which will limit the service area for a proposed solid waste facility.

The above-noted information must be submitted in complete form. The departments technical review of a proposed facility may be delayed until such time as a demonstration of need is complete.

If you have any questions, please contact me at 317/232-8866.

Sincerely,

Patrick Carroll, Chief
Technical Support Branch
Solid and Hazardous Waste Management

PJC/bja

Enclosures

Example Table of Facilities
Copy of 329 IAC 2-8-12
Solid Waste Management District Facilities Inventory Guide

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329 IAC 2-8-12 Demonstration and determination of need requirements
Authority: IC 13-1-12-8; IC 13-7-7-5; IC 13-7-10-1.5
Affected: IC 13-1-3; IC 13-7; IC 13-9.5; IC 36-9-30

Sec. 12. (a) This section applies to all permits for new solid waste facilities or major modifications of permits issued after March 20, 1990.

(b) In accordance with subsection (a), and in addition to other permit application requirements outlined in this rule, the following are also required:

(1) A description of the anticipated area that would be served by the facility as indicated by the following:

(A) Solid waste management district(s) if established.

(B) County, counties, or portions thereof.

(C) County, counties, and state if the area includes portions outside of Indiana.

(2) A description of the existing solid waste management facilities which serve the same described area.

(3) A description of the need, that would be fulfilled by constructing the proposed facility, as follows:

(A) For facilities proposed in areas with approved district solid waste management plans, a description of the need identified in the district solid waste management plan required by IC 13-9.5.

(B) For facilities proposed in areas without approved district solid waste management plans, a description of need for the proposed area to be served.

(4) A description of recycling, composting, or other activities which the facility would operate within the proposed area of service.

(5) A description of the additional disposal capacity which the facility, if permitted, would provide for the proposed area of service.

(6) Additional information as requested by the commissioner.

(c) The commissioner shall review the submitted application and accompanying materials in accordance with provisions of this rule. If it is determined that there is not a local or regional need in Indiana for the solid waste management facility, the commissioner shall deny the permit application. *(Solid Waste Management Board; 329 IAC 2-8-12; filed Feb 19, 1991, 12:06 p.m.: 14 IR 1385)*

Rule 9. Solid Waste Facility Classifications and Waste Criteria

329 IAC 2-9-1 Types of facilities
Authority: IC 13-1-12-8; IC 13-7-7-5
Affected: IC 13-1-3; IC 13-7; IC 36-9-30

Sec. 1. The following classifications will be used for the purpose of defining site requirements and permissible wastes to be received for all solid waste facilities:

(1) Construction/demolition site.

(2) Restricted waste site as follows:

(A) Restricted waste site type I.

(B) Restricted waste site type II.

EXAMPLE

EXISTING PERMITTED SOLID WASTE FACILITIES WHICH SERVE THE ANTICIPATED SERVICE AREA

Service Area Number	Facility Name	Location (County, State)	Type	Total (tons) Annual SW Quantities	Annual Out-of-State Solid Waste (Tons)	Total Estimated Permitted Capacity (Tons)	Estimated Remaining Life (year)	Approximate Closure Date
1	Waste, Inc.	Alpha Co.	LF	154,000	None	1,540,000	10 years	2002
2	Beta Recycle	Beta Co.	TS/R	60,000	None	170 tons/day	20 years	2012

NOTES:
RWS-Type I, II, III Restricted Waste Sites
LF - Landfill
CD - Construction/Demolition Site
TS/R - Processing Facilities (Transfer Station/Recycle)
IN - Incinerator
NA - Not Applicable

SOURCES:
IDEM Quarterly Reports '91
1990 Indiana Solid Waste Management Plan, Vol. I, II, III
IDEM Summary of Solid Waste Facility Data - 1991 Annual Report

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The following materials are included in this permit application package for restricted waste site types I and II:

Information on how to obtain copies of the Solid Waste Rule (329 IAC 2)(on back of Fee Transmittal Form)
1 copy of the Solid Waste Facility Permit Application
1 copy of the Fee Transmittal Form
1 copy of the Permit Application Checklist for Restricted Waste Site Type I and II
1 copy of the memo "Identification of Potentially Affected Persons"
1 copy of the list for Identification of Potentially Affected Persons
1 copy of the draft Closure and Post-Closure Plan Preparation Guidance
1 copy of the memorandum "Additional Requirements for Solid Waste Permit Applications Per New Legislation" attachments:

1. House Entrolled Act No. 1472
2. IDEM Solid Waste Facility Character Disclosure Statement
3. Request for Limited Criminal History Information
4. IDEM Authorization to Release Criminal History Information
5. Title 329, Solid Waste Management Board Proposed Rule LSA Document #90-103 ("Needs Rule")
6. House Enrolled Act No. 1388

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live

Evan Bayh
Governor
Kathy Prosser
Commissioner

105 South Meridian Street
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Telephone 317-232-8603
Environmental Helpline 1-800-451-6027

We have had numerous requests for copies of Indiana's Laws/Regulations on Solid and/or Hazardous Waste. Copies of Indiana's Laws/Regulations are available from:

Legislative Services Agency
Administrative Code and Register Division
302 State House
Indianapolis, Indiana 46204

The Legislative Services Agency may also be reached by calling AC 317/232-9557.

- For a copy of the Indiana Law that governs solid and hazardous waste management ask for the Environmental Management Act which is codified at IC 13-7.
- For a copy of Indiana's regulations that govern solid waste management ask for 329 IAC-2.
- For a copy of Indiana's regulations that govern hazardous waste management ask for 329 IAC-3.

Staff of the Office of Solid and Hazardous Waste Management are available for assistance. If you have any questions, contact staff of the respective branch within the Offices of Solid and Hazardous Waste Management.

Hazardous Waste Management Branch
Phone: AC 317/232-4518

Solid Waste Management Branch
Phone: AC 317/232-4473

DWB/tlb

10/91

Indiana Department of Environmental Management
Solid Waste Facility Permit Application

Instructions: This application shall be used to apply for all solid waste facility permits pursuant to 329 IAC 2-8. Upon completion, return this application and any additional materials to the following address:

Office of Solid and Hazardous Waste Management
Indiana Department of Environmental Management
105 South Meridian Street, P. O. Box 6015
Indianapolis, IN 46206-6015

This application is for a: ☐ new permit ☐ permit modification for additional acreage

Section A. Applicant(s) Information

Name

Mailing Address, Street City State Zip Code

AC - Telephone Number

Section B. Property Owner(s) Information

Name

Mailing Address, Street City State Zip Code

AC - Telephone Number

Section C. Facility Information

Name

Mailing Address

Facility Contact Person and Telephone #

County and General Location

- Type of Operation -

- O Sanitary Landfill
- O Construction/Demolition
- O Incinerator - 10 tons/day or greater
- O Infectious Waste Incinerator - 7 tons/day or greater
- O Restricted Waste Site TYPE I
- O Restricted Waste Site TYPE II
- O Restricted Waste Site TYPE III
- O Solid Waste Processing Facility

Total Acreage Proposed for Facility

Planned Life of Facility in Years

Type of Waste to be received

Expected Volume of Waste per day (cu. yds or tons)

Section D. Permit Application Completeness Checklists

Checklists to facilitate the submittal of complete applications are available from the Office of Solid and Hazardous Waste Management. The appropriate checklist for the facility type checked in Section C above should be completed and attached as part of this application package.

Section E. Signatories

329 IAC 2-8-1(b) states the owner of the facility is responsible for applying for and obtaining a permit. 329 IAC 2-8-4 contains detailed signatory information and provides the following certification statement:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that I am authorized to submit information."

Facility Owner Signature _____ Date _____

The owner of the land upon which the facility is located shall also sign the application form acknowledging the land owner's responsibility in accordance with 329 IAC 2-8-7.

"I hereby certify that I am fully aware of my responsibilities established in 329 IAC 2 as owner(s) of the land upon which a solid waste facility is located and shall be liable for any environmental harm caused by the facility."

Property Owner Signature _____ Date _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
SOLID WASTE FACILITY PERMIT APPLICATION

FEE TRANSMITTAL FORM

Instruction:

This form shall be used to transmit fees for all solid waste management facility permits (**NEW** permits, **RENEWALS** of permits, **MAJOR MODIFICATIONS*** of permits and **ANNUAL OPERATING FEES**) pursuant to 329 IAC 2-8, and is to accompany all payments. Make check or money order payable to the Indiana Department of Environmental Management. Upon completion, return this form and appropriate fees to the following address:

Cashier, Room 140
Indiana Department of Environmental Management
105 South Meridian Street
P. O. Box 7060
Indianapolis, IN 46206-7060

(**NOTE: A COPY** of your check and a **COPY** of this fee transmittal form must be attached to your permit application).

Section A. Applicant(s) Information

Name:		
Mailing Address: Street		City
State	Zip Code	AC-Telephone Number:
Facility Name and County:		

*"Major Modification" means any change in a permitted solid waste facility which would increase the facility's permitted capacity to process or dispose of solid waste. (Per 329 IAC 2-2-1 as amended on February 19, 1991).

Section B. Solid Waste Permit Fee Schedule

1. Non-Government Entities

The following fees are to accompany new permit applications and major modifications to existing permits.

	Permit Application for New Sites and Major Modifications
Sanitary Landfill	
> 500 tons/day	☐ $20,000
250-499 tons/day	☐ $20,000
100-249 tons/day	☐ $20,000
< 100 tons/day	☐ $20,000
Processing Facilities (non-incineration)	☐ $ 5,000
Incinerators	
≥ 500 tons/day	☐ $20,000
250-499 tons/day	☐ $20,000
100-249 tons/day	☐ $20,000
10-99 tons/day	☐ $20,000
Infectious Waste Incinerator (≥ 7 tons/day)	☐ $ 4,000
Restricted Waste Site Type I	☐ $14,000
Restricted Waste Site Type II	☐ $ 4,000
Restricted Waste Site Type III	☐ $ 2,000
Construction/Demolition Site	☐ $ 1,000
Waste Tire Cutting Facility	☐ $ 100

2. Government Entities

	Permit Application for New Sites and Major Modifications	Permit Renewal
Sanitary Landfill	☐ $ 1,000	☐ $ 500
Processing Facility (non-incineration)	☐ $ 500	☐ $ 250
Incinerator (≥ 10 tons/day)	☐ $ 1,000	☐ $ 500
Infectious Waste Incinerator (≥ 7 tons/day)	☐ $ 1,000	☐ $ 500
Restricted Waste Site Type I	☐ $ 1,000	☐ $ 500
Restricted Waste Site Type II	☐ $ 1,000	☐ $ 500
Restricted Waste Site Type III	☐ $ 500	☐ $ 250
Construction/Demolition Site	☐ $ 500	☐ $ 250

PERMIT APPLICATION CHECKLIST
TYPE I
RESTRICTED WASTE SITE: NEW AND ADDED ACREAGE

NOTE: The application must contain the following information. When specifying the location of an item, include the ***VOLUME***, ***SECTION*** and ***APPENDIX*** in which the item is located, in addition to the ***PAGE*** or ***DRAWING NUMBER***.	Location in Application	IDEM Use Only R	IDEM Use Only P
329 IAC 2-8-2 Permit Application			
(a) The following information provided on forms supplied by the commissioner:		P	
(1) The name and address of the applicant(s).		P	
(2) The name and address of the property owner(s).		P	
(3) The name, address, and location of the facility.		P	
(4) The legal description of the real property, to include the county, township, range, and section numbers and if applicable, the metes and bounds description, together with the acreage thereof for the following:		E	
(A) The area for which ownership will be established.		E/P	
(B) The facility area.		E	
(C) The waste deposition area.		E	
(5) Facility information, including the following:			
(A) A description of the type of operation.		E/P	
(B) The planned life of the facility (years).		E/P	
(C) The expected volume of waste to be received in cubic yards/day and/or tons/day.		E/P	
(D) The type(s) of waste to be received.		E/P	
(6) Required signatures and certification statements in accordance with 329 IAC 2-8-4.		P	
(7) Detailed plans and design specifications as required by 329 IAC 2-10 and 329 IAC 2-11.		E	
(8) Closure and post-closure plans as required by 329 IAC 2-15.		E	
(9) A description of the financial instrument which will be used to comply with 329 IAC 2-12.		P	
(10) Documents necessary to establish ownership of the real estate, including an option to purchase, upon which the facility is to be located. This includes a certified copy of the deed showing ownership in the person identified as the owner in the application, or said deed and evidence that ownership will be transferred to said owner prior to operation of the facility.		P	
(11) The name and addresses of all owners of record of property located within 1 mile of the proposed solid waste boundary of the solid waste land disposal facility.		P	
(12) Certification from the zoning authority, or the county commissioners if there is no zoning authority, that proper zoning approvals have been obtained, and the following documents:		P	
(A) A copy of the zoning requirements, if any, for solid waste facilities.		P	
(B) A copy of the improvement location or occupancy permit issued by the zoning authority (if applicable).		P	
(C) A copy of any zoning map amendments (if applicable).		P	
(D) A copy of any zoning ordinance amendments (if applicable).		P	
(E) A copy of any variance, special exception, special use, contingent use, or conditional use approval (if applicable).		P	
(F) The status of any appeals of any zoning determination, and if none pending, the date by which such appeal must be initiated.		P	
(b) Four copies of the completed application shall be submitted to the Office of Solid and Hazardous Waste by registered mail or in person. For all items larger than 11 X 17 inches, 1 of the 4 required copies submitted on reproducible mylar plastic. (check if present). OPTIONAL: A copy of the drawings submitted on a floppy disk in DGF (AutoCad) or DXF format.		P	

NOTE: The application must contain the following information. When specifying the location of an item include the *VOLUME, SECTION* and *APPENDIX* in which the item is located, in addition to the *PAGE* or *DRAWING NUMBER*.	Location in Application	IDEM Use R	
(c) A request of confidentiality for information submitted in accordance with IC 13-7-6-6.		P	
(d) If corporation, articles of existence signed by the Indiana Secretary of State.		P	
(e) An application fee submitted in accordance with 329 IAC 2-8-3, using the Fee Transmittal Form supplied by the Indiana Department of Environmental Management.		P	
329 IAC 2-8-12 Demonstration and Determination of Need Requirements			
(b) The following are included in the application:		P	
(1) A description of the anticipated area that will be served by the facility as indicated by the following:		P	
(A) Solid waste management districts, if established.		P	
(B) County, counties, or portions thereof.		P	
(C) County, counties, and state if the area includes portions outside of Indiana.		P	
(2) A description of the existing solid waste management facilities which serve the same described area.		P	
(3) A description of the need that would be fulfilled by constructing the proposed facility, as follows:		P	
(A) For facilities proposed in areas with approved district solid waste management plans, a description of the need identified in the district solid waste management plan required by IC 13-9.5.		P	
(B) For facilities proposed in areas without approved district solid waste management plans, a description of the need for the proposed area to be served.		P	
(4) A description of recycling, composting, or other activities which the facility would operate within the proposed area of service.		P	
(5) A description of the additional disposal capacity which the facility, if permitted, would provide for the proposed area of service.		P	
(6) Additional information as requested by the Commissioner.		P	
329 IAC 2-10-1 Solid Waste Boundary Limits			
(1) The solid waste boundary of the landfill will not be located in any of these prohibited areas:			
(A) Within a wetlands in violation of Section 404 of the Clean Water Act.		E/G	
(B) Within the critical habitat of an endangered species as defined by 50 CFR 17.		E	
(C) Within floodways of drainage areas greater than 1 square mile, without the approval of the Department of Natural Resources, and within any floodway without provisions to prevent washout of the waste.		E	
(D) Within areas of karst topography, without provisions to collect and contain all of the leachate generated and without a demonstration that the integrity of the landfill will not be damaged by subsidence.		G	
(E) Over mines, unless it is demonstrated that the integrity of the landfill will not be damaged by subsidence.		G	
(F) Within 600 feet of a potable water well in use as a water supply on the date of public notice for zoning approval for the permitted activity, or on the date of public notice of the permit application by the Commissioner, whichever occurs first, unless written consent has been obtained from the owner of the well.		G	
(G) Within 600 feet of any dwelling, in existence on the date of public notice for zoning approval for the permitted activity or on the date of public notice of the permit application by the Commissioner, whichever occurs first, unless written consent has been obtained from the occupant and owner of the dwelling.		E/P	
(H) Within 100 feet of the normal water line of any lake, reservoir, or continuously flowing stream.		E/G	

NOTE: The application must contain the following information. When specifying the location of an item include the ***VOLUME***, ***SECTION*** and ***APPENDIX*** in which the item is located, in addition to the ***PAGE*** or ***DRAWING NUMBER***.	Location in Application	IDEM Use Only	
		R	P
(I) Within the floodplain, unless the waste is protected from floodwater inundation by a dike with a top elevation not less than 3 feet above the base flood elevation.		E	
(2) Within 50 feet of the real property boundaries of the facility.		E	
329 IAC 2-10-4 Design Standards			
(a) The applicant will demonstrate that there is a barrier between the solid waste and the aquifer in accordance with the requirements contained in this section.			
(1) The barrier shall consist of soil, whether undisturbed, constructed, or a combination thereof, with an equivalent hydraulic conductivity through the barrier of less than or equal to 1×10^{-6} centimeters per second.		E/G	
(2) The barrier shall have a minimum thickness of the following:			
(A) Fifteen (15) feet, or ten (10) feet if the waste is demonstrated to have an equivalent hydraulic conductivity through the barrier of less than 1×10^{-6} centimeters per second. A greater thickness may be required where necessary to protect human health and the environment.		E/G	
(b) The barrier thickness, as specified in subsection (a) may be increased due to cation exchange capacities less than 10 milliequivalents per 100 grams or decreased due to lack of ground water resources in the area or alternate technology such as synthetic liners and leachate collection.		E/G	
329 IAC 2-11-1 General			
All design drawings shall be:		E	
- Certified by a registered professional engineer.		E	
- Properly (uniquely) titled.		E	
329 IAC 2-11-2 General Documentation Required			
(a) The application accompanied by the following information:			
(1) A USGS topographical map (7 1/2 minute) or equivalent, including all areas within 2 miles of the facility with property and solid waste boundaries clearly delineated.		E	
(2) Documentation of the base flood elevation within 1/4 mile of the proposed facility. This information shall be obtained from the Indiana Department of Natural Resources, where available.		E	
(3) A scaled map that depicts the following features, which are known to the applicant or are discernible from public records, on and within 1/2 mile of the facility:		E/G	
(A) Location of all wetlands.		E/G	
(B) Springs and seeps.		E/G	
(C) Sinkholes.		E/G	
(D) Swamps.		E/G	
(E) Legal drains.		E/G	
(F) Coal borings.		E/G	
(G) Wells.		E/G	
(H) Buildings.		E/G	
(I) Dwellings.		E/G	
(J) Sewers.		E/G	
(K) Culverts.		E/G	
(L) Drainage tiles.		E/G	
(M) Pipelines.		E/G	
(N) Powerlines.		E/G	

NOTE: The application must contain the following information. When specifying the location of an item include the *VOLUME*, *SECTION* and *APPENDIX* in which the item is located, in addition to the *PAGE* or *DRAWING NUMBER*.	Location in Application	IDE Use C	
		R	P
(O) Gas or oil wells.		E/G	
(P) Surface water.		E/G	
(Q) Water courses.		E/G	
(R) Roads.		E/G	
329 IAC 2-11-3 Plot Plans and Cross-Sectional Drawings			
(a) All plot plans include the following items:			
— Plot plans required by this section have a scale of 1 inch = 100 feet for a site of less than 80 acres and 1 inch = 200 feet for a larger site.		E/G	
— A bar scale shown on all plans.		E/G	
— All plot plans include the facility boundaries.		E/G	
— All facility plan elevations correlate with USGS mean sea level data.		E/G	
— Each of the features required by this section and which are located within 300 feet of the facility boundaries are indicated on a plot plan.		E/G	
(b) Applications are accompanied by the following plot plans and cross-sections:			
(1) A plot plan which indicates:			
(A) The locations and elevations of all existing and proposed on-site boring locations.		E	
(B) Rock outcroppings.		E	
(C) The surface water runoff direction.		E	
(D) Fences.		E	
(E) Utility easements and rights-of-way.		E	
(F) Present land surface contours at intervals of no more than 5 feet.		E	
(G) Proposed location of scales required by 329 IAC 2-14-8.		E	
(2) A plot plan which indicates the fill boundaries and proposed final contours of the site at intervals of no more than 2 feet.		E	
(3) A plot plan that indicates initial facility development. Benchmarks as required by 329 IAC 2-13-2 are shown with a description and elevation provided. Surface contours on this plan are shown at intervals of no more than 5 feet.		E	
(4) A plot plan with surface contours at intervals of no more than 5 feet which indicates:		E	
(A) Land surface water diversion structures.		E	
(B) Berms.		E	
(C) Vegetation or fences for visual screening.		E	
(D) Sedimentation and/or erosion control structures.		E	
(E) Protective barriers.		E	
(F) Leachate collection and methane control systems, if proposed.		E	
(G) Existing and proposed structures.		E	
(H) The precise location of the solid waste boundary.		E	
(I) Methods of operation.		E	
(J) Direction and order operation and development will proceed.		E	
(K) Depth of excavation.		E	
(L) Length and width of trenches, if proposed.		E	
(M) Depth of lifts and size of working face.		E	
(N) Areas of the site to be used only for acquisition of cover soil.		E	

NOTE: The application must contain the following information. When specifying the location of an item include the ***VOLUME***, ***SECTION*** and ***APPENDIX*** in which the item is located, in addition to the ***PAGE*** or ***DRAWING NUMBER***.	Location in Application	IDEM Use Only	
		R	P
(5) A minimum of 2 intersecting geological cross sectional drawings of the facility showing all boring logs and the following:		G	
(A) The types of soil materials or rock strata, as identified by boring logs, from the ground surface to the required boring depth.		G/E	
(B) The depth of the proposed fill.		G/E	
(C) Fill boundaries.		G/E	
(D) Present topography (mean sea level elevation).		G/E	
(6) Cross sectional drawings of proposed on-site all-weather roads.		E	
(7) Cross sectional drawings of proposed sedimentation and/or erosion control structures, berms, dikes, ditches, etc.		E	
(8) Cross sectional drawings of proposed protective barriers, leachate collection, or methane control systems.		E	
329 IAC 2-11-4 Soils, Ground Water and Geology Information; General			
The application is accompanied by the following information:			
(1) A soils map and related description data, as published by the U.S. Department of Agriculture, Soil Conservation Service.		G	
(2) Drilling logs and a topographic map indicating the location, and identifying with respect to the drilling logs, all wells within 2 miles of the proposed facility which are on file with the Indiana Department of Natural Resources.		G	
(3) Results of a survey of all residences within 1/4 mile of the solid waste boundary to determine if wells are present at these residences that do not have well logs on file with the Indiana Department of Natural Resources. Include information on these wells.		G	
329 IAC 2-11-5 Soils, Ground Water and Geology Information; Certified			
(a) The application is accompanied by the following information certified by a registered professional engineer or certified professional geologist, either of whom has the education or professional experience in hydrogeology or ground water hydrology:		G	
(1) The number and location of soil borings completed at the site are as follows:			
(A) One boring for every 5 acres of fill area up to 100 acres, and 1 boring for every 10 acres of fill area beyond 100 acres, with a minimum of 5 borings at any site. These borings are evenly distributed over the site.		G	
(B) Borings completed to a depth necessary to indicate compliance with the design standards of 329 IAC 2-10, with a minimum depth of 20 feet below the depth of waste placement or to bedrock, whichever is shallower.		G	
(C) At least 1 of the borings required by (A) for sites less than 10 acres, and at least 2 borings for sites greater than 10 acres completed to a depth of at least 70 feet below the depth of waste placement, or at least 20 feet into bedrock, whichever is shallower. If 2 borings are required they are evenly distributed over the site.		G	
(D) Additional borings, not necessarily meeting the preceding requirements, may be required to delineate the boundaries of any feature pertinent to the site design.		G	
(E) Alternate testing, which provides comparable information, and which has been approved by the Commissioner.		G	
(F) The Commissioner was given prior notification as to the date and time of the soil borings.		G	
(2) Borings logs include the following:		G	
— Date of drilling.		G	
— Method of drilling.		G	
— Method of backfilling and sealing of borehole.		G	

NOTE: The application must contain the following information. When specifying the location of an item include the *VOLUME, SECTION* and *APPENDIX* in which the item is located, in addition to the *PAGE* or *DRAWING NUMBER*.	Location in Application	IDEM Use R	IDEM Use P
— Textural classification and descriptions for the entire depth of the boring.		G	
— The depths to and thickness of any water bearing zones.		G	
— Static water levels immediately following the boring.		G	
— The mean sea level surface elevation.		G	
— Identification of the textural classification system utilized.		G	
(3) The following testing requirements apply to the minimum number of borings required under subdivision (1):		G	
(A) Split spoon samples of the unconsolidated material taken at an interval of 1/2.5 feet.		G	
(B) For at least 3 evenly distributed borings, including 1 deep boring, split spoon samples of the unconsolidated material taken on a continuous basis.		G	
(C) For all required deep borings, continuous core samples taken of any bedrock encountered.		G	
(D) A complete grain size analysis, including Atterberg limits, on a representative sample from each significant stratum encountered. At least 1 grain size analysis and Atterberg limits test performed for each of the required minimum number of borings.		G	
(E) Hydraulic conductivity tests conducted on each of the required minimum number of borings at a depth of approximately 5 feet below the proposed base of waste placement.		G	
(F) For landfills designed under the provisions of 329 IAC 2-10-3(2), CEC tests conducted on each of the required minimum number of borings at a depth of approximately 5 feet below the proposed base of waste placement.		G	
(G) CEC and additional hydraulic conductivity tests conducted as necessary to characterize the major strata proposed for use as base and sidewall barriers or cover material.		G	
(H) Hydraulic conductivity sampling by a combination of in-situ field tests and laboratory permeability tests on undisturbed Shelby tube samples. CEC determined according to the ammonium saturation method specified in Part 2 of Methods of Soil Analysis by the American Society of Agronomy, 1965.		G	
(I) Other tests required by the commissioner in order to further evaluate soil suitability.		G	
(J) All testing and sampling procedures, and results identified with respect to boring and depth.		G	
(4) Maintain boring samples until the solid waste facility permit is issued, or until any litigation with regard to the proposed permit is resolved, whichever is later.		G	
(5) Borings may be converted to piezometers or cased holes to comply with the requirements of section 6 of this rule.		G	
329 IAC 2-11-6 Hydrologic Study			
(a) Hydrologic study, certified by a registered professional engineer or certified professional geologist with education or professional experience in hydrogeology or hydrology. This study contains a proposal for the installation of upgradient and downgradient monitoring devices as required in section (b).		G	
(b) The proposal provides the following information by means of maps, diagrams, and narrative:			
(1) Summary of regional and site specific geologic information obtained from recent or previous soil borings, coal borings, area well logs, and/or published reports.		G	
(2) Water table and/or potentiometric surface maps of the proposed site including ground water flow directions as follows:		G	
(A) Maps prepared from data from cased holes or piezometers capable of measuring hydraulic head at a maximum screen interval of 5 feet. (This limitation on the maximum length of the screened interval does not apply to those piezometers used to determine a water table surface)		G	

NOTE: The application must contain the following information. When specifying the location of an item include the *VOLUME*, *SECTION* and *APPENDIX* in which the item is located, in addition to the *PAGE* or *DRAWING NUMBER*.	Location in Application	IDEM Use Only	
		R	P
— At least 3 such devices for fill areas less than 20 acres, 4 such devices for fill areas between 20 and 50 acres, 5 such devices for fill areas between 50 and 90 acres, and 6 such devices for fill areas greater than 90 acres.		G	
— Required devices evenly distributed over the site.		G	
— Vertical hydraulic gradients measured as a minimum of 2 separate points at the site.		G	
— Additional nested piezometers or wells as required by the commissioner to adequately determine vertical components.		G	
— Individual water table and/or potentiometric maps as required due to presence of more than 1 aquifer.		G	
(B) Monthly water level measurements taken over a period of six months will be submitted prior to operation of the facility along with water table/potentiometric surface maps constructed from each measurement event.		G	
(C) Discussion of the evidence and/or potential of significant components of vertical ground water flow. If there are significant components of vertical flow, cross-sectional representations of equipotential lines and ground water flow direction shall be provided which adequately represent the flow beneath the site.		G	
(3) A general identification and description provided for aquifers known to exist from the geologic literature and/or area well logs. In addition, provide an identification of aquifers below the proposed site to a depth required by section 5(a)(1)(C) of 329 IAC 2-11, including the following information:		G	
(A) Aquifer thickness(es)		G	
(B) Lithology		G	
(C) Estimated hydraulic conductivity and effective porosity.		G	
(D) Presence of low permeability units above or below.		G	
(E) Indication of whether aquifers are confined or unconfined.		G	
(4) Known or projected information on hydraulic connections of ground water to surface water and hydraulic connections between different aquifers at the site.		G	
(5) Information on the current and proposed use of ground water in the area, including any available information on the existing quality of ground water in aquifer(s).		G	
(6) Diagrammatic representation of proposed monitoring well design and construction, including any available information on the existing quality of ground water in aquifer(s).		G	
(7) Information on the proposed wells, as follows:		G	
— Proposed well locations, at least 1 upgradient and 3 downgradient. The downgradient wells will be located within 50 feet of the waste boundary.		G	
— Length of screened intervals.		G	
— Elevation of screened intervals.		G	
(c) Pumping tests or similar hydraulic tests performed to provide a more accurate determination of aquifer characteristics where necessary to determine the adequacy of site or monitoring system design (only necessary if required by the commissioner).		G	
329 IAC 2-11-7 Descriptive Narrative			
(a) A narrative describing the proposed facility, including the following:		E	
(1) — Anticipated quantity of solid waste to be deposited.		E	
— Types of solid waste to be deposited.		E	
— Sources of the solid waste to be deposited.		E	
329 IAC 2-14-8(d) If the landfill will accept waste from someone other than the owner/operator final weighing scales are required.		E	

NOTE: The application must contain the following information. When specifying the location of an item include the ***VOLUME, SECTION*** and ***APPENDIX*** in which the item is located, in addition to the ***PAGE*** or ***DRAWING NUMBER***.	Location in Application	IDEM Use R	
(2) A description of the equipment to be used for placement and compaction of all solid waste, excavation of soil, moving of stockpiled soils, and application of cover soil.		E	
(3) Procedures to control fugitive dust.		E	
(4) A description of sanitary facilities if employees are at the site full time.		E	
(5) A statement as to the existence of, and a description of any wells within 600 feet of the proposed fill area.		E/G	
(6) A description of the access control at the site, including roads, gates, fencing, naturally occurring features, etc., as required by 329 IAC 2-14-1.		E	
(7) A description of the safety equipment to be used at the site. In accordance with 329 IAC 2-14-7, the following safety equipment shall be provided:		E	
(a) Safety devices, including roll bars and fire extinguishers ,will be provided on all rolling equipment.		E	
(b) A first aid kit will be available on-site.		E	
(c) A telephone or radio communication system will be provided on-site.		E	
(d) If the landfill is within 10,000 feet of any airport runway used by turbojet aircraft or within 5,000 feet of any airport runway used only be piston-type aircraft, it will be operated in such a manner so as to not pose a bird hazard to aircraft.		E	
(8) The distance from the site to the nearest dwelling.		E	
(9) A description of the location, amount, and depth of excavation that will occur at the site.		E	
(10) A description of the supervision which will occur at the site.		E	
(11) A description of the base flood at the site and whether the site is in the floodway.		E	
(12) The proposed hours of operation.		E	
(13) The names and addresses of all adjoining landowners.		E	
(14) The development and progression of the solid waste land disposal facility as illustrated in the design and operational plan.		E	
(15) Calculations of available and necessary cover soil. If cover soil is to be obtained from a location other than on the proposed facility, its source, quantity, and characteristics shall be identified and approved by the commissioner.		E	
329 IAC 2-14-12 The cover will be of Unified Soil Classification ML, CL, MH, CH, or OH, or other suitable material approved by the Commissioner.		E	
329 IAC 2-14-19 Final Cover of Solid Waste Land Disposal Facility; Requirements		E	
(1) The facility will meet the following requirements for final cover:		E	
(A) The maximum projected erosion rate of the final cover will be 5 tons/acre/year.		E	
(B) The final compacted cover will have 6 inches of topsoil plus a minimum depth of compacted clay of 2 feet for slopes less than or equal to 15%; of 3 feet for slopes greater than 15% but less than 25%; and of four feet for slopes greater than 25%.		E	
(C) The final cover will have a slope of not less than 4% and not greater than 33%.		E	
(16) Winter and inclement weather operating procedures, including the method of obtaining and applying cover soil.		E	
(17) If protective barriers, leachate or methane control measures are proposed, describe or identify the following:		E	
(A) Source and type of material utilized.		E	
(B) Method and specifications of construction.		E	
(C) Testing procedures for conformance with construction specifications.		E	

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		R	P
(D) Storage, treatment, and disposal processes. In accordance with 329 IAC 2-14-23, any discharge or disposal of collected leachate will be in accordance with applicable state laws and rules		E	
(E) Any calculations necessary to indicate that the proposed design complies with the requirements of 329 IAC 2.		E	
(18) Sampling methodology for all proposed monitoring devices.		E	
(19) Testing methods for all samples to be taken.		E	
(20) A description of the proposed sign(s) at the site. In accordance with 329 IAC 2-14-3, the sign shall be at least 16 square feet, and will identify:		E	
(1) The facility name.		E	
(2) The operating schedule.		E	
(3) The type of facility.		E	
(4) The solid waste facility permit number.		E	
329 IAC 2-12-2 Closure; Financial Responsibility			
(a) Description of the instrument to be used for establishing financial responsibility for closure:		P	
(1) Trust fund.		P	
(2) Surety bond.		P	
(3) Letter of credit.		P	
(4) Insurance.		P	
(5) Financial Test.		P	
(b) Financial closure cost estimate:			
(1) A detailed written estimate of the cost of closing the facility based on the following:		E	
(A) The closure costs derived under 329 IAC 2-15-3(b).		E	
(B) One of the closure estimating standards listed under subdivision (3).		E	
(2) A demonstration of financial responsibility in the form of one of the options under subsection (a) will be submitted prior to operation..		E	
(3) One of the following cost estimating standards:			
(A) The entire facility closure standard, which equals the estimated total cost of closing the facility, less the amount representing portions of the facility which have been certified for partial closure in accordance with 329 IAC 2-15-4.		E	
(B) The incremental closure standard, that is an amount which for any year of operation equals the total cost of closing the portion of the facility dedicated to the current year of facility operation, plus all closure amounts from completed portions of the facility which have not been certified for partial closure in accordance with 329 IAC 2-15-4.		E	
329 IAC 2-12-3 Post-Closure; Financial Responsibility			
(a) Description of the instrument to be used for establishing financial responsibility for post-closure:		P	
(1) Trust fund.		P	
(2) Surety bond.		P	
(3) Letter of credit.		P	
(4) Insurance.		P	
(5) Financial Test.		P	
329 IAC 2-14-11 Diversion of Surface Water			
(c) The facility shall demonstrate that the drainage system is adequate to insure that no solid waste will be deposited into standing or ponded water..		E	

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329 IAC 2-15-3 Closure Plan			
(a) A closure plan has been submitted with the application.		E	
(b) The closure plan is certified by a registered professional engineer, and includes the following:		E	
(1) A description of the steps that will be used to partially close, if applicable, and finally close the facility in accordance with 329 IAC 2-15-2.		E	
(2) A listing of the labor, materials, and testing necessary to close the facility.		E	
(3) An estimate of the expected year of closure and a schedule of final closure. The schedule must include the following:		E	
(A) The total time required to close the facility.		E	
(B) The time required for completion of intervening closure activities.		E	
(4) An estimate of the cost/acre of providing final cover and vegetation. Such cost is not less than $5,000 and is that necessary to provide the following:		E	
(A) Two feet of compacted clay soil.		E	
(B) 6 inches of topsoil.		E	
(C) Vegetation.		E	
(D) Certification of closure including any testing necessary for such certification.		E	
(5) Closure costs for items other than providing final cover and vegetation.		E	
(6) The closure plan gives an estimate of the total closure cost estimate through adding the costs determined in subdivision (5) plus the product of the acreage of the fill area multiplied by the cost/acre determined in subdivision (4).		E	
(7) The sum of the closure cost estimate and post-closure cost estimate will not be less than $15,000/ acre, or fraction of an acre, covered by the facility.		E	
(8) If the facility will use the closure trust fund option, or funds the letter of credit on an annual basis, then for each year of operation, the closure plan specifies the following:		E	
(A) The maximum area of the facility into which solid waste will have been deposited through that year of the facilities life.		E	
(B) The area of landfill used for each year of waste deposition is delineated on the final contour map of the facility.		E	
(C) A list of closure cost estimates for each year of the anticipated life of the facility equal to the costs specified by subdivision (6).		E	
329 IAC 2-15-7 Post-closure Duties			
(a) The post-closure plan includes the following duties:			
(1) Post-closure activities will be performed in accordance with the approved post-closure plan as specified in 329 IAC 2-15-8.		E	
(2) The facility will be inspected at least twice per year, with written reports submitted to the Commissioner.		E	
(3) The final cover and vegetation will be maintained as required by 329 IAC 2-14.		E	
(4) Final contours of the facility will be maintained in accordance with 329 IAC 2-14 and to insure that ponding of water does not occur on filled areas.		E	
(5) Vegetation will be controlled on vehicular accessways to monitoring wells as required by 329 IAC 2-14.		E	
(6) Vegetation shall be controlled as necessary to enable determination of the need for slope and cover maintenance and leachate outbreak abatement.		E	
(7) Access control and benchmarks will be maintained.		E	

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		R	P
(8) Leachate collection and treatment systems, methane control systems, and water quality monitoring devices will be monitored and maintained.		E	
(9) Leachate and gas generated at the facility will be controlled as required by 329 IAC 2-14.		E	
(b) The post-closure duties outlined in this section will be followed for a period of 30 years following the date of final closure certification in accordance with 329 IAC 2-15-5.		E	
329 IAC 2-15-8 Post-closure Plan			
(a) A post-closure plan has been submitted with the application.		E	
(b) The post-closure plan identifies the activities that will be carried on after closure pursuant to 329 IAC 2-15-7. It must include the following:		E	
(1) A description of the planned ground water monitoring activities and the frequency with which they will be performed.		E	
(2) A description of the planned maintenance activities and the frequency at which they will be performed.		E	
(3) The name, address, and phone number of the person with responsibility for maintaining the site after closure who may be contacted during the post-closure period.		E	
(4) A post-closure cost estimate in accordance with 329 IAC 2-12-3. Post-closure costs shall be calculated based on the cost necessary for the cost necessary for the work to be performed by a third party. For post-closure maintenance of final cover and vegetation the cost per acre is 10% of the cost calculated under 329 IAC 2-15-3(b)(4) multiplied by the total acreage of the site permitted for filling.		E	
(5) For facilities that apply for a permit after July 1, 1991, the estimate of the post-closure cost per acre shall be that necessary for providing the activities as specified in the post-closure plan. The sum of the closure cost estimate and the post-closure cost estimate shall not be less than $15,000 per acre or fraction of acre covered by the permitted facility.		E	

Preparer's Name (Please Print)

Preparer's Title (Please Print)

Preparer's Name (Signature)

Date

Preparer's Phone Number

PERMIT APPLICATION CHECKLIST
TYPE II
RESTRICTED WASTE SITE: NEW AND ADDED ACREAGE

NOTE: The application must contain the following information. When specifying the location of an item, include the *VOLUME*, *SECTION* and *APPENDIX* in which the item is located, in addition to the *PAGE* or *DRAWING NUMBER*.	Location in Application	IDEM Use Only R	IDEM Use Only P
329 IAC 2-8-2 Permit Application			
(a) The following information provided on forms supplied by the commissioner:		P	
(1) The name and address of the applicant(s).		P	
(2) The name and address of the property owner(s).		P	
(3) The name, address, and location of the facility.		P	
(4) The legal description of the real property, to include the county, township, range, and section numbers and if applicable, the metes and bounds description, together with the acreage thereof for the following:		E	
(A) The area for which ownership will be established.		E/P	
(B) The facility area.		E	
(C) The waste deposition area.		E	
(5) Facility information, including the following:			
(A) A description of the type of operation.		E/P	
(B) The planned life of the facility (years).		E/P	
(C) The expected volume of waste to be received in cubic yards/day and/or tons/day.		E/P	
(D) The type(s) of waste to be received.		E/P	
(6) Required signatures and certification statements in accordance with 329 IAC 2-8-4.		P	
(7) Detailed plans and design specifications as required by 329 IAC 2-10 and 329 IAC 2-11.		E	
(8) Closure and post-closure plans as required by 329 IAC 2-15.		E	
(9) A description of the financial instrument which will be used to comply with 329 IAC 2-12.		P	
(10) Documents necessary to establish ownership of the real estate, including an option to purchase, upon which the facility is to be located. This includes a certified copy of the deed showing ownership in the person identified as the owner in the application, or said deed and evidence that ownership will be transferred to said owner prior to operation of the facility.		P	
(11) The name and addresses of all owners of record of property located within 1 mile of the proposed solid waste boundary of the solid waste land disposal facility.		P	
(12) Certification from the zoning authority, or the county commissioners if there is no zoning authority, that proper zoning approvals have been obtained, and the following documents:		P	
(A) A copy of the zoning requirements, if any, for solid waste facilities.		P	
(B) A copy of the improvement location or occupancy permit issued by the zoning authority (if applicable).		P	
(C) A copy of any zoning map amendments (if applicable).		P	
(D) A copy of any zoning ordinance amendments (if applicable).		P	
(E) A copy of any variance, special exception, special use, contingent use, or conditional use approval (if applicable).		P	
(F) The status of any appeals of any zoning determination, and if none pending, the date by which such appeal must be initiated.		P	
(b) Four copies of the completed application shall be submitted to the Office of Solid and Hazardous Waste by registered mail or in person. For all items larger than 11 X 17 inches, 1 of the 4 required copies submitted on reproducible mylar plastic. (check if present). OPTIONAL: a copy of the drawings submitted on a floppy disk in DGF (AutoCad) or DXF format.		P	

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(c) A request of confidentiality for information submitted in accordance with IC 13-7-6-6.		P	
(d) If corporation, articles of existence signed by the Indiana Secretary of State.		P	
(e) An application fee submitted in accordance with 329 IAC 2-8-3, using the Fee Transmittal Form supplied by the Indiana Department of Environmental Management.		P	
329 IAC 2-8-12 Demonstration and Determination of Need Requirements			
(b) The following are included in the application:		P	
(1) A description of the anticipated area that will be served by the facility as indicated by the following:		P	
(A) Solid waste management districts, if established.		P	
(B) County, counties, or portions thereof.		P	
(C) County, counties, and state if the area includes portions outside of Indiana.		P	
(2) A description of the existing solid waste management facilities which serve the same described area.		P	
(3) A description of the need that would be fulfilled by constructing the proposed facility, as follows:		P	
(A) For facilities proposed in areas with approved district solid waste management plans, a description of the need identified in the district solid waste management plan required by IC 13-9.5.		P	
(B) For facilities proposed in areas without approved district solid waste management plans, a description of the need for the proposed area to be served.		P	
(4) A description of recycling, composting, or other activities which the facility would operate within the proposed area of service.		P	
(5) A description of the additional disposal capacity which the facility, if permitted, would provide for the proposed area of service.		P	
(6) Additional information as requested by the Commissioner.		P	
329 IAC 2-10-1 Solid Waste Boundary Limits			
(1) The solid waste boundary of the landfill will not be located in any of these prohibited areas:			
(A) Within a wetlands in violation of Section 404 of the Clean Water Act.		E/G	
(B) Within the critical habitat of an endangered species as defined by 50 CFR 17.		E	
(C) Within floodways of drainage areas greater than 1 square mile, without the approval of the Department of Natural Resources, and within any floodway without provisions to prevent washout of the waste.		E	
(D) Within areas of karst topography, without provisions to collect and contain all of the leachate generated and without a demonstration that the integrity of the landfill will not be damaged by subsidence.		G	
(E) Over mines, unless it is demonstrated that the integrity of the landfill will not be damaged by subsidence.		G	
(F) Within 600 feet of a potable water well in use as a water supply on the date of public notice for zoning approval for the permitted activity, or on the date of public notice of the permit application by the Commissioner, whichever occurs first, unless written consent has been obtained from the owner of the well.		G	
(G) Within 600 feet of any dwelling, in existence on the date of public notice for zoning approval for the permitted activity or on the date of public notice of the permit application by the Commissioner, whichever occurs first, unless written consent has been obtained from the occupant and owner of the dwelling.		E/P	
(H) Within 100 feet of the normal water line of any lake, reservoir, or continuously flowing stream.		E/G	

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		R	P
(I) Within the floodplain, unless the waste is protected from floodwater inundation by a dike with a top elevation not less than 3 feet above the base flood elevation.		E	
(2) Within 50 feet of the real property boundaries of the facility.		E	
329 IAC 2-10-4 Design Standards			
(a) The applicant will demonstrate that there is a barrier between the solid waste and the aquifer in accordance with the requirements contained in this section.			
(1) The barrier shall consist of soil, whether undisturbed, constructed, or a combination thereof, with an equivalent hydraulic conductivity through the barrier of less than or equal to 1×10^{-6} centimeters per second.		E/G	
(2) The barrier shall have a minimum thickness of the following:			
(A) A range between 5 and 10 feet, dependent upon the permeability of the waste.		E/G	
(b) The barrier thickness, as specified in subsection (a) may be increased due to cation exchange capacities less than 10 milliequivalents per 100 grams or decreased due to lack of ground water resources in the area or alternate technology such as synthetic liners and leachate collection.		E/G	
329 IAC 2-11-1 General			
All design drawings shall be:		E	
- Certified by a registered professional engineer.		E	
- Properly (uniquely) titled.		E	
329 IAC 2-11-2 General Documentation Required			
(a) The application accompanied by the following information:			
(1) A USGS topographical map (7 1/2 minute) or equivalent, including all areas within 2 miles of the facility with property and solid waste boundaries clearly delineated.		E	
(2) Documentation of the base flood elevation within 1/4 mile of the proposed facility. This information shall be obtained from the Indiana Department of Natural Resources, where available.		E	
(3) A scaled map that depicts the following features, which are known to the applicant or are discernible from public records, on and within 1/2 mile of the facility:		E/G	
(A) Location of all wetlands.		E/G	
(B) Springs and seeps.		E/G	
(C) Sinkholes.		E/G	
(D) Swamps.		E/G	
(E) Legal drains.		E/G	
(F) Coal borings.		E/G	
(G) Wells.		E/G	
(H) Buildings.		E/G	
(I) Dwellings.		E/G	
(J) Sewers.		E/G	
(K) Culverts.		E/G	
(L) Drainage tiles.		E/G	
(M) Pipelines.		E/G	
(N) Powerlines.		E/G	
(O) Gas or oil wells.		E/G	
(P) Surface water.		E/G	

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(Q) Water courses.		E/G	
(R) Roads.		E/G	
329 IAC 2-11-3 Plot Plans and Cross-Sectional Drawings			
(a) All plot plans include the following items:			
— Plot plans required by this section have a scale of 1 inch = 100 feet for a site of less than 80 acres and 1 inch = 200 feet for a larger site.		E/G	
— A bar scale shown on all plans.		E/G	
— All plot plans include the facility boundaries.		E/G	
— All facility plan elevations correlate with USGS mean sea level data.		E/G	
— Each of the features required by this section and which are located within 300 feet of the facility boundaries are indicated on a plot plan.		E/G	
(b) Applications are accompanied by the following plot plans and cross-sections:			
(1) A plot plan which indicates:			
(A) The locations and elevations of all existing and proposed on-site boring locations.		E	
(B) Rock outcroppings.		E	
(C) The surface water runoff direction.		E	
(D) Fences.		E	
(E) Utility easements and rights-of-way.		E	
(F) Present land surface contours at intervals of no more than 5 feet.		E	
(G) Proposed location of scales required by 329 IAC 2-14-8.		E	
(2) A plot plan which indicates the fill boundaries and proposed final contours of the site at intervals of no more than 2 feet.		E	
(3) A plot plan that indicates initial facility development. Benchmarks as required by 329 IAC 2-13-2 are shown with a description and elevation provided. Surface contours on this plan are shown at intervals of no more than 5 feet.		E	
(4) A plot plan with surface contours at intervals of no more than 5 feet which indicates:		E	
(A) Land surface water diversion structures.		E	
(B) Berms.		E	
(C) Vegetation or fences for visual screening.		E	
(D) Sedimentation and/or erosion control structures.		E	
(E) Protective barriers.		E	
(F) Leachate collection and methane control systems, if proposed.		E	
(G) Existing and proposed structures.		E	
(H) The precise location of the solid waste boundary.		E	
(I) Methods of operation.		E	
(J) Direction and order operation and development will proceed.		E	
(K) Depth of excavation.		E	
(L) Length and width of trenches, if proposed.		E	
(M) Depth of lifts and size of working face.		E	
(N) Areas of the site to be used only for acquisition of cover soil.		E	
(5) A minimum of 2 intersecting geological cross sectional drawings of the facility showing all boring logs and the following:		G	

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(A) The types of soil materials or rock strata, as identified by boring logs, from the ground surface to the required boring depth.		G/E	
(B) The depth of the proposed fill.		G/E	
(C) Fill boundaries.		G/E	
(D) Present topography (mean sea level elevation).		G/E	
(6) Cross sectional drawings of proposed on-site all-weather roads.		E	
(7) Cross sectional drawings of proposed sedimentation and/or erosion control structures, berms, dikes, ditches, etc.		E	
(8) Cross sectional drawings of proposed protective barriers, leachate collection, or methane control systems.		E	
329 IAC 2-11-4 Soils, Ground Water and Geology Information; General			
The application is accompanied by the following information:			
(1) A soils map and related description data, as published by the U.S. Department of Agriculture, Soil Conservation Service.		G	
(2) Drilling logs and a topographic map indicating the location, and identifying with respect to the drilling logs, all wells within 2 miles of the proposed facility which are on file with the Indiana Department of Natural Resources.		G	
(3) Results of a survey of all residences within 1/4 mile of the solid waste boundary to determine if wells are present at these residences that do not have well logs on file with the Indiana Department of Natural Resources. Include information on these wells.		G	
329 IAC 2-11-5 Soils, Ground Water and Geology Information; Certified			
(a) The application is accompanied by the following information certified by a registered professional engineer or certified professional geologist, either of whom has the education or professional experience in hydrogeology or ground water hydrology:		G	
(1) The number and location of soil borings completed at the site are as follows:			
(A) One boring for every 5 acres of fill area up to 100 acres, and 1 boring for every 10 acres of fill area beyond 100 acres, with a minimum of 5 borings at any site. These borings are evenly distributed over the site.		G	
(B) Borings completed to a depth necessary to indicate compliance with the design standards of 329 IAC 2-10, with a minimum depth of 20 feet below the depth of waste placement or to bedrock, whichever is shallower.		G	
(C) At least 1 of the borings required by (A) for sites less than 10 acres, and at least 2 borings for sites greater than 10 acres completed to a depth of at least 70 feet below the depth of waste placement, or at least 20 feet into bedrock, whichever is shallower. If 2 borings are required they are evenly distributed over the site.		G	
(D) Additional borings, not necessarily meeting the preceding requirements, may be required to delineate the boundaries of any feature pertinent to the site design.		G	
(E) Alternate testing, which provides comparable information, and which has been approved by the Commissioner.		G	
(F) The Commissioner was given prior notification as to the date and time of the soil borings.		G	
(2) Borings logs include the following:		G	
— Date of drilling.		G	
— Method of drilling.		G	
— Method of backfilling and sealing of borehole.		G	
— Textural classification and descriptions for the entire depth of the boring.		G	

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— The depths to and thickness of any water bearing zones.		G	
— Static water levels immediately following the boring.		G	
— The mean sea level surface elevation.		G	
— Identification of the textural classification system utilized.		G	
(3) The following testing requirements apply to the minimum number of borings required under subdivision (1):		G	
(A) Split spoon samples of the unconsolidated material taken at an interval of 1/2.5 feet.		G	
(B) For at least 3 evenly distributed borings, including 1 deep boring, split spoon samples of the unconsolidated material taken on a continuous basis.		G	
(C) For all required deep borings, continuous core samples taken of any bedrock encountered.		G	
(D) A complete grain size analysis, including Atterberg limits, on a representative sample from each significant stratum encountered. At least 1 grain size analysis and Atterberg limits test performed for each of the required minimum number of borings.		G	
(E) Hydraulic conductivity tests conducted on each of the required minimum number of borings at a depth of approximately 5 feet below the proposed base of waste placement.		G	
(F) For landfills designed under the provisions of 329 IAC 2-10-3(2), CEC tests conducted on each of the required minimum number of borings at a depth of approximately 5 feet below the proposed base of waste placement.		G	
(G) CEC and additional hydraulic conductivity tests conducted as necessary to characterize the major strata proposed for use as base and sidewall barriers or cover material.		G	
(H) Hydraulic conductivity sampling by a combination of in-situ field tests and laboratory permeability tests on undisturbed Shelby tube samples. CEC determined according to the ammonium saturation method specified in Part 2 of Methods of Soil Analysis by the American Society of Agronomy, 1965.		G	
(I) Other tests required by the commissioner in order to further evaluate soil suitability.		G	
(J) All testing and sampling procedures, and results identified with respect to boring and depth.		G	
(4) Maintain boring samples until the solid waste facility permit is issued, or until any litigation with regard to the proposed permit is resolved, whichever is later.		G	
(5) Borings may be converted to piezometers or cased holes to comply with the requirements of section 6 of this rule.		G	
329 IAC 2-11-6 Hydrologic Study			
(a) Hydrologic study, certified by a registered professional engineer or certified professional geologist with education or professional experience in hydrogeology or hydrology. This study contains a proposal for the installation of upgradient and downgradient monitoring devices as required in section (b).		G	
(b) The proposal provides the following information by means of maps, diagrams, and narrative:			
(1) Summary of regional and site specific geologic information obtained from recent or previous soil borings, coal borings, area well logs, and/or published reports.		G	
(2) Water table and/or potentiometric surface maps of the proposed site including ground water flow directions as follows:		G	
(A) Maps prepared from data from cased holes or piezometers capable of measuring hydraulic head at a maximum screen interval of 5 feet. (This limitation on the maximum length of the screened interval does not apply to those piezometers used to determine a water table surface)		G	

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		R	P
— At least 3 such devices for fill areas less than 20 acres, 4 such devices for fill areas between 20 and 50 acres, 5 such devices for fill areas between 50 and 90 acres, and 6 such devices for fill areas greater than 90 acres.		G	
— Required devices evenly distributed over the site.		G	
— Vertical hydraulic gradients measured as a minimum of 2 separate points at the site.		G	
— Additional nested piezometers or wells as required by the commissioner to adequately determine vertical components.		G	
— Individual water table and/or potentiometric maps as required due to presence of more than 1 aquifer.		G	
(B) Monthly water level measurements taken over a period of six months will be submitted prior to operation of the facility along with water table/potentiometric surface maps constructed from each measurement event.		G	
(C) Discussion of the evidence and/or potential of significant components of vertical ground water flow. If there are significant components of vertical flow, cross-sectional representations of equipotential lines and ground water flow direction shall be provided which adequately represent the flow beneath the site.		G	
(3) A general identification and description provided for aquifers known to exist from the geologic literature and/or area well logs. In addition, provide an identification of aquifers below the proposed site to a depth required by section 5(a)(1)(C) of 329 IAC 2-11, including the following information:		G	
(A) Aquifer thickness(es)		G	
(B) Lithology		G	
(C) Estimated hydraulic conductivity and effective porosity.		G	
(D) Presence of low permeability units above or below.		G	
(E) Indication of whether aquifers are confined or unconfined.		G	
(4) Known or projected information on hydraulic connections of ground water to surface water and hydraulic connections between different aquifers at the site.		G	
(5) Information on the current and proposed use of ground water in the area, including any available information on the existing quality of ground water in aquifer(s).		G	
(6) Diagrammatic representation of proposed monitoring well design and construction, including any available information on the existing quality of ground water in aquifer(s).		G	
(7) Information on the proposed wells, as follows:		G	
— Proposed well locations, at least 1 upgradient and 3 downgradient. The downgradient wells will be located within 50 feet of the waste boundary.		G	
— Length of screened intervals.		G	
— Elevation of screened intervals.		G	
(c) Pumping tests or similar hydraulic tests performed to provide a more accurate determination of aquifer characteristics where necessary to determine the adequacy of site or monitoring system design (only necessary if required by the commissioner).		G	
329 IAC 2-11-7 Descriptive Narrative			
(a) A narrative describing the proposed facility, including the following:		E	
(1) — Anticipated quantity of solid waste to be deposited.		E	
— Types of solid waste to be deposited.		E	
— Sources of the solid waste to be deposited.		E	
329 IAC 2-14-8(d) If the landfill will accept waste from someone other than the owner/operator final weighing scales are required.		E	

NOTE: The application must contain the following information. When specifying the location of an item include the *VOLUME*, *SECTION* and *APPENDIX* in which the item is located, in addition to the *PAGE* or *DRAWING NUMBER*.	Location in Application	IDEM Use Only	
		R	P
(2) A description of the equipment to be used for placement and compaction of all solid waste, excavation of soil, moving of stockpiled soils, and application of cover soil.		E	
(3) Procedures to control fugitive dust.		E	
(4) A description of sanitary facilities if employees are at the site full time.		E	
(5) A statement as to the existence of, and a description of any wells within 600 feet of the proposed fill area.		E/G	
(6) A description of the access control at the site, including roads, gates, fencing, naturally occurring features, etc., as required by 329 IAC 2-14-1.		E	
(7) A description of the safety equipment to be used at the site. In accordance with 329 IAC 2-14-7, the following safety equipment shall be provided:		E	
(a) Safety devices, including roll bars and fire extinguishers ,will be provided on all rolling equipment.		E	
(b) A first aid kit will be available on-site.		E	
(c) A telephone or radio communication system will be provided on-site.		E	
(d) If the landfill is within 10,000 feet of any airport runway used by turbojet aircraft or within 5,000 feet of any airport runway used only be piston-type aircraft, it will be operated in such a manner so as to not pose a bird hazard to aircraft.		E	
(8) The distance from the site to the nearest dwelling.		E	
(9) A description of the location, amount, and depth of excavation that will occur at the site.		E	
(10) A description of the supervision which will occur at the site.		E	
(11) A description of the base flood at the site and whether the site is in the floodway.		E	
(12) The proposed hours of operation.		E	
(13) The names and addresses of all adjoining landowners.		E	
(14) The development and progression of the solid waste land disposal facility as illustrated in the design and operational plan.		E	
(15) Calculations of available and necessary cover soil. If cover soil is to be obtained from a location other than on the proposed facility, its source, quantity, and characteristics shall be identified and and approved by the commissioner.		E	
329 IAC 2-14-12 The cover will be of Unified Soil Classification ML, CL, MH, CH, or OH, or other suitable material approved by the Commissioner.		E	
329 IAC 2-14-19 Final Cover of Solid Waste Land Disposal Facility; Requirements		E	
(1) The facility will meet the following requirements for final cover:		E	
(A) The maximum projected erosion rate of the final cover will be 5 tons/acre/year.		E	
(B) The final compacted cover will have 6 inches of topsoil plus a minimum depth of compacted clay of 2 feet.		E	
(C) The final cover will have a slope of not less than 2% and not greater than 33%.		E	
(16) Winter and inclement weather operating procedures, including the method of obtaining and applying cover soil.		E	
(17) If protective barriers, leachate or methane control measures are proposed, describe or identify the following:		E	
(A) Source and type of material utilized.		E	
(B) Method and specifications of construction.		E	
(C) Testing procedures for conformance with construction specifications.		E	

NOTE: The application must contain the following information. When specifying the location of an item include the ***VOLUME***, ***SECTION*** and ***APPENDIX*** in which the item is located, in addition to the ***PAGE*** or ***DRAWING NUMBER***.	Location in Application	IDEM Use Only	
		R	P
(D) Storage, treatment, and disposal processes. In accordance with 329 IAC 2-14-23, any discharge or disposal of collected leachate will be in accordance with applicable state laws and rules		E	
(E) Any calculations necessary to indicate that the proposed design complies with the requirements of 329 IAC 2.		E	
(18) Sampling methodology for all proposed monitoring devices.		E	
(19) Testing methods for all samples to be taken.		E	
(20) A description of the proposed sign(s) at the site. In accordance with 329 IAC 2-14-3, the sign shall be at least 16 square feet, and will identify:		E	
(1) The facility name.		E	
(2) The operating schedule.		E	
(3) The type of facility.		E	
(4) The solid waste facility permit number.		E	
329 IAC 2-12-2 Closure; Financial Responsibility			
(a) Description of the instrument to be used for establishing financial responsibility for closure:		P	
(1) Trust fund.		P	
(2) Surety bond.		P	
(3) Letter of credit.		P	
(4) Insurance.		P	
(5) Financial Test.		P	
(b) Financial closure cost estimate:			
(1) A detailed written estimate of the cost of closing the facility based on the following:		E	
(A) The closure costs derived under 329 IAC 2-15-3(b).		E	
(B) One of the closure estimating standards listed under subdivision (3).		E	
(2) A demonstration of financial responsibility in the form of one of the options under subsection (a) will be submitted prior to operation..		E	
(3) One of the following cost estimating standards:			
(A) The entire facility closure standard, which equals the estimated total cost of closing the facility, less the amount representing portions of the facility which have been certified for partial closure in accordance with 329 IAC 2-15-4.		E	
(B) The incremental closure standard, that is an amount which for any year of operation equals the total cost of closing the portion of the facility dedicated to the current year of facility operation, plus all closure amounts from completed portions of the facility which have not been certified for partial closure in accordance with 329 IAC 2-15-4.		E	
329 IAC 2-12-3 Post-Closure; Financial Responsibility			
(a) Description of the instrument to be used for establishing financial responsibility for post-closure:		P	
(1) Trust fund.		P	
(2) Surety bond.		P	
(3) Letter of credit.		P	
(4) Insurance.		P	
(5) Financial Test.		P	
329 IAC 2-14-11 Diversion of Surface Water			
(c) The facility shall demonstrate that the drainage system is adequate to insure that no solid waste will be deposited into standing or ponded water..		E	

NOTE: The application must contain the following information. When specifying the location of an item include the ***VOLUME***, ***SECTION*** and ***APPENDIX*** in which the item is located, in addition to the ***PAGE*** or ***DRAWING NUMBER***.	Location in Application	IDEM Use O R	
329 IAC 2-15-3 Closure Plan			
(a) A closure plan has been submitted with the application.		E	
(b) The closure plan is certified by a registered professional engineer, and includes the following:		E	
(1) A description of the steps that will be used to partially close, if applicable, and finally close the facility in accordance with 329 IAC 2-15-2.		E	
(2) A listing of the labor, materials, and testing necessary to close the facility.		E	
(3) An estimate of the expected year of closure and a schedule of final closure. The schedule must include the following:		E	
(A) The total time required to close the facility.		E	
(B) The time required for completion of intervening closure activities.		E	
(4) An estimate of the cost/acre of providing final cover and vegetation. Such cost is not less than $5,000 and is that necessary to provide the following:		E	
(A) Two feet of compacted clay soil.		E	
(B) 6 inches of topsoil.		E	
(C) Vegetation.		E	
(D) Certification of closure including any testing necessary for such certification.		E	
(5) Closure costs for items other than providing final cover and vegetation.		E	
(6) The closure plan gives an estimate of the total closure cost estimate through adding the costs determined in subdivision (5) plus the product of the acreage of the fill area multiplied by the cost/acre determined in subdivision (4).		E	
(7) The sum of the closure cost estimate and post-closure cost estimate will not be less than $15,000/ acre, or fraction of an acre, covered by the facility.		E	
(8) If the facility will use the closure trust fund option, or funds the letter of credit on an annual basis, then for each year of operation, the closure plan specifies the following:		E	
(A) The maximum area of the facility into which solid waste will have been deposited through that year of the facilities life.		E	
(B) The area of landfill used for each year of waste deposition is delineated on the final contour map of the facility.		E	
(C) A list of closure cost estimates for each year of the anticipated life of the facility equal to the costs specified by subdivision (6).		E	
329 IAC 2-15-7 Post-closure Duties			
(a) The post-closure plan includes the following duties:			
(1) Post-closure activities will be performed in accordance with the approved post-closure plan as specified in 329 IAC 2-15-8.		E	
(2) The facility will be inspected at least twice per year, with written reports submitted to the Commissioner.		E	
(3) The final cover and vegetation will be maintained as required by 329 IAC 2-14.		E	
(4) Final contours of the facility will be maintained in accordance with 329 IAC 2-14 and to insure that ponding of water does not occur on filled areas.		E	
(5) Vegetation will be controlled on vehicular accessways to monitoring wells as required by 329 IAC 2-14.		E	
(6) Vegetation shall be controlled as necessary to enable determination of the need for slope and cover maintenance and leachate outbreak abatement.		E	
(7) Access control and benchmarks will be maintained.		E	

NOTE: The application must contain the following information. When specifying the location of an item include the ***VOLUME***, ***SECTION*** and ***APPENDIX*** in which the item is located, in addition to the ***PAGE*** or ***DRAWING NUMBER***.	Location in Application	IDEM Use Only	
		R	P
(8) Leachate collection and treatment systems, methane control systems, and water quality monitoring devices will be monitored and maintained.		E	
(9) Leachate and gas generated at the facility will be controlled as required by 329 IAC 2-14.		E	
(b) The post-closure duties outlined in this section will be followed for a period of 30 years following the date of final closure certification in accordance with 329 IAC 2-15-5.		E	
329 IAC 2-15-8 Post-closure Plan			
(a) A post-closure plan has been submitted with the application.		E	
(b) The post-closure plan identifies the activities that will be carried on after closure pursuant to 329 IAC 2-15-7. It must include the following:		E	
(1) A description of the planned ground water monitoring activities and the frequency with which they will be performed.		E	
(2) A description of the planned maintenance activities and the frequency at which they will be performed.		E	
(3) The name, address, and phone number of the person with responsibility for maintaining the site after closure who may be contacted during the post-closure period.		E	
(4) A post-closure cost estimate in accordance with 329 IAC 2-12-3. Post-closure costs shall be calculated based on the cost necessary for the cost necessary for the work to be performed by a third party. For post-closure maintenance of final cover and vegetation the cost per acre is 10% of the cost calculated under 329 IAC 2-15-3(b)(4) multiplied by the total acreage of the site permitted for filling.		E	
(5) For facilities that apply for a permit after July 1, 1991, the estimate of the post-closure cost per acre shall be that necessary for providing the activities as specified in the post-closure plan. The sum of the closure cost estimate and the post-closure cost estimate shall not be less than $15,000 per acre or fraction of acre covered by the permitted facility.		E	

Preparer's Name (Please Print)

Preparer's Title (Please Print)

Preparer's Name (Signature)

Date

Preparer's Phone Number

March 4, 1991

TO: Applicant

FROM: Kathy Prosser
Commissioner

SUBJECT: Identification of Potentially Affected Persons

The Administrative Orders and Procedures Act requires that the Department of Environmental Management give notice of its decision on your application to the following persons:

a. each person to whom the decision is specifically directed;

b. each person to whom a law requires notice be given;

c. each competitor who has applied to the Department of Environmental Management for a mutually exclusive license, if issuance is the subject of the decision and the competitor's application has not been denied in an order for which all rights to judicial review have been waived or exhausted;

d. each person who has provided the Department of Environmental Management with a written request for notification of the decision;

e. each person who has a substantial and direct proprietary interest in the issuance of the permit (or variance);

f. each person whose absence as a party in the proceeding concerning the permit (or variance) decision would deny another party complete relief in the proceeding or who claims an interest related to the issuance of the permit (or variance) and is so situated that the disposition of the matter, in the person's absence may:

    1. as a practical matter impair or impede the persons ability to protect that interest, or

    2. leave any other person who is a party to a proceeding concerning the permit subject to a substantial risk of incurring multiple or otherwise inconsistent obligations by reason of the person's claimed interest.

IC 4-21.5-3-5(f) provides that we may request your assistance in identifying these people. Our failure to properly identify and notify these people of the decision could have the result of voiding any decision which is made.

As part of your application, identify those people who you believe are entitled to notice by IC 4-21.5-3-5. I am especially interested in your identifying those addressed under subdivisions (e) and (f) above.

Your assistance in identifying these people will help ensure that the legislature's intent is met and the decision made by the Department of Environmental Management is upheld upon administrative or judicial review.

Thank you for your cooperation.

Identification of Potentially Affected Persons

Please read the attached letter from the Commissioner and list here any persons whom you have reason to believe have a substantial or proprietary interest in this matter or could otherwise be considered to be potentially affected under the law. Failure to notify a person who is later determined to be potentially affected could result in voiding our decision on your permit on procedural grounds. To ensure conformance with the Administrative Adjudication Act and to avoid reversal of a decision on your permit, please list all such parties. Use additional sheets if necessary.

NAME _____

STREET _____

CITY, STATE, ZIPCODE _____

NAME _____

STREET _____

CITY, STATE, ZIPCODE _____

NAME _____

STREET _____

CITY, STATE, ZIPCODE _____

Please complete this form by signing the following statement.

I certify that to the best of my knowledge I have listed all potentially affected parties, as defined by IC 4-21.5, known to me. If none are listed it signifies that no such parties are known.

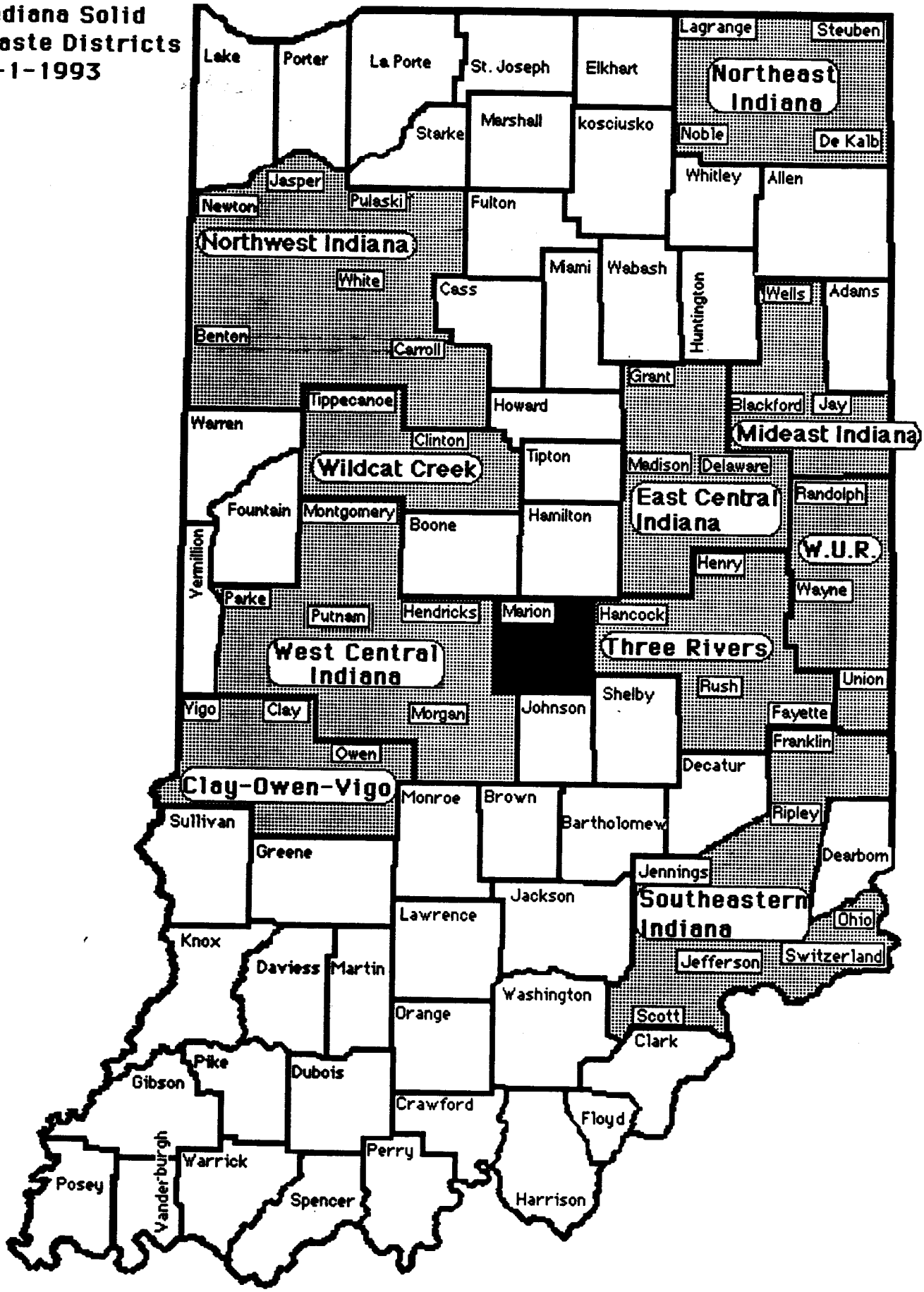
Signed _____

Title _____

Company _____

Date _____

Indiana Solid Waste Districts 1-1-1993



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(219) 724-8281 [fax]

Adams Co. SWMD
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Decatur, IN 46733
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leaves office 1/93

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Fort Wayne, IN 46802
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Allen Co. SWMD
Ed Rousseau, Board Chair
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Fort Wayne, IN 46802
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Blackford Co.
see Mideast Indiana SWMD

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Nashville, IN 47448
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Cass Co. SWMD
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c/o Auditor's Office
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Coleen Wolford, secretary

Clinton Co.
see Wildcat Creek SWMD

Crawford Co. SWMD
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Daviess Co. SWD
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Greensburg, IN 47240
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Decatur Co. SWMD
Norma Bainbridge
Administrator & Controller
208 W. Main St.
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Dekalb Co.
see Northeast Indiana SWMD

Delaware Co.
see East Central Indiana SWMD

Dubois Co. SWMD
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East Central Indiana SWMD
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(317) 288-1967
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East Central Indiana SWMD includes:
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Grant Co.
Madison Co.

Elkhart Co. SWMD
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315 S. Second St.
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(219) 523-2390

Elkhart Co. SWMD
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Commissioners Office
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Fayette Co.
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Fountain Co. SWMD
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Franklin Co.
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Jay Co.
see Mideast Indiana SWMD

Jefferson Co.
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Jennings Co.
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Lake Co. SWMD
Mayor James Metros, Board Chair
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LaPorte County SWMD
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Mideast Indiana SWMD
Rex K. Chaney, Board Chair
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Mideast Indiana SWMD includes:
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- Jay Co.
- Wells Co.

Monroe Co. SWMD
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Montgomery Co.
see West Central Indiana SWMD

Morgan Co.
see West Central Indiana SWMD

Newton Co.
see Northwest Indiana SWMD

Noble Co.
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Northeast Indiana SWMD
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- LaGrange Co.
- Noble Co.
- Steuben Co.

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Northwest Indiana SWMD includes:
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- Carroll Co.
- Jasper Co.
- Newton Co.
- Pulaski Co.
- White Co.

Ohio Co.
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Parke Co.
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Perry Co. SWMD
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Pulaski Co.
see Northwest Indiana SWMD

Putnam Co.
see West Central Indiana SWMD

Randolph Co.
see W.U.R. SWMD

Ripley Co.
see Southeast Indiana SWMD

Rush Co.
see Three Rivers SWMD

St. Joseph Co. SWMD
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(812) 689-3526 [fax]

Southeastern Indiana SWMD includes:
Franklin Co.
Jefferson Co.
Jennings Co.
Ohio Co.
Ripley Co.
Scott Co.
Switzerland Co.

Spencer Co. SWMD
Deborah Steinkamp, Director
R.R. 1, Box 515B
Chrisney, IN 47611
(812) 362-7401

Spencer Co. SWMD
Charles W. McMican, Board Chair
R.R. 2, Box 144
Richland, IN 47634
(812) 649-4556 [district office]
(812) 359-4526 [home]

Starke Co. SWMD
Pam Fletcher, Board President
Starke Co. Govt. Bldg.
53 E. Mound St.
Knox, IN 46534
(219) 772-9106 [courthouse]
(219) 772-4416

Steuben Co.
see Northeast Indiana SWMD

Sullivan Co. SWMD
Ed Cox, Board President
Attn: Judy K. Harris
Court House
Sullivan, IN 47882
(812) 268-4491 [courthouse]
(812) 268-6814 [courthouse]

Switzerland Co.
see Southeast Indiana SWMD

Three Rivers SWMD
Steve Lempke, Director
1145 E. U.S. 52
P.O. Box 426
Rushville, IN 46173-0426
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(317) 932-4355 [fax]

Three Rivers SWMD includes:
Fayette Co.
Hancock Co.
Henry Co.
Rush Co.

Tippecanoe Co.
see Wildcat Creek SWMD

Tipton Co. SWMD
David Berkemier, Board President
Court House
Tipton, IN 46072
(317) 675-2794 [courthouse]

Union Co.
see W.U.R. SWMD

Vanderburgh Co. SWMD
Bettye Lou Jerrel, Board Chair
305 Admin. Bldg., Civic Center Complex
1 N.W. Martin Luther King, Jr. Blvd.
Evansville, IN 47708
(812) 426-5241 [district office]

Vermillion Co. SWMD
John Cheesewright, Board President
R.R. 1, Box 14
Dana, IN 47847
(317) 665-3831

Vigo Co.
see Clay-Owen-Vigo SWMD

W.U.R. SWMD
Jim Lasley, Solid Waste Coordinator
2380 Liberty Ave.
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(317) 962-4709 [home]
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W.U.R. SWMD
Max Smith, Board Chairman
Wayne Co. Admin. Ofc.
401 E. Main St.
Richmond, IN 47374
(317) 489-4036 [home]

W.U.R. SWMD includes:
Randolph Co.
Union Co.
Wayne Co.

Wabash Co. SWMD
Ted Little, President
R.R. 1
North Manchester, IN 46962
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(219) 982-8092 [home]

Warren Co. SWMD
Jack Sargent, Administrator
408 W. Washington St.
Williamsport, IN 47993
(317) 762-6182
(317) 762-6181

Warrick Co. SWMD
Chris Horn, Board Chair
Courthouse
Boonville, IN 47601
(812) 897-6155
(812) 897-6120 [courthouse]

Washington Co. SWMD
Mike Goering, Administrator
Courthouse
Salem, IN 47167
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(812) 883-2431 [district office]

Wayne Co.
see W.U.R. SWMD

Wells Co.
see Mideast Indiana SWMD

West Central Indiana SWMD
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Danville, IN 46122
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Jim Hauck, Education Coordinator

West Central Indiana SWMD
George Nicholas, Board Chair
Parke Co. Courthouse
Rockville, IN 47872
(317) 569-3422

West Central Indiana SWMD includes:
Hendricks Co.
Montgomery Co.
Morgan Co.
Parke Co.
Putnam Co.

White Co.
see Northwest Indiana SWMD

Whitley Co. SWMD
Patrick Zickgraf, Administrator
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[James Argerbright,Brd member, work]
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Wildcat Creek SWMD
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Lafayette, IN 47905
(317) 474-5607
(317) 474-6714 [fax]

Wildcat Creek SWMD
Nola Gentry, Board Chair
2436 Glick
Lafayette, IN 47905

Wildcat Creek SWMD includes:
Clinton Co.
Tippecanoe Co.

Please bring needed corrections
and additions to the attention of
CINDY CLENDENON
IDEM, OSHWM Planning Section
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DRAFT

Closure & Post-Closure Plan Preparation Guidance for Solid Waste Land Disposal Facilities

Indiana Department Of Environmental Management

May 1989

This document has been prepared as guidance to the regulated community on the preparation of closure and post-closure plans as required by 329 IAC 2. For new land disposal facilities and additional acreage amendment applications, closure and post-closure plans are required as part of the application package. Existing land disposal facilities are not to remain open after September 1, 1989 unless they submit these plans prior to that date. Closure and post-closure plan requirements are specified in Rule 329 IAC 2-15.

Existing facilities are also required to establish financial responsibility for post-closure by September 1, 1989, and for closure by September 1, 1992. Procedures for establishing financial mechanisms are not part of this guidance. Mr. Kevin Hogan of the Solid Waste Management Branch may be contacted at 317/232-3412 for guidance and sample forms.

This guidance has been prepared by staff of the Office of Solid and Hazardous Waste Management, but has not been adopted or approved by the Agency. As such, it is noted as "draft". At a later date, it may be updated or finalized. If you have any comments or questions or wish to check on the availability of any new guidance, please contact the Solid Waste Management Branch at 317/232-3592.

Preparation Of Closure & Post-Closure Plans

Attached are forms that may be used to prepare your closure and/or post-closure plans. These forms are not mandated, but may be used for your convenience. If you do not use the actual forms, then the forms and these instructions should be used as a guide to what should be included in your plans.

You are reminded that if there is any change that causes the submitted information to be incorrect, the applicant must notify the commissioner within 15 days and submit corrected information within a reasonable time (329 IAC 2-8-1(c)).

Closure Plan Line-By-Line Instructions

Item I

Give the facility's name, location, county, solid waste permit number, and total fill acreage.

Existing permitted facilities should give their solid waste permit number if one has been specified in a permit or renewal issued since 329 IAC 2 became effective. Otherwise, the facility's Construction Permit Number should be given. New facilities should indicate "N/A" for not applicable.

For "Total Fill Acreage", existing facilities should provide the total acreage at the site approved for filling regardless of whether some of the area has already received final cover and vegetation. There is a further discussion of areas that are already closed under the instructions for Items II and VIII.

Item II

Give a description of partial closure activities, if any are planned, and a description of final closure activities.

Partial closure refers to the closure (including final cover, vegetation, and certification) of an area of the landfill while

the rest of the landfill remains in operation. The closure plan may specify that partial closure of the landfill will occur according to some type of schedule. This will decrease the area needing closure when the landfill stops operation.

The regulation indicates that the description of closure activities be acceptable for closure at any point in the facility's intended life. In most cases, allowing for early closure in the description of activities will only mean indicating that the facility will close either at the elevations specified by the approved final contour map or at lesser elevations with slopes that are consistent with permit or regulatory minimums and maximums and adequate to prevent ponding of water on filled areas.

Items that should minimally be described for final closure are:

- -notifications to the agency and customers;
- -source of cover soils;
- -compacted cover and topsoil thicknesses;
- -soil classifications and testing specifications for the compacted cover and topsoils;
- -compaction methods for the cover including lift thicknesses;
- -methods and/or testing to provide appropriate slopes and final elevations;
- -procedures to establish vegetation;
- -any planned construction, modification, or repair of drainage structures;
- -any planned new access control measures or repairs of existing access control; and
- -certification statements and notices as required by 329 IAC 2-15-5.

The preceding listing was written from the perspective of what will be needed for most sanitary landfills. Some of the requirements may not be applicable to all facilities. For instance, Type III sites and construction/demolition sites are not specifically required by regulation to provide six inches of topsoil.

For most areas that are already permitted, the approved plans and permit specify the type of soil to be used for final cover. If the source of cover soil has already been tested as part of the facility's permit application, then no further testing may be necessary as part of closure activities. Otherwise, soil classification testing should be included as necessary to characterize the soil. Compaction methods should describe lift thicknesses and should also describe either the number of passes of compacting equipment or else the testing for density which will be done.

Closure plans submitted for existing areas, as specified by 329 IAC 2-7-6(b), are not allowed, by regulation, to conflict with previously approved plans. No changes in the landfill fill area or slopes are permitted.

Many currently-permitted sanitary landfills are not required by their current permits to place six inches of topsoil on top of their cover. As specified in the regulation, these landfills will become subject to this requirement at their first permit renewal under 329 IAC 2. Landfills may indicate that their cover will include the six inches of topsoil without being considered to be in conflict with their approved plans in violation of 329 IAC 2-7-6(b). Alternatively, the closure plans may indicate that the topsoil will be included for closure of areas occurring after renewal.

Item III

Give a listing of labor, materials, and testing necessary to close the facility. All activities described in Item II should be accounted for.

Item IV

For Item IV.A, give an estimate of the expected year of closure. It is often difficult to accurately forecast the exact lifetime of a facility. The regulation reflects this uncertainty in asking for only an estimate. This date is not a commitment by the facility to close by a certain date. The time before closure

may however affect the rate at which the post-closure mechanism must be funded. The date of closure should be estimated by dividing the remaining fill volume by the average rate of incoming waste. Normally for sanitary landfills, 20% of the total fill volume is subtracted to allow for cover soil volume and a 2:1 ratio of incoming to inplace volume for the waste is assumed.

For Item IV.B, the total time required to close the facility should be the anticipated length of time between when the facility ceases accepting waste and when the submittals required by 329 IAC 2-15-5 are submitted to the agency. In order to allow for periods of inclement weather during the placement of cover and establishment of vegetation, a time of one year is suggested.

The time for intermediate closure steps under Item IV.C. should be specified for placement of final cover, placement of topsoil, seeding, and activities related to drainage and access control. The regulation requires (at 329 IAC 2-14-13, 14, 15, & 16) that sites apply the final cover within certain time frames. Sanitary landfills are required to place final cover within 180 days.

It is important to note that 329 IAC 2-15-6(a) requires that final closure be initiated within 15 days after receiving the final volume of waste. It may be appropriate to include notification of closure to the agency as an early step in closure in order to meet this deadline.

Item V

Calculate the cost per acre to provide two feet of compacted clay soil; six inches of topsoil; vegetation; and certification of closure including any testing necessary for such certification. Provide this figure based on the above work regardless of whether your actual cover will be more or less extensive than what is specified. The regulation does not require a higher financial assurance for those who plan a more extensive cover system (such as a thicker cover), nor does the regulation allow a smaller amount for those required to do less.

Closure costs must be calculated based on the cost necessary for the work to be performed by a third party. A suggested reference for many of the costs is "Means Site Work Cost Data" by the R.S. Means Company, Inc. In other cases, local contractors may need to be contacted.

The cost of drainage features on the final cover, such as swales and downchutes, may be included in Item V or in Item VI. If these items are included under Item V, then they must be accomplished as part of partial closure, if planned, for an area.

Item VI

List the cost for items other than final cover and vegetation such as drainage structures (if not included above), access repair, and recording the notice on the deed.

Item VII

Multiply Item I.E. by Item V.G. and then add Item VI.C.

Item VIII

Check the yes or no box to indicate whether funding will be on an incremental basis. The regulation provides for two different options for closure cost estimates: the entire facility standard and the incremental standard.

With the entire facility standard, financial assurance must be provided for the cost of closing the entire facility although this amount may be reduced as areas are certified as partially closed. As an example, if a facility planned to fill 100 acres and needed $10,000/acre for closure, then financial assurance would need to be provided initially for $1,000,000. This amount could be decreased during the life of the facility as areas are certified as partially closed.

For the incremental standard, the facility is allowed to provide assurance for the closure cost based on a yearly

projection taking into account the areas which will have received waste by the end of the year minus the area that will be closed at the beginning of the year. For example, if, at the beginning of year #3, a facility has placed waste onto five acres of which one has been certified as partially closed and the facility plans on filling two additional acres during the third year, then financial assurance must be provided at the beginning of the year for:

5 acres - 1 acre + 2 acres = 6 acres.

The question has been raised about how to handle areas that are closed either prior to the new regulation becoming effective or to closure plan approval. The regulation specifies that partial closures are to certify that the areas were closed in accordance with approved closure plan. The argument has been made that the facility's permit is, in effect, the approved closure plan prior to approval of the new plan. This argument seems to be a practical way to avoid having facilities be responsible for financial assurance of large areas that are already closed.

If the answer to Item VIII.A is no, skip to Item IX.

For Item VIII.B, attach a copy of the facility's approved final contour map. Indicate on this map the maximum areas of waste deposition on a yearly basis for the remaining life of the facility. The map should clearly identify the lines used to delineate the required boundaries. The map should also be appropriately titled, dated, and show the preparing engineer's certification.

Fill in the table for Item VIII.C. For closure plans required for existing areas under 329 IAC 2-7-6(b), year #1 should start on September 1, 1989. Photocopy additional pages as necessary.

Item IX

Closure plans are required to be certified by a professional engineer registered in the State of Indiana.

Post-Closure Plan Line-By-Line Instructions

Item I

Give the facility's name, location, county, and solid waste permit number.

Existing permitted facilities should give their solid waste permit number if one has been specified in a permit or renewal issued since 329 IAC 2 became effective. Otherwise, the facility's Construction Permit Number should be given. New facilities should indicate "N/A" for not applicable.

Item II

The name, address, and phone # of the permittee who shall be the contact person during post-closure must be provided.

Item III

Provide a description of planned ground water monitoring activities including frequencies. Certain facilities may not be required to monitor ground water. Construction/demolition sites and Restricted Waste Type III sites do not have to monitor ground water if not specified by their permits. These facilities may indicate "N/A" for this item.

You should be aware that 329 IAC 2 requires semi-annual monitoring of ground water as opposed to the quarterly monitoring required in the past. Specific parameters, different from those commonly required in the past, are also specified in the regulation.

Item IV

329 IAC 2-15-7 specifies required post-closure duties. These duties should be reiterated here within the post-closure plan with any necessary detail provided. In particular, 329 IAC 2-15-7(a)(8) & (9) require monitoring of leachate collection and treatment and methane control systems plus control of any gas or leachate generated. These monitoring and control activities need to be

delineated.

You should be aware that Rule 14 of the regulation requires that sanitary landfills implement an approved methane monitoring program. Existing facilities should describe their anticipated monitoring program within the post-closure plan if one has not yet been approved.

Item V

Provide post-closure cost estimates as specified. These estimates should be for the entire 10-year post-closure period rather than on a yearly basis. Costs must be calculated based on the cost necessary for the work to be performed by a third party.

For maintenance of the final cover and vegetation (Item V.B), the cost shall be 10% of the cost per acre calculated for final cover and vegetation calculated in the closure plan multiplied by the total acreage permitted for filling.

Item V.C requires the cost for vegetation control. The regulation at 329 IAC 2-15-7(a)(4) requires control of vegetation on vehicular accessways to monitoring wells. At 329 IAC 2-15-7(a)(5), the regulation requires control of vegetation at the site as necessary to enable the need for slope and cover maintenance and leachate outbreak abatement. In general this will require the landfill to mow portions of the site on at least a yearly basis.

Item V.H requires the cost for ground water monitoring. A January of 1988 survey of ground water monitoring costs by staff indicated an approximate cost per well of $140 for sampling and $310 for analysis of the parameters required for sanitary landfills. This cost of $450 would need to be multiplied by 20 to provide for 10 years of biannual sampling and then multiplied by the number of wells needing to be monitored. This projected cost may change if rates by monitoring laboratories change.

The costs for leachate hauling and disposal (Item V.I & J may

be quite extensive for some facilities and not applicable to others. For facilities not required to collect leachate, these items may be marked "N/A".

Item VI

The permittee or an authorized representative of the permittee must sign the post-closure plan and provide his name, address, and phone number.

SOLID WASTE CLOSURE PLAN

I. GENERAL INFORMATION

A. Facility Name: _____

B. Facility Location: _____

_____

C. Facility County: _____

D. Facility Solid Waste Permit No.: _____

E. Total Fill Acreage (See instructions.): _____

II. CLOSURE ACTIVITIES (Provide a description of the steps that will be used to partially close, if applicable, and finally close the facility. See instructions for items that should be included.)

II. **CLOSURE ACTIVITIES** (Continued. Photocopy additional pages as necessary.)

III. LABOR, MATERIALS, & TESTING (Provide a listing of items necessary to close the facility. For items that will vary depending upon the number of acres to be closed, the quantities should be indicated on a per acre basis.)

A. Item	B. Quantity	C. Units

IV. EXPECTED YEAR OF CLOSURE

A. Expected Year Of Closure: _____

B. Total Time Required To Close Facility
(See instructions.) _____

C. Time Required For Intermediate Steps In Closure (Provide a description of intermediate closure activities and the time required. See instructions.)

V. COST PER ACRE FOR FINAL COVER & VEGETATION

A. What % Of Final Cover And Topsoil Is Available From Areas That Are Controlled, And Will Be Controlled Through Post-Closure, By The Permittee?

1. % of final cover _____

2. Describe location of sources _____
_____
_____

3. % of topsoil _____

4. Describe location of sources _____
_____
_____

B. Cost Per Acre for Acquisition, Placement, & Compaction of Two Feet of Final Cover

1. Acquisition

a. Quantity of clay needed per acre (cy/acre) 3,230

b. Excavation unit cost ($/cy) (if obtained on-site) _____

c. Purchase unit cost ($/cy) (if obtained off-site) _____

d. Delivery unit cost ($/cy) (if obtained off-site) _____

e. Acquisition cost ($/acre)
Line 1a * Line 1b (or)
Line 1a * (Line 1c + Line 1d) _____

2. Placement and Compaction

a. Placement/spreading unit cost ($/cy) _____

b. Compaction unit cost ($/cy) _____

c. Placement and compaction cost ($/acre)
Line 1a * (Line 2a + Line 2b) _____

3. Testing

   a. Soil classification (if soil source is of variable quality)($/acre) _____

   b. Survey control for cover thickness and proper slopes ($/acre) _____

   c. Density testing (if planned)($/acre) _____

   d. Testing cost ($/acre)
      Line 3a + Line 3b + Line 3c _____

4. Clay Cover Cost ($/acre)
   Line 1e + Line 2c + Line 3d _____

C. Cost Per Acre For Acquisition & Placement of Topsoil

1. Acquisition

   a. Quantity of topsoil needed per acre (cy/acre) 807

   b. Excavation unit cost ($/cy) (if obtained on-site) _____

   c. Purchase unit cost ($/cy) (if obtained off-site) _____

   d. Delivery unit cost ($/cy) (if obtained off-site) _____

   e. Acquisition cost ($/acre)
      Line 1a * Line 1b (or)
      Line 1a * (Line 1c + Line 1d) _____

2. Placement

   a. Spreading unit cost ($/cy) _____

   b. Placement cost ($/acre)
      Line 1a * Line 2a _____

3. Topsoil Cost ($/acre)
   Line 1e + Line 2b _____

D. Cost Per Acre to Establish Vegetation

1. Vegetation

a. Seeding unit cost ($/acre) _____

b. Fertilization unit cost ($/acre) _____

c. Mulching unit cost ($/acre) _____

d. Vegetation Establishment Cost ($/acre) _____
Line 1a + Line 1b + Line 1c

E. Cost Per Acre to Certify Closure

1. Registered Professional Engineer

a. Initial review of closure plan (hrs) _____

b. Total number of inspections _____

c. Inspection time required (hrs/visit) _____

d. Total inspection time (hrs) _____
Line 1b * Line 1c

e. Prepare final documentation (hrs) _____

f. Total engineer time (hrs) _____
Line 1a + Line 1d + Line 1e

g. Engineer unit labor cost ($/hr) _____

h. Professional engineer cost ($) _____
Line 1f * Line 1g

i. Area of site permitted for filling (acres) _____

j. Closure Certification Cost ($/acre) _____
Line 1h ÷ Line 1i

F. Other Costs Per Acre for Final Cover and Vegetation

1. Other Costs ($/acre) (Specify.) _____

_____

_____

_____

_____

G. Total of Items B Through F
(Must not be less than $5,000) _____

VI. OTHER CLOSURE COSTS (Give these on a total facility basis rather than per acre.)

A. Notation on Property Deed _____

B. Other Costs

Costs for items such as drainage features, installation of gas vents, etc. should be delineated in this section.

1. Activity Cost

C. Total (Add costs from sections A. and B.)_____

VII. **CLOSURE COST ESTIMATE** (Multiply Item I.E by Item V.G. and then add Item VI.C.): _____

VIII. **ADDITIONAL INFORMATION REQUIRED FOR FACILITIES PROVIDING FINANCIAL ASSURANCE ON AN INCREMENTAL BASIS**

A. Will Closure Financial Assurance Be Provided On An Incremental Basis? (If the answer to this question is no, skip to Item IX.): _____

B. Map Of Areas Of Waste Deposition (Attach a copy of the facility's final contour map which shows the maximum areas of waste deposition on a yearly basis for the remaining life of the facility.)

C. Maximum Areas Of Waste Deposition & Closure Costs (Fill in the following table for each remaining year of the facility's life.)

Year	Max. Area of Waste Deposition (cumulative acres) (end of year)	Closure Cost w/o Partial Closure ($)	Area Partially Closed (cumulative acres) (start of year)	Incremental Closure Cost ($)

IX. ENGINEER CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that I am authorized to submit this information.

Signature: _____ Date: _____

Name: _____

Address: _____

_____

Telephone #: _____

Professional Engineer Registration No.: _____

SOLID WASTE POST-CLOSURE PLAN

I. GENERAL INFORMATION

A. Facility Name: _____

B. Facility Location: _____

_____

C. Facility County: _____

D. Facility Solid Waste Permit No.: _____

II. POST-CLOSURE CONTACT PERSON

A. Name: _____

B. Address: _____

_____

C. Telephone No.: _____

III. **GROUND WATER MONITORING ACTIVITIES** (Provide a description of planned ground water monitoring activities including the frequency of the activities. See instructions.)

IV. **MAINTENANCE ACTIVITIES** (Provide a description of planned maintenance activities and the frequency at which they will be performed. See instructions.)

V. POST-CLOSURE COST ESTIMATE (See instructions. Note that these estimates are to be presented for the entire 10-year post-closure care period rather than on a yearly basis.)

A. Cost for Semi-Annual Inspections and Reports

1. Inspection

a. Number of inspections during post-closure period (semiannual inspections for 10 years) 20

b. Inspector time required (hrs/insp) _____

c. Inspector unit labor cost ($/hr) _____

d. Inspection Cost ($)
Line 1a * Line 1b * Line 1c _____

2. Report Preparation

a. Number of reports during post-closure period 20

b. Cost per report ($) _____

c. Report cost ($)
Line 2a * Line 2b _____

3. Inspection and Report Cost ($) _____

B. Cost for Maintenance of Final Cover and Vegetation

The cost for cover maintenance and vegetation shall be 10 percent of the cost per acre calculated for final cover and vegetation in the closure plan. (329 IAC 2-15-8(b)(4))

1. Final Cover Maintenance

a. 10% of cost for placement of final cover and vegetation (as determined in Item V.G of the Closure Plan) ($/acre) _____

b. Total area of site permitted for filling (acres) _____

c. Cover Maintenance Cost ($)
Line 1a * Line 1b _____

C. Cost for Vegetation Control

Certain areas are required to be mowed per regulation. See instructions.

1. Mowing

a. Mowing frequency (visits/10 years) _____

b. Area to be mowed (acres/visit) _____

c. Mowing unit cost ($/acre) _____

d. Vegetation Control Cost ($)
Line 1a * Line 1b * Line 1c _____

D. Cost for Maintenance of Access Control & Benchmarks

1. Access Control Maintenance

a. Access control maintenance frequency (visits/10 years) _____

b. Amount of fence needing replacement (linear feet/visit) _____

c. Fencing unit cost ($/linear foot) _____

d. Fence cost ($)
Line 1a * Line 1b * Line 1c _____

e. Other ($)
(specify)_____ _____
_____

f. Access Control Maintenance Cost ($)
Line 1d + 1e _____

2. Benchmark Maintenance Cost (if any)($) _____

3. Access Control & Benchmark Repair Cost ($)
Line 1f + Line 2 _____

E. Cost for Leachate Collection System Monitoring and Maintenance

1. Leachate Collection System Inspection

a. Inspection frequency (insp/10 years) _____

b. Inspection time required (hrs/insp) _____

c. Inspector unit labor cost ($/hr) _____

d. Inspection cost ($)
Line 1a * Line 1b * Line 1c _____

2. Leachate Collection System Maintenance

a. Number of pumps replaced during post-closure (pumps/10 years) _____

b. Pump unit cost ($/pump) _____

c. Other ($)
(specify)_____ _____
_____
_____

d. Leachate system maintenance
(Line 2a * Line 2b) + Line 2c _____

3. Leachate Collection Monitoring and Maintenance Cost ($)
Line 1d + Line 2d _____

F. Cost for Methane Control System Monitoring and Maintenance

1. Methane Control System Monitoring

a. Gas monitoring frequency (visits/10 years) _____

b. Time required to monitor (hrs/visit) _____

c. Contract lab technician unit labor cost ($/hr) _____

d. Gas monitoring cost ($)
Line 1a * Line 1b * Line 1c _____

2. Gas Monitoring Well Maintenance

   a. Maintenance frequency (visits/10 years) _____

   b. Monitoring wells needing maintenance per visit _____

   c. Maintenance time required (hrs/well) _____

   d. Unit labor cost ($/hr) _____

   e. Monitoring well maintenance cost ($) Line 2a * Line 2b * Line 2c * Line 2d _____

3. Gas Monitoring and Maintenance Cost ($) Line 1d + Line 2e _____

G. Cost for Ground Water Monitoring System Maintenance

1. Monitoring Well Maintenance

   a. Maintenance frequency (visits/10 yrs) _____

   b. Number of monitoring wells needing maintenance per visit _____

   c. Maintenance time required (hrs/well) _____

   d. Unit labor cost ($/hr) _____

   e. Monitoring well maintenance cost ($) Line 1a * Line 1b * Line 1c * Line 1d _____

2. Monitoring Well and Parts Replacement

   a. Number of wells needing replacement during post-closure period _____

   b. Existing monitoring well sealing unit cost ($/well) _____

   c. New monitoring well construction unit cost ($/well) _____

d. Monitoring well replacement cost ($)
Line 2a * (Line 2b + Line 2c) _____

e. Number of pumps needing replacement during post-closure period _____

f. Pump unit cost ($/pump) _____

g. Pump cost ($)
Line 2e * Line 2f _____

3. Ground Water Monitoring System Maintenance Cost ($)
Line 1e + Line 2d + Line 2g _____

H. Cost for Ground Water Monitoring

1. Ground Water Monitoring

a. Number of required monitoring wells _____

b. Monitoring frequency (semiannual sampling for 10 years) 20

c. Sampling and analysis cost ($/well) _____

d. Ground Water Monitoring Cost ($)
Line 1a * Line 1b * Line 1c _____

I. Cost for Leachate Hauling

1. Leachate Pumping & Hauling

a. Leachate removal frequency (visits/10 years) _____

b. Quantity to be managed off-site (gallons/visit) _____

c. Truck capacity (gallons) _____

d. Number of loads/visit
Line 1b ÷ Line 1c
(round up to nearest integer) _____

e. Pumping and transportation unit cost ($/load) _____

f. Leachate Hauling Cost ($) Line 1a * Line 1d * Line 1e _____

J. Cost for Leachate Disposal

1. Leachate Treatment

a. Volume of leachate requiring disposal (gallons) _____

b. Disposal unit cost ($/gal) _____

c. Leachate Disposal Cost ($) Line 1a * Line 1b _____

K. Other Costs

Any costs not included in the above items should be included here. These might include drainage ditch, access road, and sedimentation pond maintenance, lift station power costs, etc.

1. Activity

Cost

2. Total of Other Costs ($) _____

L. Total Post Closure Cost Estimate ($)
(Total of preceding categories) _____

VI. SIGNATORY CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that I am authorized to submit this information.

Signature: _____ Date: _____

Name: _____

Address: _____

_____

Telephone #: _____

OFFICE OF SOLID AND HAZARDOUS WASTE MANAGEMENT

LOCATOR LIST

SOLID WASTE MANAGEMENT

Asbestos Disposal - Barnes 8401 Snodgrass 8922

Coal Ash/Foundry Sand Disposal - Lorenz 4524

Composting - Melvin 3-3834 Palin 8892 Carroll 8866

Contaminated Soil Disposal - Rud 7200

Disclosure Statements - Tragesser 4417

Financial Assurance - Tragesser 4417

Good Character - Insco 3451

Industrial Waste (Special) Disposal - Lorenz 4524 Snodgrass 8922

Infectious Waste Disposal - Carmen Quintana, State Board of Health 633-0731

Landfill Complaints - Appropriate inspector for that particular landfill or Miller 3458

Landfill Inspections - Appropriate inspector for that particular landfill or Miller 3458

Low Level Radioactive Waste - Palin 8892

Need Reviews - Mabry 4867 Carroll 8866

Open Dumping - Appropriate inspector for that particular county or Miller 3458

PCB's - Snodgrass 8922

Road Oiling Complaints - Miller 3458

Resource Recovery Certifications - Evans 7199

Revolving Loans, Solid Waste District - Clendenon 8885

Sanitary Landfill Operating Permit Status - Rud 7200 Barnes 8401

Solid Waste Management Branch Chief - Palin 8892

Solid Waste Permit Branch Chief - Carroll 8866

Solid Waste Enforcement - Hale 7195 Johnson 7201

Solid Waste Facility Quarterly Reporting - Clendenon 8885 Davis 3-5752

Solid Waste Manifest - Miller 3458 Yakimicki 3-5749

Recycling - Cohen 8600

EPA - Marie Oliver (312) 886-6339

Solid Waste Regulations - Batchellor 8899

Solid Waste Management Board - Batchellor 8899

Solid Waste Management Data - Clendenon 8885 Davis 3-5752

Solid Waste Management District Plans - Clendenon 8885 Hoffspiegel 3-3835

Solid Waste Management Plan - Clendenon 8885 Hoffspiegel 3-3835

TCLP (Toxicity Characteristic Leaching Procedure) - Snodgrass 8922 Lorenz 4524

Tire Dumps/Disposal - Hotz 7155 Poe 7205

Tire Task Force - Clements 8852 Palin 8892

Vehicle Permitting - Yakimicki 3-5749 Palin 8892

Waste Disposal Classification - Lorenz 4524 Snodgrass 8892

HAZARDOUS WASTE MANAGEMENT

EPA - Dooley 8925

Antifreeze - Hunt 4535

Biennial Reports - Dooley 8925 Hunt 4535

Capacity Assurance Plan (CAP) - Dalton 8844

Closure Plans for Hazardous Waste Facilities - Windle 3242 Perry 3397

Compliance status of a facility - Assigned staff person in Compliance Monitoring or Enforcement

Corrective Action - Sickels 3406 Stilz 3409

Dust Suppressants - Berrey 4417

EPA Hazardous Waste Reporting - Dooley 8925 Kizer 4537

Freedom of Information Act (FOIA) Requests - Whittington 3297

Financial Assurance - Stevens 8901 Linson 3292

Good Character - Linson 3292 Windle 3242

Hazardous Waste Air Emissions - Wilhelm 3529

Hazardous Waste Branch Chief - Linson 3292

Hazardous Waste Disposal - Anyone in Compliance Monitoring Section

Hazardous Waste Enforcement Status - Staff person assigned to case
If unknown, any enforcement staff person

Hazardous Waste Generator Status - Ossivand 5976

Hazardous Waste Standards (permitting) - Windle 3242 Gross 3398

Hazardous Waste Notifier Information/Changes - Dooley 8925

Hazardous Waste Permit Applications (Part A/Part B) - Windle 3242 Perry 3397

Hazardous Waste Records - Oakes 3399 Whittington 3297

Hazardous Waste Regulations and Variances/Questions - Berrey 4417 Linson 3292
or any staff person in the Branch

Hazardous Waste Regulations (to purchase copy) - Legislative Services Agency
(317) 232-9557

Hazardous Waste Tax - Wilson 4416 Hunt 4535

Household Hazardous Waste - Hunt 4535

Lead Acid Batteries - Berrey 4417 Romesser 4536

Lead Based Paint - Berrey 4417 Hunt 4535

Manifest - Mills 7955 Hansen 7956

Notifier's List (to purchase) - Whittington 3297 Oakes 3399

Resource Conservation and Recovery Info System - Dooley 8925 Phillips 7971

Settlement Conferences - Appropriate enforcement staff person

Small Quantity Generator Information - Anyone in Compliance Monitoring

Solvent Recovery - Kizer 4537 Hunt 4535

State Authorization (RCRA) - Dalton 8884 Linson 3292

Used Oil and Filters - Hunt 4535

Violation Letters - Enforcement staff assigned to case

GEOLOGY - HAZARDOUS WASTE

Facility Compliance with Groundwater Requirements - Schmidt 8713 Templin 8711

Groundwater Cleanup Levels - Schmidt 8713 Templin 8711

Groundwater Monitoring Parameters - Schmidt 8713 Templin 8711

Hydrogeologic Studies - Schmidt 8713 Templin 8711

Monitoring Well Installation/Construction Requirements - Templin 8711
Schmidt 8713

Sampling and Analysis Plans - Martin 8727 Templin 8711

Soil Boring and Testing Requirements - Templin 8711 Martin 8727

Statistics Applied to Groundwater - Templin 8711 Martin 8727

Unconsolidated Soil Descriptive Requirements - Templin 8711 Martin 8727

GEOLOGY - SOLID WASTE

329 IAC 2 - Geology and Groundwater Questions - Becka 8712

Facility Compliance with Groundwater Requirements - Becka 8712

Groundwater Cleanup Levels - Becka 8712

Groundwater Monitoring Parameters - Becka 8712

Hydrogeologic Studies - Becka 8712

Monitoring Well Installation/Construction Requirements - Becka 8712

Groundwater Sampling and Analysis Plan - Becka 8712 Woods 8722

Soil Boring and Testing Requirements - Becka 8712 Guerrettaz 8719

Soil Cover and Liner Requirements - Becka 8712 Guerrettaz 8719

Statistics Applied to Groundwater - Becka 8712 Guerrettaz 8719

ENGINEERING - HAZARDOUS WASTE

Hazardous Waste Incinerators - Roiran 8855 Schmidt 8842

Hazardous Waste Landfills - Pekera 8844 Raychowdhury 8858

ENGINEERING - SOLID WASTE

Infectious Waste Incinerators - Lightbody 8900 Clements 8852

Solid Waste Incinerators - Lightbody 8900 Clements 8852

Solid Waste Landfills - Klesmith 8840 Hiadari 8865

Solid Waste Composting & Tire Regulation - Clements 8852

Solid Waste Rule Changes - Klesmith 8840

CHEMISTRY

Clean-up Criteria - Harrison 8877 Steward 8929

Facility Sampling and Analysis Plan - Steward 8929 Buckel 5884

Agency Sampling and Analysis Plan - Childers 5885 White 8876

Data Quality Objectives QA/QC - White 8876 Childers 5885

Laboratory Requirements - White 8876 Childers 5885

Laboratory Facility Requirements - Steward 8929 Buckel 5884

Solid Waste Chemistry/Sampling Analysis QA/QC - Koottungal 8868

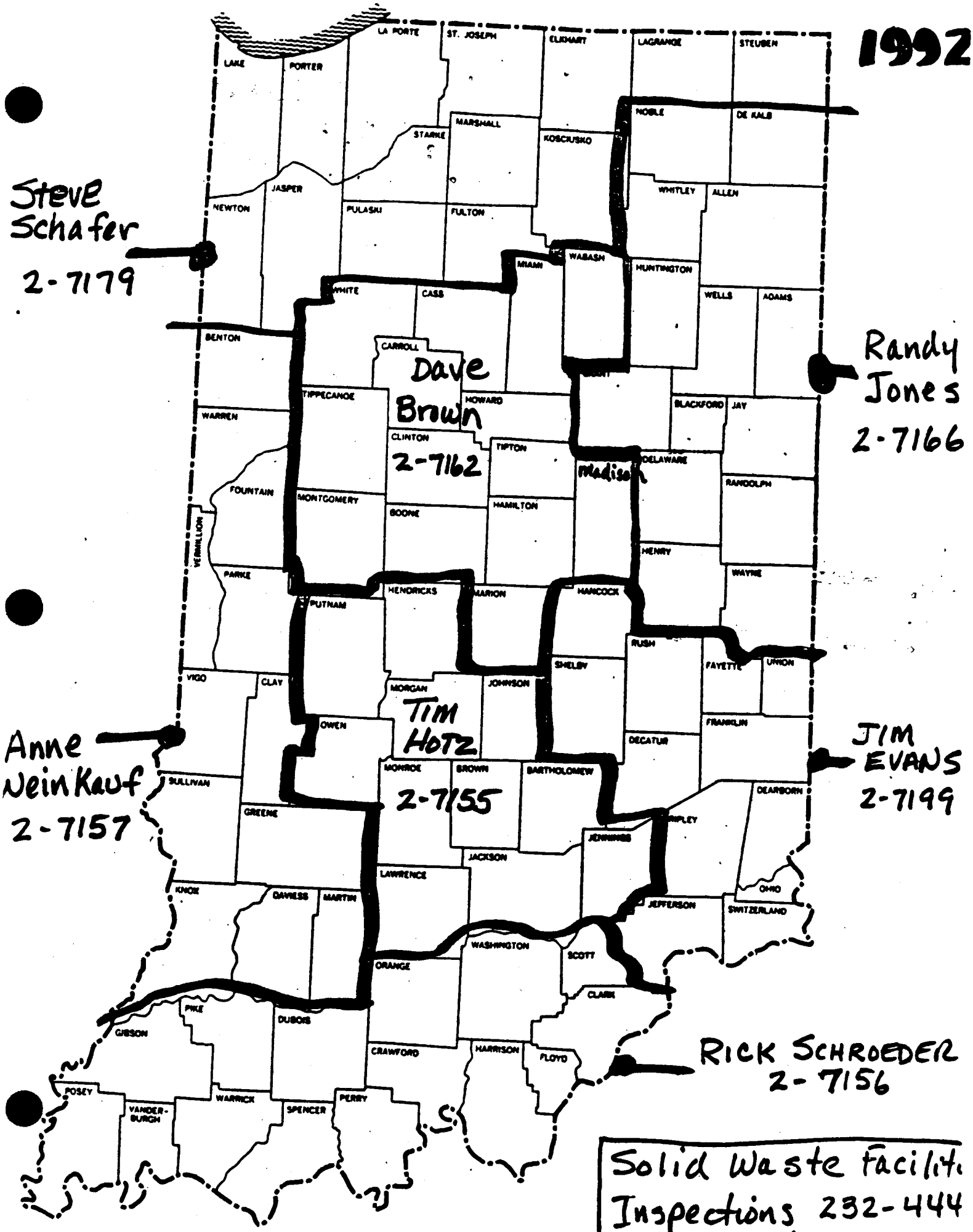
OTHER

CERCLA - Atkinson 8928 Oakes (to purchase list) 3399

Policy and Planning Branch Chief - T.J. Knotts 8857

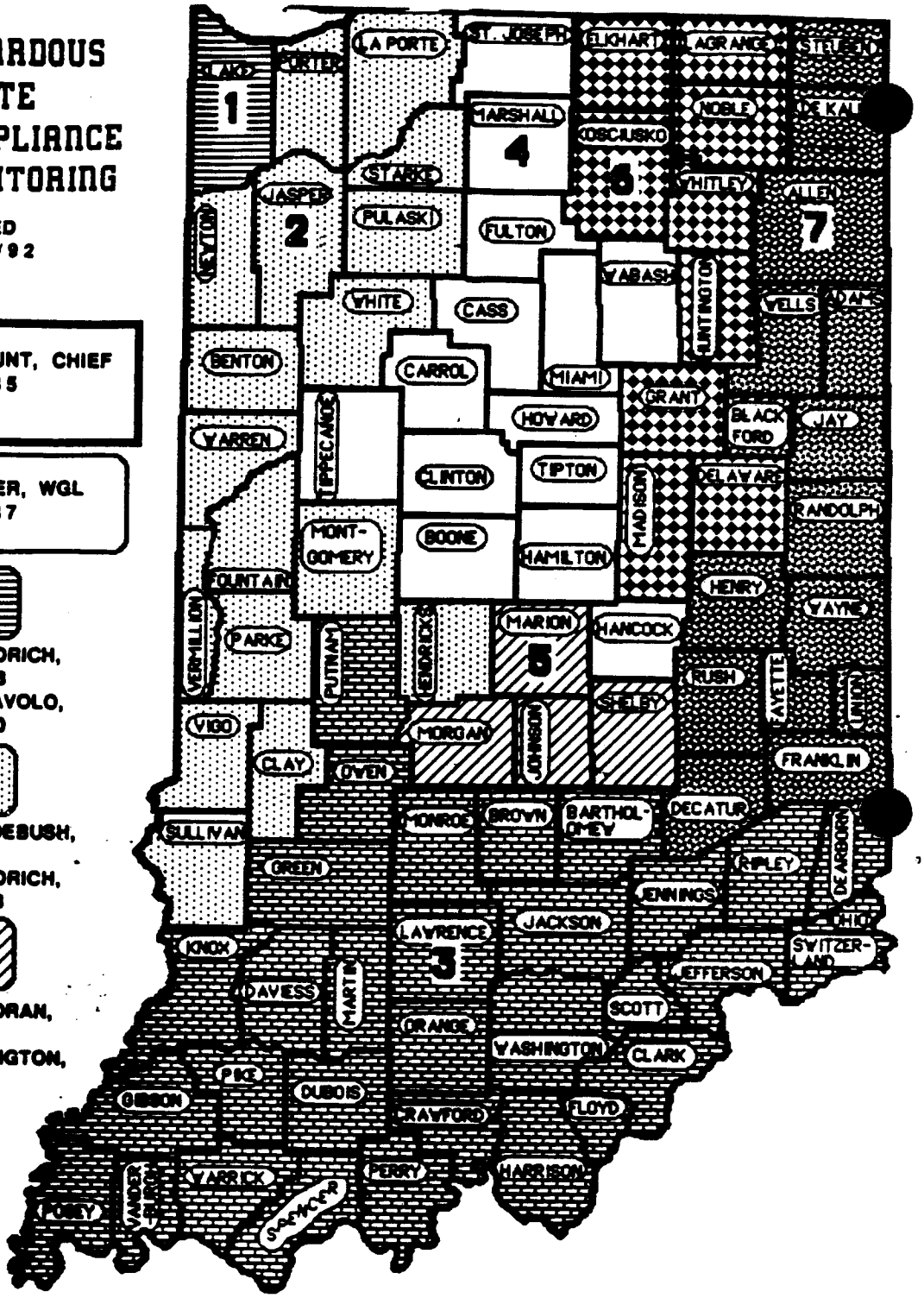
Superfund Sites - Atkinson 8928 Molini 8932

kja 01/21/93


1992
LA PORTE
ST. JOSEPH
ELKHART
LAGRANGE
STEUBEN
LAKE
PORTER
NOBLE
DE KALB
MARSHALL
STARKE
KOSCIUSKO
Steve Schafer
2-7179
JASPER
NEWTON
PULASKI
FULTON
WHITLEY
ALLEN
WABASH
MIAMI
HUNTINGTON
WHITE
CASS
WELLS
ADAMS
BENTON
CARROLL
Dave Brown
2-7162
Randy Jones
2-7166
TIPPECANOE
HOWARD
BLACKFORD
JAY
WARREN
CLINTON
TIPTON
DELAWARE
Madison
FOUNTAIN
MONTGOMERY
HAMILTON
RANDOLPH
VERMILLION
BOONE
HENRY
PARKE
HENDRICKS
MARION
HANCOCK
WAYNE
PUTNAM
RUSH
VIGO
CLAY
SHELBY
FAYETTE
UNION
MORGAN
JOHNSON
TIM HOTZ
Anne Neinkauf
2-7157
OWEN
FRANKLIN
DECATUR
JIM EVANS
2-7199
SULLIVAN
MONROE
BROWN
BARTHOLOMEW
2-7155
DEARBORN
GREENE
RIPLEY
JENNINGS
JACKSON
LAWRENCE
KNOX
DAVIESS
MARTIN
OHIO
JEFFERSON
SWITZERLAND
WASHINGTON
SCOTT
ORANGE
CLARK
PIKE
DUBOIS
GIBSON
CRAWFORD
HARRISON
FLOYD
RICK SCHROEDER
2-7156
POSEY
VANDER-BURGH
WARRICK
SPENCER
PERRY
Solid Waste facilit
Inspections 232-444
Sol Miller 2-74

HAZARDOUS WASTE COMPLIANCE MONITORING

UPDATED
12/29/92



JIM HUNT, CHIEF
2-4535

B. KIZER, WGL
2-4537

1
M. HERDRICH,
2-8553
K. MARAVOLO,
2-3410

2
R. ROUDEBUSH,
3-4637
M. HERDRICH,
2-8553

5
C. HALLORAN,
2-8552
M. PENINGTON,
3-4994

C. GRADY, WGL
2-3411

3
R. WILSON, 2-4416
B. OSSIVAND, 3-4991

4
J. CRAWFORD, 2-4314
S. ORMSBY, 3-5746

6
M. WILHELM, 2-3529
L. TRAIVARANON, 2-4419

7
R. WILSON, 2-4416
L. PARSONS, 2-4402

APPENDIX F

State Form 4336

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

INDIANAPOLIS

*NOT FOR PUBLIC RELEASE

OFFICE MEMORANDUM

DATE: December 21, 1990

TO: Christa Russell

THRU: Karyl Schmidt

FROM: David Becka DLB

SUBJECT: Geology review sheet for new sanitary landfill applications and applications for horizontal area expansion.

****

GEOLOGY REVIEW SHEET
Solid Waste Permit Applications
New Sites and Horizontal Area Expansions
for
Sanitary Landfills

Name of Facility:_____ OPP#:_____

Date Application Received:_____ County:_____

Geologist:_____ Date of Review:_____

**Not for Public Release (protected internal communications under IC 5-14-3-4(b) (c) or information not obtained under authority of nor required, by state law).*

Provide the following information on this sheet and/or attached sheets in such as to be suitable documentation for later staff review or presentation at an appeal procedures:

329 IAC 2-7-8
Pending Applications

329 IAC 2-7-8(c)

Applications for a solid waste facility permit received on or after January 20, 1988, shall comply with the provisions of Article 329 IAC 2. Does the application fall under this requirement?_____

329 IAC 2-10-1
Limits On Solid Waste Boundary Of Solid Waste Disposal Facility

329 IAC 2-10-1(1)(A)

Is the facility located in a wetlands area?_____

If so, has a copy of the 404 permit from the Army Corp of Engineers been provided?_____

329 IAC 2-10-1(1)(C)

Is the facility located in a floodway of drainage area greater than one square mile?_____

If so, has an approval letter from the Indiana Department of Natural resources been submitted?_____

And, are adequate provisions provided to prevent washout of the waste?_____

329 IAC 2-10-1(1)(D)

Is the facility located within an area of karst topography?_____

If so, are adequate provisions provided to collect and contain all of the leachate generated?_____

And, is it adequately demonstrated that the integrity of the landfill will not be damaged by subsidence?_____

329 IAC 2-10-1(1)(E)

Is the facility located over underground mines?_____

If so, is it adequately demonstrated that the integrity of the landfill will not be damaged by subsidence?_____

329 IAC 2-10-1(1)(F)

Is a potable water well located within 600 feet of the solid waste boundary? (Note: The well must be in use as a water supply for a dwelling or dwellings on the date of public notice for zoning approval for the permitted activity or on the date of public notice by the Commissioner of the permit application, whichever occurs first, unless written consent is obtained from the owner of the well.)_____

329 IAC 2-10-1(1)(H)

Are the solid waste boundaries of the facility located within 100 feet of the normal water line of a lake, reservoir, or continuously flowing stream?_____

329 IAC 2-10-1(1)(I)

Is the facility located within a floodplain?_____

If so, has the solid waste been protected from floodwater inundation by a dike with a top elevation not less than 3 feet above the base flood elevation?_____

329 IAC 2-10-1(1)(K)

Is a public water supply well located within 1,200 feet of the solid waste boundary? (Note: The well must be in use as such on the date of public notice for zoning approval for the permitted activity or on the date of public notice by the Commissioner of the permit application, whichever occurs first, unless written consent is obtained from the owner of the well.)_____

329 IAC 2-10-3
Design Standards For Sanitary Landfills

329 IAC 2-10-3(1)(B)

Does the facility have a barrier beneath the base of the leachate collection system drainage layer and piping, of at least 10 feet of material with an equivalent hydraulic conductivity of not more than 1 x 10-6 cm/sec?_____

329 IAC 2-10-3(2)

The requirements of 329 IAC 2-10-3 need not be met if the proposed site meets the criteria under 329 IAC 2-10-3(2), "*Alternative Provisions for Sanitary Landfills.*" Is such a demonstration being made? And if so, have the requirements of 329 IAC 2-10-3(2)(A) through (C) been met?_____

329 IAC 2-10-3(2)(A)

Is there an existence of a minimum 50 foot barrier of material having an equivalent hydraulic conductivity no greater than 1 x 10-6 cm/sec between any locally useful aquifer and the solid waste?_____

329 IAC 2-10-3(2)(B)

Has an adequate demonstration been made showing that the ground water standard specified in 329 IAC 2-16 shall not be exceeded in any locally useful aquifer or surface waters (excepting on-site retention ponds) without leachate collection?_____

Has consideration been given to the following?_____

(i) Concentration and total amount of contaminants generated;_

(ii) Specific geologic characteristics of the site including secondary porosity features occurring in soil or rock, and cation exchange; and_____

(iii) Ground water flow direction and predicted mechanisms of contaminant attenuation._____

329 IAC 2-10-3(2)(C)

Without consideration for 329 IAC 2-10-3(2)(A) and (B), other alternative technologies for the design of a sanitary landfill may be considered by the Commissioner provided the alternative is demonstrated to provide at least the equivalent protection to public health and the environment as the standard in 329 IAC 2-10-3(1). Is such a demonstration being made, and if so is it adequate?_____

329 IAC 2-11-2
General Documentation Required

329 IAC 2-11-2(a)(1)

Has a USGS topographical quadrangle map (7 1/2 minute), or equivalent, including all areas within two (2) miles of the proposed facility boundaries with property boundaries and proposed solid waste boundaries clearly delineated, been submitted?_____

329 IAC 2-11-2(a)(2)

Has documentation of the base flood elevation within one-fourth mile of the proposed facility from the Indiana Department of Natural Resources been provided?_____

329 IAC 2-11-2(a)(3)

Has a scaled map depicting wetlands, springs and seeps, sinkhole, swamps, legal drains, coal borings, wells, buildings, dwellings, sewers, culverts, drainage tiles, pipelines, powerlines, gas or oil wells, surface water, water courses, and roads within one-half mile of the facility been submitted?_____

329 IAC 2-11-3
Plot Plans And Cross-sectional Drawings

329 IAC 2-11-3(1)(A)

Has a plot plan indicating the following been submitted?_____

A scale of at least one inch equals 100 feet for sites less than 80 acres or a scale of, at least, one inch equals 200 feet for a facility of 80 acres or more._____

A bar scale._____

Facility boundaries shown._____

Elevations correlate with USGS mean sea level data._____

The following features within 300 feet of the facility boundaries:_____

Locations and elevations of all existing and proposed on-site boring locations._____

Rock outcroppings._____

Surface water runoff direction._____

Fences._____

Utility easements and right-of-ways._____

Present land surface contours at intervals of no more than 5 feet._____

329 IAC 2-11-3(1)(E)

Have adequate geological cross sectional drawings of the proposed facility indicating the following been submitted?_____

Horizontal and vertical bar scales._____

Elevations correlate with USGS mean sea level data._____

The types of soil materials or rock strata, as identified by boring logs, from the ground surface to the required boring depth._____

Depth of proposed fill._____

Fill boundaries._____

Present topography._____

All boring logs shown on cross sections._____

Minimum of two (2) intersecting cross sections._____

Were the cross sections reasonable and representative interpretations of stratigraphic correlation of units?_____

329 IAC 2-11-4
Soils, Ground Water And Geology Information - In General

329 IAC 2-11-4(1)

Has a soils map and related description data, as published by the USDA, Soil Conservation Service, been provided?_____

329 IAC 2-11-4(2)

Have the drilling logs and a topographic map indicating the location, and identifying with respect to the drilling logs, all wells within two (2) miles of the proposed facility which are on file with the Indiana Department of Natural Resources, been submitted?_____

Where a large number of well logs would be required by this requirement, the Commissioner may alternatively allow a summary of information to be submitted, has such a wavier been approved?_____

329 IAC 2-11-4(3)

Has a survey of any residences within one one quarter (1/4) mile of the solid waste boundary been conducted?_____

Has a statement as to the results of the survey and any information gained been included with the application?_____

329 IAC 2-11-5
Soils, Ground Water, And Geology Information - Certified

329 IAC 2-11-5(a)

Has the information on soils, ground water, and geology been certified by a registered professional engineer or certified professional geologist?_____

329 IAC 2-11-5(a)(1)

Has the number and location of the soil borings completed at the site been indicated?_____

329 IAC 2-11-5(a)(1)(A)

Have there been at least one boring for every five acres of fill up to 100 acres?_____

And one boring for every ten acres of fill area beyond 100 acres?_____

For sites smaller than fifty acres, have a minimum of five (5) borings been performed?_____

Are the borings evenly distributed over the site?_____

329 IAC 2-11-5(a)(1)(B)

Have the borings been completed to a minimum depth of twenty feet below the depth of waste placement or to bedrock, whichever is shallower?_____

329 IAC 2-11-5(a)(1)(C)

For sites less than ten acres, have at least one of the required borings been completed to a depth of at least seventy feet below the depth of waste placement, or at least seventy feet into bedrock, whichever is shallower?_____

For sites greater than ten acres, have at least two of the required borings been completed to a depth of at least seventy feet below the depth of waste placement, or at least seventy feet into bedrock, whichever is shallower?_____

Where two deep borings are required, are they evenly distributed over the site?_____

329 IAC 2-11-5(a)(1)(D)

What additional borings, not necessarily meeting the preceding requirements, may be required to delineate the boundaries of any features pertinent to the site design?_____

Have such borings been provided?_____

329 IAC 2-11-5(a)(1)(E)

The Commissioner may vary the minimum requirements where alternate testing provides comparable information. Have there been any variances requested or granted?_____

329 IAC 2-11-5(a)(1)(F)

Were there any Commissioner's request for prior notification of the date and time of soil borings, and if so, were we notified?_____

329 IAC 2-11-5(a)(2)

Do the boring logs contain the following information?_____

Date of drilling._____

Method of drilling._____

Method of backfilling and sealing of the borehole._____

Textural classification and descriptions for the entire depth of the boring._____

The depths to and thickness of any water bearing zones._____

Static water levels immediately following the boring._____

Mean sea level surface elevation of the boring._____

Has the textural classification system utilized been identified?____

329 IAC 2-11-5(a)(3)(A)

For each of the minimum number of borings required, were split spoon samples of the unconsolidated material taken at an interval of one per two and one-half feet?_____

Based on the uniformity of geologic conditions at the site, the Commissioner may vary this requirement. Have there been any variances requested or granted?_____

329 IAC 2-11-5(a)(3)(B)

For at least three evenly distributed borings, including one of the deep borings required, were split spoon samples of the unconsolidated material taken on a continuous basis?_____

329 IAC 2-11-5(a)(3)(C)

For the deep borings required, were continuous core samples taken of any bedrock encountered?_____

329 IAC 2-11-5(a)(3)(D)

Were complete grain size analysis, including Atterberg limits, performed on a representative sample from each significant stratum encountered?_____

Was more than one stratum represented by a single grain size analysis and Atterburg limits test where alternating strata of approximately identical color and texture were encountered?_____

Were at least one grain size analysis and Atterburg limits test performed for each of the required minimum number of borings?_____

329 IAC 2-11-5(a)(3)(E)

Were hydraulic conductivity tests conducted on each of the required minimum number of borings?_____

Were the hydraulic conductivity tests conducted at a depth of approximately five (5) feet below the proposed base of waste placement?_____

Did these test fall within the three (3) to ten (10) foot range beneath the base of the leachate collection system drainage layer and piping?_____

329 IAC 2-11-5(a)(3)(F)

Has the landfill been designed under the provisions of 329 IAC 2-10-3(2)?_____

If so, have CEC tests been conducted on each of the required minimum number of borings?_____

Were the CEC tests conducted at a depth of approximately five (5) feet below the proposed base of waste placement?_____

Did these test fall within the three (3) to ten (10) foot range beneath the base of the leachate collection system drainage layer and piping?_____

329 IAC 2-11-5(a)(3)(G)

Were additional CEC tests conducted as necessary to characterize the major strata proposed for use as base and sidewall barriers or cover soil?_____

Were additional hydraulic conductivity tests conducted as necessary to characterize the major strata proposed for use as base and sidewall barriers or cover soil?_____

329 IAC 2-11-5(a)(3)(H)

Was the hydraulic conductivity sampling a combination of in-situ field tests and laboratory permeability test on undisturbed Shelby tube samples?_____

Was the combination of field test and laboratory test adequate?_____

Were CEC's determined according to the ammonium saturation method specified in Part 2 of "Methods of Soil Analysis" published by the American Society of Agronomy in 1965?_____

329 IAC 2-11-5(a)(3)(I)

Other tests may be required by the Commissioner in order to further evaluate soil suitability. Is further testing required?_____

The Commissioner may vary the preceding minimum requirements (329 IAC 2-11-5(a)(3)) where alternate testing methods provide comparable information. Have there been any variances requested or granted?__

329 IAC 2-11-5(a)(3)(J)

Were all testing and sampling procedures identified?_____

Were all results identified with respect to boring and depth?_____

329 IAC 2-11-5(a)(4)

Boring samples shall be collected and maintained until the solid waste facility permit is issued, or until any litigation with regard to the proposed permit is resolved, which ever is later. Have the boring samples been maintained?_____

329 IAC 2-11-5(a)(5)

Have any borings completed for the purpose of satisfying the requirements of 329 IAC 2-11-5 been converted to piezometers or cased holes to comply with the requirements of 329 IAC 2-11-6?_____

329 IAC 2-11-6
Hydrogeologic Study

329 IAC 2-11-6(a)

Does the application contain an adequate proposal for the installation of monitoring wells?_____

Does the proposal consist of an adequate hydrogeologic study?_____

The Commissioner may modify the requirements for the proposal dependent on site characteristics. Have there been any variances requested or granted?_____

Has the proposal been certified by a registered professional engineer or certified professional geologist?_____

329 IAC 2-11-6(b)(1)

Does the proposal provide a summary of regional and site specific geologic information obtained from recent or previous soil borings, coal borings, area well logs, and/or published reports?_____

329 IAC 2-11-6(b)(2)

Does the proposal provide an adequate water table and/or potentiometric surface map(s) of the proposed site including ground water flow direction?_____

329 IAC 2-11-6(b)(2)(A)

Have the potentiometric surface map(s) been prepared from cased holes or piezometers capable of measuring hydraulic head at a maximum screen interval of five feet? (Note: This limitation on the maximum length of the screened interval does not apply to those piezometers used to determine a water table surface map.)_____

Have the water table and/or potentiometric surface map(s) been prepared with the following number of cased hole or piezometers:____

At least three devices for fill areas less than twenty acres;

four devices for fill areas between twenty and fifty acres;

five devices for fill areas between fifty and ninety acres; or

six devices for fill areas greater than ninety acres.

Are the required devices evenly distributed over the site?

Have the vertical gradients been measured at a minimum of two separate points at the site?

Additional nested piezometers or wells may be required by the Commissioner to adequately determine vertical components. Is the vertical component of ground water flow adequately determined?

Have individual water table and/or potentiometric maps been submitted where more than one aquifer is present within the specified boring depths required in 329 IAC 2-11-5(a)(1)(C)?

329 IAC 2-11-6(b)(2)(B)

Prior to the operation of the facility, monthly water level measurements along with water table/potentiometric surface maps constructed from each measurement event over a period of at least six months must be submitted to the Commissioner. Has this requirement been satisfied?

If not, how many maps have been submitted?_____

329 IAC 2-11-6(b)(2)(C)

Does the proposal discuss the evidence and/or potential of significant components of vertical ground water flow?_____

If there are significant components of vertical flow, have cross-sectional representations of equipotential lines and ground water flow direction been provided which adequately represent the flow beneath the site?_____

329 IAC 2-11-6(b)(3)

Does the proposal provide identification of aquifers below the proposed site to the depth required by 329 IAC 2-11-5(a)(1)(C), including the following information:_____

Aquifer thickness(es);_____

lithology;_____

estimated hydraulic conductivity and effective porosity;_____

presence of low permeability units above or below; and_____

whether the aquifers are confined or unconfined._____

Has a general identification and description been provided for aquifers known to exist from the geologic literature and/or area well logs?_____

329 IAC 2-11-6(b)(4)

Does the proposal present any known or projected information on hydraulic connections of ground water to surface water and hydraulic connections between different aquifers at the site?_____

329 IAC 2-11-6(b)(5)

Does the proposal provide any information on the current and proposed use of ground water in the area, including any available information on existing quality of ground water in aquifer(s)?_____

329 IAC 2-11-6(b)(6)

Does the proposal provide adequate diagrammatic representation of proposed monitoring well design and construction?_____

329 IAC 2-11-6(b)(7)

Does the proposal provide an adequate plot plan and/or discuss the proposed well locations, including length and elevation of screened intervals?_____

329 IAC 2-11-6(c)

The Commissioner may require that pumping tests or similar hydraulic tests be performed to provide a more accurate determination of aquifer characteristics where necessary to determine the adequacy of site or monitoring system design. Are additional tests required?___

329 IAC 2-11-7
Descriptive Narrative

329 IAC 2-11-7(a)(5)

Does the descriptive narrative include a statement as to the existence of and a description of any wells within 600 feet of the proposed fill area?_____

329 IAC 2-11-7(a)(9)

Does the descriptive narrative include a description of the location, amount and depth of excavation which will occur at the site?_____

329 IAC 2-11-7(a)(11)

Does the descriptive narrative include an adequate description of the base flood at the site and whether the site is in the floodway?_

329 IAC-2-11-7(a)(15)

Does the descriptive narrative include the calculations of available and necessary cover soil?_____

If cover material is obtained from a location other than on the proposed facility, has its source, quantity, and characteristics been identified and approved by the Commissioner?_____

329 IAC 2-11-7(a)(18)

Does the descriptive narrative include an adequate sampling methodology for all proposed monitoring devices?_____

329 IAC 2-11-7(a)(19)

Does the descriptive narrative include the testing method for all samples to be taken?_____

329 IAC 2-14-2
On-site Roads

329 IAC 2-14-2(c)

Have on-site roads that access the monitoring wells been proposed or provided?_____

Are they passable, and will gravel or other materials be provided as needed to provide trafficability?_____

Will vegetation be controlled on the access way and around the wells?_____

329 IAC 2-14-12
Cover - General Provisions

329 IAC 2-14-12(a)

Is the cover soil described as Unified Soil Classifications of ML, CL, CH or OH? or_____

If other cover material is to be utilized, will it provide an adequate level of environmental protection and has it been approved by the Commissioner?_____

329 IAC 2-15-8
Post-closure Plan

329 IAC 2-15-8(a)

Has a post-closure plan been submitted with the application?_____

Has the post-closure plan been approved by the Commissioner (the approved post-closure plan will become a condition of the permit)?__

If the plan is determined to be unacceptable, identify the items needed to make it complete._____

329 IAC 2-15-8(b)

Does the post-closure plan identify the following activities which will be carried on after closure, pursuant to 329 IAC 2-15-7?_____

Control of any vegetation on vehicular accessways to monitoring wells as required by 329 IAC 2-14?_____

Maintenance and monitoring of water quality devices?_____

Post-closure requirements followed for a period of ten years following the date of final closure certification in accordance with 329 IAC 2-15-5?_____

329 IAC 2-15-8(b)(1)

Does the post-closure plan provide an adequate description of the planned ground water monitoring activities and the frequency with which they will be performed?_____

329 IAC 2-15-8(b)(2)

Does the post-closure plan provide an adequate description of the planned maintenance activities and frequency at which they will be performed?_____

329 IAC 2-15-8(b)(4)

Does the post-closure plan provide a reasonable cost estimate in accordance with 329 IAC 2-12-3 for the items required under 329 IAC 2-15-8(b)(1) and 329 IAC 2-15-8(b)(2)?_____

329 IAC 2-16-1
Requirement For Monitoring Devices

329 IAC 2-16-1(a)

For new facilities and horizontal area expansions, have adequate ground water monitoring devices been proposed or installed?_____

329 IAC 2-16-1(c)(1)

Does the ground water monitoring system consist of a sufficient number of monitoring devices, installed at appropriate locations and depths, to yield ground water samples from the aquifer or aquifers that represent the quality of both background water that has not been affected by leachate from a facility and the quality of ground water passing the monitoring boundary of the facility?_____

329 IAC 2-16-1(c)(2)

Have the number, spacing, and depths of monitoring devices been proposed by the applicant in the site specific geological study required under 329 IAC 2-11?_____

329 IAC 2-16-1(c)(3)

Have a minimum of four ground water monitoring devices, one upgradient and three downgradient, been proposed or installed?_____

329 IAC 2-16-1(e)

Were there any Commissioner's request for prior notification in advance of the date and time of the installation of the monitoring devices, and if so, were we notified?_____

329 IAC 2-16-1(f)

Have any ground water flow maps been submitted?_____

329 IAC 2-16-1(g)

Are any monitoring devices to be replaced?_____

329 IAC 2-16-1(h)

Are the monitoring devices other than monitoring wells?_____

329 IAC 2-16-1(i)

Are the monitoring devices required by 329 IAC 2-16 located within 50 feet of the solid waste boundary?_____

329 IAC 2-16-2
Sampling Procedures

329 IAC 2-16-2(a)

Has an adequate ground water monitoring plan been submitted?_____

Does the plan describe procedures and techniques utilized to comply with 329 IAC 2-16-2(b) through (e)?_____

Is a copy of the ground water monitoring plan kept on-site?_____

329 IAC 2-16-2(h)

Background quality may be based on sampling of devices that are not upgradient from the waste management in accordance with 329 IAC 2-16-2(h)(1) and (2). If so, has the following requirements been met?_____

(1) Can a determination be made as to what monitoring devices are upgradient based on the hydrogeologic conditions of the site; and_____

(2) will sampling at other devices provide an indication of background ground water quality that is as representative or more representative than that provided by the upgradient devices?_____

Revised: *Date*

State Form 4336

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

INDIANAPOLIS

*NOT FOR PUBLIC RELEASE

OFFICE MEMORANDUM

DATE: March 13, 1992

TO: Solid Waste Geologists

THRU:

FROM: David Becka DLB

SUBJECT: Checklist for sanitary landfill renewal permit application review.

****

REVIEW CHECKLIST
FOR
RENEWAL OF OPERATING PERMIT

- SANITARY LANDFILL -

Name of Facility:_____ **OPP#:**_____

Date Application was Received:_____ **County:**_____

Geologist:_____ **Date of Review:**_____

Date Review Completed:_____ **Total Hours in Review**_____

What Ground Water Monitoring Program is the Facility Currently Conducting?____
Old Rule Background Phase I Phase II Assessment Corrective Action

Where further explanation is necessary for clarification of an answer, footnote the question and attach an appendix with expanded notes keyed to the question.

Not for Public Release (protected internal communications under IC 5-14-3-4(b) (c) or information not obtained under authority of nor required, by state law).

329 IAC 2-16-1
Requirements for Monitoring Devices

_____ Does the ground water monitoring system consist of a sufficient number of monitoring wells (a minimum of four, one upgradient and three downgradient)?

Identify the upgradient well(s): _____

Identify the downgradient wells: _____

_____ Have the monitoring wells been installed at suitable locations, spacing, and depths to yield representative ground water samples upgradient and downgradient from the appropriate ground water monitoring zone?

_____ Has the Permittee been submitting, along with the water quality results, a ground water flow direction map and/or potentiometric contour map of the aquifer(s) being monitored at the site?

- _____ Submitted quarterly for the first year's determination of initial background water quality?
- _____ Submitted semi-annually thereafter?
- _____ Are the measurements obtained during the scheduled water quality sampling months?
- _____ Do the maps contain:
  - _____ Locations of all required monitoring wells and well identification?
  - _____ Identification of which wells are considered upgradient and downgradient?
  - _____ Static water level elevations for each location?
  - _____ Date and time of the water level measurements for each of the wells?
  - _____ Potentiometric contour interval?
  - _____ Flow arrows?
  - _____ Identification of which aquifer is represented, either by an aquifer title or by an aquifer elevation?
  - _____ Property and fill boundaries?
  - _____ Facility name and county?
  - _____ Map scale?
  - _____ North arrow?
- _____ Are the static water level elevations in the wells being measured on the same day, prior to purging and sampling, and as close in time as practical?

_____ Are the downgradient monitoring wells, installed after the effective date (February 11, 1989) of 329 IAC 2, within 50 feet of the solid waste boundary?

329 IAC 2-16-2
Sampling Procedures

_____ Has the Permittee submitted a ground water sampling and analysis plan?

_____ Are the monitoring wells sampled semi-annually during the assigned sampling schedule?

_____ Are monitoring well water level measurements taken semi-annually during the assigned sampling schedule?

_____ Are the results of all water elevation measurements and analysis received within 60 days of sampling?

_____ Are two original and unbound laboratory certified copies of the analyses provided for all water quality results?

_____ Do the laboratory results contain the following information?

- _____ Detection limits for all chemical parameters?
- _____ Date sampled?
- _____ Date samples received by the laboratory?
- _____ Date analyzed?
- _____ Date of the laboratory report?
- _____ Method of analysis used for each chemical parameter?
- _____ Well identification for which the sample was taken?
- _____ Identification of field blanks, duplicates, and trip blanks?

_____ Are the ground water maps, ground water quality results, and statistical assessments/trend analysis being submitted to the geology section chief, and with the correct full address?

329 IAC 2-16-3
Duration of Monitoring Program

* For facilities which applied for a permit before July 1, 1991, ground water monitoring shall be conducted throughout the active life and the ten (10) year post-closure care period of the facility following the date of final closure certification.
* For facilities which applied for a permit after July 1, 1991, post-closure ground water monitoring shall be conducted for a period of thirty (30) years following the date of final closure certification.

329 IAC 2-16-4
Preoperational/Operational Conditions Relating to Ground Water Monitoring

_____ Has a plot plan been submitted indicating location, mean sea level elevation, and numbering system of all monitoring wells?

_____ Have construction details of all monitoring wells ever been submitted?

_____ Have boring logs of all monitoring wells ever been submitted?

_____ Has the initial background water quality determination been completed for the upgradient monitoring well(s)?.

_____ Has the upgradient monitoring well(s) been sampled quarterly during the assigned sampling schedule?

_____ Has background water quality been determined for the monitoring parameters in 329 IAC 2-16-6(b), the secondary standards in 329 IAC 2-16-7(c), and the constituents in 329 IAC 2-16-10?

329 IAC 2-16-5
Determining Increases Over Background

_____ Has the permittee selected a method to determine whether there is a statistically significant increase (or decrease, in the case of pH) over background values for each required constituents?

329 IAC 2-16-6
Phase I Monitoring Program

_____ Are all the phase I monitoring parameters being sampled?

_____ Is pH being measured in the field?

_____ Is there a statistically significant increase or increase in trend (or decrease, in the case of pH) over background for two or more parameters at any downgradient monitoring well?
If so, refer to 329 IAC 2-16-6(d).

329 IAC 2-7-7
Application of Design and Siting Standards to Solid Waste Land Disposal Facilities which have Operating Permits in Effect on the Effective Date of this Article (329 IAC 2)

* For solid waste land disposal facilities which have operating permits in effect on the effective date of 329 IAC 2 (February 11, 1989), the prohibitions of 329 IAC 2-10-1 apply with respect to the solid waste boundary.

329 IAC 2-8-10
Action on Renewal Permit Application (General Information)

_____ Are all monitoring wells affixed with permanent identification that uniquely identifies each monitoring well at the site?

_____ Are all the monitoring wells maintained properly?
- _____ Visible?
- _____ Accessible?
- _____ Vegetation height controlled around the wells?
- _____ Securely capped?

_____ Locked?
_____ Well casings inspected and repaired?
_____ Maintained mounds of clay soil around the casings or maintenance of the concrete pad?

329 IAC 2-8-11
Permit Revocation and Modification

* Suitability of the facility location will not be considered at the time of permit modification or revocation unless new information or standards indicate that a threat to human health or the environment exists.

329 IAC 2-14-2
On-site Roads

_____ Have on-site roads that access the monitoring wells been provided?

_____ Are they passable, and has gravel or other material been provided as needed to provide trafficability?

_____ Has the vegetation been controlled on the access ways and around the monitoring wells?

329 IAC 2-15-8
Post-closure Plan

_____ Has a post-closure plan been submitted?

_____ Has the post-closure plan been approved (the approved post-closure plan will then become a condition of the permit)?

_____ Has the post-closure plan been determined to be acceptable?

_____ Does the post-closure plan identify the following activities which will be carried on after closure, pursuant to 329 IAC 2-15-7?
_____ Control of any vegetation on vehicular access ways to monitoring wells required by 329 IAC 2-14?
_____ Maintenance and monitoring of water quality devices?
_____ Post-closure requirements followed for a ten (10) or thirty (30) year period following the date of final closure certification in accordance with 329 IAC 2-15-5?

_____ Does the post-closure plan provide an adequate description of the planned ground water monitoring activities and the frequency with which they will be performed?

_____ Does the post-closure plan provide an adequate description of the planned maintenance activities and frequency at which they will be performed?

_____ Does the post-closure plan provide cost estimation in accordance with 329 IAC 2-12-3 for the items required under 329 IAC 2-15-8(b)(1) and 329 IAC 2-15-8(b)(2)?

Revision:

APPENDIX G

FACT

HIGHLIGHTS OF 1990 LEGISLATION AFFECTING THE ENVIRONMENT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

RECYCLING

Following an executive order initiated by Governor Bayh in November of 1989, the legislature this year adopted his measures into law. Both the Governor and the legislature recognized that in order for recycling to work in Indiana, there must be an adequate market base to support the use of recyclable materials, Therefore much emphasis was placed in creating private/public partnerships to reach recycling goals.

PUBLIC FUNDING: Beginning July 1, the Department of Commerce, will establish the Indiana Recycling and Promotion Assistance Fund. This fund will provide grants and loans to new business ventures in creating recycling markets in Indiana. The Department of Environmental Management (IDEM) will continue to offer grants to local communities and not-for-profit organization involved in recycling projects.

Both of these programs will receive money collected from the Solid Waste Management Fund. This fund establishes a .50¢/ton fee on all solid waste disposed of in Indiana.

MARKET DEVELOPMENT: The Indiana Department of Corrections will investigate the feasibility of creating a prison recycling industry.

A paper Recycling Task Force and a Packaging Task Force will be formed later this year to investigate and make recommendations for further initiatives to encourage the use of recycled paper products and reducing disposable product packaging.

State and local government and educational institutions are now required to allow for a 10% price preference on the purchase of products with a 50% or greater recycled content.

A Waste Tire Management Task Force will be developing recommendations for creating markets to use old tires.

Retailers of new lead acid batteries must accept old/used batteries from the public and conspicuously post signs which inform people of this.

SOLID WASTE MANAGEMENT/PLANNING

GOALS: Planning goals for Indiana include a 35% reduction by 1996 and a 50% reduction in the volume of solid waste which must be disposed of by 2001. Criteria for meeting these goals will be included in both the 20 year state solid waste management plan and local management plans developed by solid waste planning districts.

DEMONSTRATED NEED: Any applicant for a solid waste facility permit must now indicate how the facility would satisfy a local or regional solid waste management need.

TRAINING AND CERTIFICATION: Solid waste facility operators will be required to undergo a training and certification program administered by IDEM.

All asbestos contractors and workers must participate in a tra ng and certification progr m which as been approved by the IDEM Office of Air Managem t.

SOLID WASTE TRANSPORTATION: All vehicles transporting m nicipal solid waste will be inspected and licensed by IDEM. These vehicles also must have placards which indicate it is hauling municipal trash. Operators will no longer be allowed to "backhaul" their otherwise empty trash truck with Indiana food products. This is to ensure that a trash truck is a trash truck and only a trash truck.

EMERGENCY RESPONSE: All facilities which contain hazardous materials must have mechanisms surrounding them to prevent releases into the environment, if they are not already required by any other state or federal law.

Owners and operators will be required to develop and maintain emergency response plans as well.

Local Emergency Planning Commissions will receive additional funding from increased tank fees.

1991 LEGISLATION AFFECTING SOLID WASTE MANAGEMENT PLANNING

The following is a summary of 1991 legislation which affects the Solid Waste Management Districts, along with their Solid Waste Management Plans. Districts will want to consider this new legislation as they operate as a unit of government and as they develop their plans.

1. The composition of a joint district board established under I.C. 13-9.5-2-6(d) after 3/1/91 must include a representative recommended by the municipal executive and approved by the legislative body of the largest municipality in each county. Representatives from other municipalities may also serve on the joint district board. (I.C. 13-9.5-2-6, as amended by P.L. 130-1991)

2. The Solid Waste Planning Advisory Council is established to advise the Indiana Department of Environmental Management and the Environmental Policy Commission on the implementation and revision of the Indiana Solid Waste Management Plan. The Council is composed of representatives of the following:

a. Indiana Department of Environmental Management Commissioner
b. Lieutenant Governor
c. Two members of the Senate
d. Two members of the House of Representatives
e. Cities and towns
f. Counties
g. Industrial generators of solid waste
h. Utilities
i. The private recycling industry
j. The private solid waste management industry
k. Environmentalists

(I.C. 13-9.5-3.5, as added by P.L. 130-1991)

3. A District Solid Waste Management Plan must include provisions to manage and dispose of the following waste streams:

a. Waste tires
b. Household hazardous waste
c. Used oil
d. White goods
e. Other classifications of waste provided for in the State Plan

(I.C. 13-9.5-4-7.5, as added by P.L. 130-1991)

4. Counties that receive revenues from the Hazardous Waste Disposal Tax may use them to meet planning and implementation requirements for a District Solid Waste Management Plan after other required purposes for the revenues have been fulfilled. (I.C. 6-6-6.6-3, as amended by P.L. 25-1991)

(over)

5. Within thirty days after establishing a Board of Directors of a Solid Waste Management District, the Board of Directors must also appoint and convene a Solid Waste Management Advisory Committee. At least 50% of the committee members must be representatives of the environmental community and other citizens, who are not employed directly or indirectly by the solid waste management industry. The advisory committee must submit a report to accompany an adopted District Solid Waste Management Plan. (I.C. 13-9.5-2-10, as amended by P.L. 25-1991)

6. A district board and an advisory committee must each conduct at least one regularly scheduled public meeting each month prior to adopting a plan. Public comments must be taken at each meeting. (I.C. 13-9.5-4-2, as amended by P.L. 25-1991)

7. Before adopting a plan, a district board must make the proposed plan available to the public at least thirty days before a public hearing is held. (I.C. 13-9.5-4-2, as amended by P.L. 25-1991)

8. A Solid Waste Management District may receive financial assistance for household hazardous waste collection and disposal, and education through a matching grants program administered by the Indiana Department of Environmental Management. (I.C. 13-7-33, as added by P.L. 131-1991)

9. Local units of government that provide collection or disposal services must publish the calculated costs of collection, disposal, recycling, and other costs which would include direct and indirect costs. The Indiana Institute on Recycling shall provide the methodology and guidance for the units of government to use in making these calculations. (I.C. 36-9-30-36, I.C. 36-9-31-26, as added by P.L. 231-1991)

10. The Solid Waste Management Board shall adopt rules to establish and impose fees on the disposal of solid waste generated outside of Indiana. The amount of the fees will be determined as necessary to offset costs incurred by state or local governments that are attributable to the importation of out-of-state waste. Portions of the revenues shall be distributed to the Solid Waste Management Districts pro rata on the basis of the district's population. (I.C. 13-9.5-5-1, as amended by P.L. 127-1991)

11. Before a district submits a district plan to the Commissioner of the Indiana Department of Environmental Management (IDEM), a district may merge with one or more other districts after the adoption of identical resolutions by the board of each district to be merged. The new board shall then be established using the procedures set forth in I.C. 13-9.5-2. (I.C. 13-9.5-4-12, as amended by P.L. 130-1991)

After a district submits a district plan to the Commissioner of IDEM, a district may merge with one or more other districts after the adoption of identical resolutions by the board of each district to be merged. The new board shall then be established using the procedures set forth in I.C. 13-9.5-2. In this case, a merged district must adopt a district plan within thirty days after the merger is completed and file the district plan with the Commissioner of IDEM. (I.C. 13-9.5-4-12.5, as added by P.L. 130-1991)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live

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Governor
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March 5, 1992

1992 LEGISLATION AFFECTING SOLID WASTE MANAGEMENT PLANNING

The following is a summary of 1992 legislation which affects the solid waste management districts, along with their solid waste management plans. Not every item affecting the districts is included in this summary. For example, S.E.A. 294 makes several technical changes and clarifications for the functions and administrative practices of the districts. For further details, it is recommended that the districts contact the Legislative Services Agency at (317) 232-9856 to obtain a copy of 1992 legislation.

The board of directors of a solid waste management district shall select a controller who is not a member of the board. The controller shall (1) be the official custodian of all district funds, (2) be responsible to the board for the fiscal management of the district, (3) be responsible for the proper safeguarding and accounting of the district's funds, (4) issue warrants approved by the board after a properly itemized and verified claim has been presented to the board on a claim docket, (5) make financial reports of district funds and present the reports to the board for the board's approval,
(6) prepare the district's annual budget, and (7) perform other duties prescribed by the board.
(I.C. 13-9.5-2-9, as amended by S.E.A. 294 and I.C. 13-9.5-2-9.3, as added by S.E.A. 294)

Solid waste management districts have the following powers:
(1) the power to enter into an interlocal cooperation agreement under I.C. 36-1-7 to obtain fiscal, administrative, managerial, or operational services from a county or municipality;
(2) the power to compensate advisory committee members for attending meetings at a rate determined by the board;
(3) the power to reimburse board and advisory committee members for travel and related expenses at a rate determined by the board;
(4) in a joint district, the power to pay a fee from district funds to the counties in the district in which a final disposal facility is located;
(5) the power to make grants or loans of money, property, or services to public or private recycling programs;
(6) in a district financed entirely by revenues, other than property tax levies, the power to adopt an annual budget without obtaining the approval of a state agency.
(I.C. 13-9.5-2-11, as amended by S.E.A. 294)

A board may pay registration fees and all actual expenses for employees or members of the board or advisory committee to attend a conference, seminar, or training session concerning solid waste management or related issues. A board may appropriate funds necessary to provide membership for the district in organizations that are concerned with the betterment and improvement of solid waste management planning and practices.
(I.C. 13-9.5-2-11.3, as added by S.E.A. 294)

Notice of each district's public meeting shall be given by the board in accordance with I.C. 5-14-1.5. In addition, a copy of the schedule of regularly scheduled monthly meetings shall annually be submitted for publication to a newspaper of general circulation in each county of the district. The notice must be at least two (2) columns wide by five (5) inches long and may not be placed in the part of the newspaper where legal notices and classified advertisements appear.
(I.C. 13-9.5-4-2, as amended by S.E.A. 294)

After a district plan has been adopted for a district by a board, the advisory committee appointed by the board shall meet at least four (4) times each year, and at the request of the board.
(I.C. 13-9.5-4-2, as amended by S.E.A. 294)

A resolution adopted by a board that establishes district final disposal fees may contain a provision that authorizes the board to impose a penalty of not more than five hundred dollars ($500) per day because of nonpayment of fees or noncompliance with a condition in the resolution.
(I.C. 13-9.5-7-1, as amended by S.E.A. 294)

A person may operate a composting facility only if the person registers the composting facility with the Indiana Department of Environmental Management. This does not apply to a person who conducts a composting operation at the person's residence or farm for vegetative matter and other types of organic material that are generated by the person's activities, and stored, treated, or disposed of at the person's residence or farm. A person who operates a registered composting facility shall submit an annual report to the Indiana Department of Environmental Management (IDEM) before February 1 of each year that indicates the volume of material processed by the composting facility during the preceding year. IDEM shall begin registering composting facilities before August 1, 1993.
(I.C. 13-7-35, as added by S.E.A. 25)

After September 30, 1994, vegetative matter resulting from landscaping maintenance and land clearing projects may not knowingly be deposited in a solid waste landfill. However, this does not apply to (1) vegetative matter that, after composting, is used as cover material for a solid waste landfill, and (2) the deposit of vegetative matter into a solid waste landfill that is part of a methane production facility approved by the Indiana Department of Environmental Management and that produces energy for sale or for use.
(I.C. 13-7-29, as added by S.E.A. 25)

After June 30, 1994, a person may not knowingly combine vegetative matter resulting from landscaping maintenance and land clearing projects that is intended for (1) collection, or (2) disposal at a solid waste landfill with another type of solid waste.
(I.C. 13-7-35, as added by S.E.A. 25)

A person may not maintain a waste tire storage site unless the person has registered the site and holds a valid certificate of registration. (H.E.A. 1047 deletes permitting requirements.)
(I.C. 13-7-23-6, as amended by H.E.A. 1047)

A person that obtains a certificate of registration must (1) report annually to the Indiana Department of Environmental Management on the number of tires received, and the number and manner of disposal, (2) maintain contingency plans to protect public health and the environment, (3) certain sites must maintain financial assurance, and (4) maintain a copy of the certificate of registration at the site.
(I.C. 13-7-23-9, as amended by H.E.A. 1047)

The waste tire task force is established to develop a plan to develop markets for waste tires. This plan must be submitted to the governor and legislative council before January 1, 1993.
(I.C. 13-7-23-14, as amended by H.E.A. 1047)

PASS THROUGH PROVISION REPEALER
(I.C. 13-9.5-7-6, as repealed by S.E.A. 151)

Indiana Department of Environmental Management
Review of Legislation Enacted During the 1993 Session of the Indiana General Assembly

Summary

Legislation Affecting All Programs:
1) HEA 1646; Creation of the Administrative Rules Oversight Committee and the Regulatory Review Board; Attorney General Determination Concerning the Taking of Property.
2) SEA 179; Creation of the Northwest Indiana Advisory Board.
3) SEA 195; IDEM Property Inspection Summaries. Pollution Permit Notifications.
4) SEA 302; Environmental Rulemaking Procedures Using a "Logical Outgrowth" Test.
5) SEA 609; Repeal of Negligence Standard for Criminal Prosecution of Environmental Violations.

Legislation Specifically Affecting the Office of Air Management:
1) HEA 1078; Open Burning of Vegetative Matter.
2) HEA 1839; 1990 Clean Air Act Enabling Legislation.
3) SEA 349; Air Construction Permits in Severe Ozone Non-Attainment Areas.

Legislation Specifically Affecting the Office of Water Management:
1) HEA 1842; Water Pollution Control Equipment Certification.
2) SEA 360; Notification of County Surveyors Concerning NPDES Permits.

Legislation Specifically Affecting the Office of Environmental Response:
1) HEA 1503; Underground Storage Tanks, Lender Liability, Property Liens.
2) HEA 1651; Allowable Durations for Remediation Contracts.
3) SEA 649; PCB Incinerator Permitting Requirements.

Legislation Specifically Affecting the Office of Pollution Prevention & Technical Assistance:
1) HEA 1412; Recycling Market Development, Pollution Prevention Institute Responsibilities, Use of Pollution Prevention Techniques in Permitting, Enforcement, and Rulemaking.

Legislation Specifically Affecting the Office of Solid & Hazardous Waste Management:
1) HEA 1412; Recycling Market Development, Solid Waste Management District Authorities.
2) HEA 1427; Waste Tire Management.
3) HEA 1433; Good Character Requirements for Solid Waste Permits.
4) SEA 349; Vertical Expansions for Landfills.
5) SEA 394; Partial Load Rejection Requirements.
6) SEA 632; Yard Waste Composting.
7) SEA 649; PCB Incinerator Permitting Requirements.

1) HEA 1646; Administrative Rules Oversight Committee.

The Administrative Rules & Oversight Committee (AROC) is comprised of eight (8) legislators, four from the House appointed by the Speaker, and four from the Senate appointed by the Senate President Pro Tem. AROC may review complaints filed by anyone regarding a rule or agency practice. It may review a rule, an agency practice or an agency's failure to adopt a rule, and make recommendations that a rule by modified, repealed or adopted. If appropriate, AROC may prepare and arrange for the introduction of a bill to clarify legislative intent concerning a specific rule, or to correct the misapplication of a law by an agency., Notice of any AROC meetings must be published in the Indiana Register.

The legislation requires that the members of the AROC be must appointed before July 1, 1993. The committee must prepare a bill for introduction in the 1994 general assembly to establish a "regulatory review board". This board is to undertake a comprehensive review of the Indiana Administrative Code, identify outdated, redundant or inconsistent rules, and make recommendations for repealing, or amending the rules.

HEA 1646 also requires that the Attorney General must notify the Governor and the appropriate agency if upon review, a proposed rule may constitute the taking of property without just compensation to an owner.

BILL IS EFFECTIVE IMMEDIATELY.

2) SEA 179; Northwest Indiana Advisory Board.

Requires the Commissioner to establish an 11 member Northwest Indiana Advisory Board. The members of the board must be residents of either Lake, Porter, or LaPorte County. One of the members must be a State Senator, and one must be a State Representative whose district includes one or more of the three NW Indiana counties. The remaining 9 members are appointed by the Commissioner as follows:

1) One member representing the general public.
2) One member representing environmental interests.
3) One member representing business and industry.
4) One member representing labor.
5) One member representing public health.
6) One member representing education.
7) One local elected official from each of the 3 counties.

The advisory board shall do the following:
1) monitor permit applications;
2) disseminate information and material to the public;
3) make recommendations to the department and boards; and
4) assist the NW regional IDEM office.

EFFECTIVE JULY 1, 1993

3) SEA 195; Property Inspection Summaries/Permit Application Notification.

Requires that anyone conducting an IDEM inspection on private property, must upon completion of the inspection provide the owner with an oral report of the inspection, including any specific matters that may be a violation. Within 45 days after providing the oral report, or if the designated agent was unable to meet with the owner, a written summary of the inspection must be mailed to the owner. The boards must adopt rules to implement this section.

SEA 195 also requires that within 10 days of filing a permit application under IC 13-7-10-1, an applicant must provide notice to all owners or occupants of land adjacent to the land that is the subject of the permit application. Notice shall:

1) be in writing;
2) include the date on which the application was submitted to IDEM; and
3) include a brief description of the subject matter in the application.

The applicant must pay for all costs of complying with this requirement.

This requirement applies to new permits, or permits upon property that is undeveloped. The following permits are excluded from this requirement:

1) a combined sewer;
2) a sanitary sewer;
3) a public water supply;
4) a water main extension;

EFFECTIVE JULY 1, 1993.

4) SEA 302; Environmental Rulemaking Procedures.

Provides a new environmental rulemaking procedure that requires:

1) Publication in the Indiana Register of draft rules for public comment, prior to preliminary adoption by a board;
2) incorporation of new language for a proposed rule if the new language is a result of a "logical outgrowth" from written comments submitted to a board prior to the rule being considered for final adoption;
3) authorizes the boards to use emergency rulemaking procedures for rules that have federally mandated deadlines for implementation.

EFFECTIVE IMMEDIATELY.

5) SEA 609; Repeal of "Negligence" as a Standard for Criminal Prosecution.

Removes "negligence" as a standard for which a person could be charged with a Class D felony for violating any rule, standard, determination, permit, or order made or issued by a board or the Commissioner under IC 13-1-1, IC 13-1-3, or IC 13-7. EFFECTIVE JULY 1, 1993.

6) HEA 1078; Open Burning.

Allows a person to openly burn vegetation from a farm, orchard, nursery, tree farm, drainage ditch, wood products derived from pruning or clearing a roadside by a county highway department, or wooden asbestos-free structures located in unincorporated areas. HEA 1078 also allows the burning of "clean petroleum products" for maintaining or repairing railroad tracks & railroad right-of-ways. All open burning must comply with other state & federal laws.

EFFECTIVE JULY 1, 1993.

7) HEA 1839; 1990 Clean Air Act Enabling Legislation.

Provides technical changes in the Indiana Code to allow the Air Pollution Control Board to adopt rules necessary to comply with the 1990 V Federal Clean Air Act Amendments. Creates a Title V operating permit program trust fund. Clarifies that if an applicant has submitted a timely and complete title V permit, but has not received the permit before the federal deadlines go into effect, the failure to have a permit is not a violation under IC 13-1-1.

Requires IDEM to submit all necessary data within 120 days, in support of reclassifying areas that are currently classified by EPA as a marginal non-attainment area.

EFFECTIVE IMMEDIATELY.

8) SEA 349; Vertical Expansion of Landfills/Air Construction Permits in Severe Ozone Non-Attainment Areas.

Prohibits the Solid Waste Management Board from adopting rules to prohibit, encumber, or arbitrarily restrict vertical expansions of existing permitted landfills. EFFECTIVE JULY 1, 1993.

Prohibits the department from issuing an air construction permit for a thermal oxidation unit used to remediate soil contaminated by petroleum, unless the applicant can demonstrate that it is in compliance with the State Implementation Plan under Section 182 of the Clean Air Act.
EFFECTIVE IMMEDIATELY.

9) HEA 1842; Water Pollution Control Equipment Certification.

A section of HB 1842, amends the statute that currently requires IDEM to annually certify industrial waste control facility for property tax exemptions. HEA 1842 changes the annual facility certification to a 5-year certification.
IDEM may also revoke a certification if it is determined that the equipment is no longer predominantly used for industrial waste control. EFFECTIVE JULY 1,1993.

10) SEA 360; Notification of County Surveyors Concerning NPDES Permits.

Requires IDEM to send a monthly list of new NPDES applications to the county surveyor of the affected county and advise all NPDES applicants in writing that if the receiving stream is a regulated drain, the county drainage board must also review the application for approval under IC 36-9-27.

EFFECTIVE JULY 1, 1993.

11) HEA 1503; Underground Storage Tank Lender Liability, Property Liens.

Repeals a measure enacted by the legislature in 1991 which excluded creditors and fiduciaries from the definition of "owner/operator" in IC 13-7-20-24. Repeals the sunset date on the state's authority to collect underground storage tank registration fees. Allows tank owners with double walled tanks made of material other than "steel" to be eligible for a $30,000 deductible under the Excess Liability Fund coverage.

Requires IDEM to publish a 30 day public notice period before a lien placed on a property remediated by IDEM may become effective.

EFFECTIVE IMMEDIATELY.

12) HEA 1651; Extended Duration Time for Site Remediation Contracts.

Allows the state to enter into a contract for up to 10 years with a person, for purposes of conducting site remediation under CERCLA or the State Cleanup Program.

EFFECTIVE JULY 1, 1993.

13) SEA 649; PCB Incinerator Permits

Prohibits the issuance of a PCB incinerator construction or operating permit (IC 13-7-16.5-1) unless it can be demonstrated that:

1) The same technology is being used at an existing facility and that facility has demonstrated 99.9999% PCB destruction; and

2) no hazardous substances have been released into another media by using that technology.

The bill further stipulates that monitoring data from an existing facility must demonstrate that no releases have occurred that could pose a risk of an acute or a chronic human health effect or an adverse environmental effect. The proposed facility

must also have a plan to provide adequate emergency response training and an evacuation plan both of which have been "funded and developed". EFFECTIVE IMMEDIATELY.

14) HEA 1412; Environmental Study Committee/ Recycling Market Development/Pollution Prevention/Solid Waste Management Districts.

Environmental Study Committee

Replaces the Environmental Policy Commission with an Environmental Study Committee comprised of 14 legislators (7 from the House, 7 from the Senate) including the chairperson, ranking majority & minority member of the Senate Health & Environment and House Environmental Affairs Committee. The Legislative Services Agency is to provide staff & administrative support to the committee. EFFECTIVE JUNE 1, 1993.

State Agency Involvement in Market Development

Requires the Department of Commerce to:

1) produce an annual recycled products guide for state & local government, judicial, and educational institutions;

2) submit to the general assembly an annual report before October 1 of each year. The report must include a listing of recyclable materials to be targeted for market development, a market development strategy for those materials, and a market development analysis.

Includes in the definition of "Industrial Development Project", the term "recycling market development project" for the purposes of determining eligibility for loan guarantees administered by the Indiana Development Finance Authority.

Requires the Department of Administration to:

1) prepare purchasing specifications for products containing recycled materials;

2) in coordination with the Department of Commerce, host at least 1 annual conference bringing together government purchasing agents and suppliers of products made from recycled materials;

3) submit an annual report to the general assembly on the effectiveness of state policies concerning the procurement of products made from recycled materials.

Requires each agency that has enter into at least one contract for the procurement of supplies to submit an annual report to the Department of Administration indicating

the volume and aggregate number of products purchased containing recycled materials.

Provides a 15% price preference by state agencies for products purchased that contain at least 50% by volume recycled content.

Extends the sunset date for the Indiana Recycling Institute from July 1, 1994 to December 31, 1996.

Requires the Governor to establish a 15 member recyclable materials transportation task force before August 1, 1993. The task force is to examine the structure of transportation systems used to convey recyclable materials and make recommendations to enhance and improve the transportation of recyclable materials within the state. Members of the task force must include the following representatives:

1) One member from INDOT
2) One member from IURC
3) One member from INDOC
4) One member from IDEM
5) One member from the trucking industry
6) One member from the railroad industry
7) One member from another transportation industry
8) Two members from the recycling industry
9) Three members from environmental organizations
10) Three members from solid waste management districts

The task force must submit a report to the General Assembly and the Governor before July 1, 1994.
EFFECTIVE JULY 1, 1993.

Pollution Prevention

Clarifies the definition of Pollution Prevention, and proclaims that pollution prevention is the most desirable form of environmental protection. Clarifies that the Pollution Prevention Institute may contract its duties as authorized by the board. Authorizes the Institute to conduct and publish various studies.

Prohibits IDEM or any of the Boards from incorporating manuals or policies, or rules requiring pollution prevention practices by means of:

1) permit conditions;
2) enforcement actions; or
3) other department actions

unless the requirements are pursuant to a federally delegated program or utilizing a federal guidance document, or a program developed by the Institute or Office of Pollution Prevention & Technical Assistance.
EFFECTIVE JULY 1, 1993.

Solid Waste Management Districts

Limits property tax rates imposed by a solid waste management district to $0.25

per $100 of assessed value. Allows solid waste management districts to establish & maintain a self insurance program for household hazardous waste collection activities. Requires the State Board of Tax Commissioners to approve a solid waste management district budget. Prohibits a solid waste district board from imposing a solid waste management fee in excess of $2.50/ton. Authorizes a district board to impose solid waste management fees on persons who generate solid waste or who benefit from the management of solid waste within the district.
EFFECTIVE JULY 1, 1993.

15) HEA 1427; Waste Tire Management.

Requires government purchasing agents to develop specifications for retread tires. Imposes a $0.25 fee on the sale of all new tires in Indiana. Retailers collecting the fee may retain 1% of the fees. Fees will be deposited in the IDEM waste tire management fund. 50% of the revenue deposited in the fund is earmarked for the cleanup of illegal tire dumpsites, and 50% of the revenue shall be used to assist the Department of Commerce for providing grants and loans for waste tire market development projects. Requires IDEM to submit an annual report on waste tire management including the status of programs funded by the waste tire management fund. Authorizes the Commissioner to proceed in court to compel a responsible party to remove improperly stored or disposed tires, and to obtain authority for IDEM to enter onto private property to remove the tires. Authorizes cost recovery for the cleanup of waste tire sites. Requires IDEM to operate a waste tire education program. Effective July 1, 1995, whole waste tires are prohibited from disposal in a landfill.

EFFECTIVE JULY 1, 1993.

16) HEA 1433; Good Character.

Excludes captive solid waste facilities (ie. owned & operated to accept only waste that is generated by the owner of the facility), from being subject to Good Character Disclosures for permits involving construction, operation or major modification of solid waste facilities.

EFFECTIVE IMMEDIATELY.

17) SEA 394; Partial Load Rejection.

SEA 394 requires the solid waste management board to adopt rules that are effective before July 1, 1994 establishing a "cradle-to-grave" tracking system for use by a treatment, storage, or disposal facility (TSDF) when rejecting a partial shipment of hazardous waste. Stipulates that a TSDF shall not be held liable under IC 13-7-8.7 for the rejected load.

Clarifies that the "needs" demonstration for a solid waste facility permit is not required for a hazardous waste facility, or a captive solid waste facility.

EFFECTIVE JULY 1, 1993.

18) SEA 632; Yard Waste Composting.

Clarifies that Composting facility registration requirements apply to facilities that accept more than 2,000 lbs. of vegetative matter per year. Allows a facility to be located less than 200 feet from a residence if there is a local ordinance allowing a shorter distance, and with written approval of the property owner or occupant.

EFFECTIVE JULY 1, 1993.

INDIANA LEGISLATION AFFECTING SOLID WASTE MANAGEMENT

Law	Provision	Options Affected	Responsibility Level
HEA1472 1990 (P.L.109-1990)	• Demonstrate need for solid waste management facility (see HEA1240, Art 9.5, Section 13 [p11] for definition).	LF, INCIN, PF	State
	• Licensing, inspection, and manifesting of municipal waste transportation vehicles - excluding those transporting recyclables - facilities may not accept unlicensed, unmanifested waste. Processors must manifest waste sent out.	LF INCIN PF	State Local
	• Good character requirements for solid waste facility operators.	LF, INCIN, PF	State
HEA1414 1990 (P.L.108-1990)	• Training and certification requirements for solid waste management facility operators.	LF INCIN, PF, MRF Compost Special-HHW	State
HEA1391 1990 (P.L.19-1990)	• Procurement preferences to supplies with at least 50% recycled content, purchase cost of recycled portion is at least 50% of production cost, or other percentage IDEM determines.	Source Red Recycling	State
	• Lead-acid battery recycling - prohibits disposal in conventional landfills, requires retailers to accept old batteries.	Recycling/ Problem	Local State
	• Information clearinghouse on source separation, recycling compost, hazardous and solid waste min/reduction (defined)..	All	State
	• Establishes requirements for permits to central processing and transfer facilities.	LF, INCIN, PF	State
	• Tires - exempts recyclers and recycler suppliers from waste tire storage permit if less than 1,000 tires are stored inside. Establishes waste tire management fund and task force.	Recycling/ Problem	State

Source Red = source reduction
INCIN = incineration
LF = landfills
MRF = materials recovery facility
PF = processing facilities
Problem = problem waste management programs/facilities

(dj/412)

INDIANA LEGISLATION AFFECTING SOLID WASTE MANAGEMENT

Law	Provision	Options Affected	Responsibility Level
HEA1240 (P.L. 10-1990)	• Encourages projects to create markets and products made from recycled materials.	Recycling	State
	• Establishes Recycling Promotion and Assistance Fund.	Recycling	
	• Establishes source reduction and recycling preferred over incineration and landfill.	Recycling Source Red	State
	• Establishes state/district waste reduction goal of 35% by 1995, 50% by 2000.	LF, INCIN	
	• Establishes recycling education programs.	Recyling	State
	• Establishes packaging/waste reduction task force.		
	• Establishes paper recycling task force.		
	• Haulers must certify waste origin.	LF INCIN	State
	• Solid Waste Management Board may ban or restrict recyclables from final disposal.		State
	• Counties must form solid waste management districts.	All	District
	• IDEM must develop state solid waste plan and model format.	All	State
	• District must develop solid waste plans.	All	District
	• Establishes state solid waste management fund for programs to promote recycling.	Recycling	State
	• Imposes $.50/ton fees on waste disposal.	LF, INCIN	State
	• Provides loans for developing district plans.	All	State
	• Sets deadlines for accomplishing goals.	All	State District
HEA1106 1990 (P.L.105-1990)	• Establishes pollution prevention entities to disseminate information, collect data, and award grants. Develop policies and programs to reduce generation of municipal wastes, including hazardous waste and reduce toxic material in consumer products. May need federal reporting and permitting authority under US Solid Waste Disposal Act. "Programs shall not discourage environmentally sound recycling . . . for pollution that has not been prevented."	All	State

Source Red = source reduction
INCIN = incineration
LF = landfills
MRF = materials recovery facility
PF = processing facilities
Problem = problem waste management programs/facilities

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INDIANA LEGISLATION AFFECTING SOLID WASTE MANAGEMENT

Law	Provision	Options Affected	Responsibility Level
HEA1030 1990 (P.L.70-1990)	• Statute requires commissioner to designate ten landfill inspectors.	LF/PF	State
	• Requires longer closure and post-closure financial responsibility for landfill and transfer station permit holders.	LF/PF	State
	• Prohibits trucks transporting solid waste from back hauling food within 15 days unless properly sanitized.		State
HEA1926 1989 (P.L.167-1989)	• Establishes Indiana Institute on Recycling to develop concepts, methods, and procedures for assisting in solid waste recycling.	Recycling	State
*HEA1310 1989 (P.L.326-1989)	• Establishes "solid waste separation and recycling fund." (Passed but not funded.)	Recycling	State
SEA430 1989 (P.L.31-1989)	• Requires state agencies and colleges to purchase degradable plastic disposables if available and economically appropriate.	Source Red Recycling LF	State
SEA415 1989 (P.L.30-1989)	• Requires state agencies and colleges to collect and recycle paper. Revenues to promote waste reduction programs.	Source Red Recycling LF	State
SEA219 (P.L.165-1989)	• Requires material coding of plastic containers.	Recycling	State

*Act expires 7/1/91

Source Red = source reduction
INCIN = incineration
LF = landfills
MRF = materials recovery facility
PF = processing facilities
Problem = problem waste management programs/facilities

(dj/412)

Kotter 3/19/90

SUMMARY OF SUMMARIES 1990

HB 1030-- additional requirements for proof of financial responsibility for solid waste facility operators (formerly SB 3 authored by Vobach)

requires IDEM to designate 10 employees as "landfill inspectors" (it does NOT require us to hire 10 additional inspectors -- only designate them) formerly HB 1282 authored by Hoover (repub.)

requires the state personnel director to redesign the classification & pay plans for IDEM engineers & technical personnel by July 1, 1992 (formerly SB 5 authored by Vobach)

HB 1472-- Governor's Bill; Solid Waste Transportation

allows the commissioner to grant/deny solid waste permit application based on the applicant's good/bad character or past history of compliance with environmental laws

Requires solid waste permit applicant to demonstrate a regional or local need for a facility before the permit can be granted

Establishes a municipal waste manifest reporting/licensing & inspection program

HB 1240-- Governor's Solid Waste Planning/Recycling Bill

Renames & instructs the Energy development board to focus on economic development efforts involving recycling

Instructs the Dept. of Corrections to consider developing programs which enhance the use of or production of recyclable materials

Instructs IDEM to establish education programs about the benefits of recycling for students, consumers & businesses

Creates a paper recycling & packaging task force

Sets up provisions for the establishment of solid waste planning districts

Sets up provisions for the creation of a state and district solid waste management plans

Creates a state Solid Waste Management Fund for recycling grants

Creates a state Solid Waste Planning Revolving Loan Fund

Provides waste [illegible] and 3

HB 1106--Pollution Prevention

Creates the Office of Pollution Prevention & Technical Assistance 7/1/90

Eliminates the Office of Technical Assistance

Creates the Pollution Prevention Board

Creates the Pollution Prevention and Safe Materials Institute

Requires annual state report of the progress the above entities are making in promoting Pollution Prevention Concepts

HB 1391-- Representative Bosma's omnibus environmental bill. Includes:

10% purchasing preference for recycled products which contain 50% or more recycled material (formerly SB 9 authored by Vobach, formerly SB 436 authored by Simpson)

Mandatory licensing/ accreditation of asbestos contractors and workers (formerly HB 1305 authored by Representative Underwood (D) & Senator Bushemi)

Spill prevention; requires secondary containment for hazardous materials which are not covered by any other existing statute or regulation (formerly HB 1439 --IDEM bill)

Requirements for retailers to accept & publicize the collection of used lead acid batteries (formerly SB 6 authored by Senator Gard)

Requires IDEM to provide technical assistance & education programs about alternatives to land disposal & incineration of solid waste (formerly SB 4 authored by Senators Gard & Vobach)

Requirements for IDEM to provide various copies of reporting documents upon request of anyone, for purposes of the Responsible Party Property Transfer Law (formerly SB 500 authored by Senator Bushemi)

Requires the adoption of rules for the permitting of waste tire storage sites with 500 or more tires; requires IDEM submit an annual report to the legislature on waste tire management; establishes the "waste tire management fund" to be used for cleaning up abandoned tire sites; cre a "waste tire task force" to develop a plan for creating markets for was tires and guidelines for storage (formerly SB 67 authored by Senator Gard)

HB 1414-- IDEM bill which establishes solid waste facility operator training & certification law (has been signed by the Governor)

HB 1189-- IDEM bill which provides mechanisms for funding local emergency planning commissions through increased fees on facilities subject to Sec 312 RTK reporting requirements-- 10% of fees go to IDEM for coordinating activitie

HB 1336-- IDEM bill which allows IDEM to grant a variance to a NPDES permit for up to 5 years

A company that violates this chapter and fails to produce adequate documentation for its environmental claims of a product may be subject to fines and penalties under the Indiana Deceptive Practices Act.

HB 1307 was amended to include a section that requires the Department of Commerce to "develop" and promote markets for 10 specific recyclable items. IDOC must also submit an annual report before October 1, each year to the General Assembly concerning the availability and "location" of markets in Indiana.

HEA 1311 Household Hazardous Waste Grant Program

Requires IDEM to provide matching grants for household hazardous waste projects of local government and solid waste districts.

Up to $250,000 per year from the Hazardous Substance Response Trust Fund may be used to fund these grants. Grants may be awarded for educational projects and collection projects. The grants cannot exceed 50% of the total eligible cost of the proposed project.

IDEM also may utilize money from the Response Trust Fund for expenses related to personnel and administering the grants program. However, IDEM must submit an annual budget to the state budget committee. Personnel and administrative expenses must be appropriated by the General Assembly.

Before February 1 of each year, IDEM also must submit an annual report to the governor, the environmental policy commission, the legislative council, and the state budget director. The report must contain the following information:

1) a description of each grant award;
2) a statement of the total funds expended for grants during the preceding year;
3) an estimate of funds required to meet eligible grant requests for the current year;
4) recommended changes to the grant program.

The Solid Waste Management Board must adopt rules to implement this program.

HEA 1318 Watershed Task Force/ Permits for Water Main Extensions

Establishes an interagency "Watershed Task Force." The task force is to compile new and existing data concerning Indiana watersheds including federal, state, and local regulation of both quality and quantity of water in watersheds.

1991 LEGISLATIVE SUMMARY

HEA 1056 — Tire Recycling

Requires tire retailers to accept as many used tires as they sell from customers, and they must post signs in their establishment publicizing this requirement.

Stipulates methods for retailers to dispose of waste tires.

Requires waste tire transporters to be registered with IDEM, and must prepare and carry a manifest adopted by the Solid Waste Management Board, for each load of tires. Until rules are adopted, transporters must develop and use their own manifest forms. Transporters must transmit one copy of each manifest to the department within 30 days of each shipment.

Establishes requirements and criteria for obtaining a waste tire cutting facility operating permit from the department; proceeds from permit fees are to be deposited in the Waste Tire Management Fund. Each cutting facility must establish an escrow account to be used to pay the estimated cost of remediating the site. Four dollars and eighty cents ($4.80) per cubic yard of waste tires must be deposited in the account. This section of the law expires on the earlier of July 1, 1992 or the date rules adopted by the board become effective.

HEA 1123 — Local Government Reporting of Solid Waste Management Costs

Effective July 1, 1992 any local government unit that provides solid waste collection or disposal services must publish the full and per capita costs of the service during the previous year. The required calculations must include the rates charged for:

1) Collection
2) Disposal
3) Recycling
4) Other Costs

The Indiana Institute on Recycling is to develop a standard methodology for local governments to use when making the calculations. The calculations must be included in the annual local government budgets and also be filed with the Institute.

HB 1307 — Environmental Marketing Claims

Authorizes IDEM or the Office of the Attorney General to require a company to fully disclose documentation that a consumer product is in fact "environmentally friendly" if the company advertises it to be as such. Requires all companies making such claims to maintain records of documentation and make them available to the public upon request.

Upon completion of this review, the task force shall select a watershed area to serve as a pilot watershed management program. The task force must however, propose the pilot program for approval by the Environmental Policy Commission.

Members of the task force must include, but are not limited to the following:

- IDEM commissioner
- IDNR director
- Commissioner of agriculture (Commerce)
- One business representative
- One environmental representative
- One local government representative
- One public water utility representative
- Four additional members

The entire Environmental Policy Commission will serve as non-voting, ex officio members of the task force.

IDNR and IDEM must provide staff support as necessary, with IDNR serving "...as the lead agency in providing staff support..."

HEA 1318 also statutorily incorporated language identical to 327 IAC 8-3-2, which exempts water main extensions from having to obtain a permit if the extension:

- Constitutes an increase of less than 5% in the number of customers; or
- is less than 2,500 feet in length.

Construction plans for these extensions still must be reviewed by IDEM.

HEA 1399

Began as a "lender liability" bill and ended as a "Christmas tree" for a number of proposals that passed the House of Representatives, but died in the Senate.

AAA Modification

Originally found in HB 1537, this is IDEM's AAA streamlining bill for licensing and accreditations. Beginning July 1, 1991 the 15-day public notice requirement is exempt for the following IDEM licensing activities:

1) Registering pollution control devices;
2) Asbestos accreditation;
3) Wastewater treatment plant operator certification;
4) Solid waste facility operator certification;
5) Municipal waste transportation vehicle registration.

Technical Clarifications for Solid Waste Management Districts

These provisions exempt county or joint solid waste management districts from the Indiana gross income tax, gross retail tax and the supplemental net income tax.

Additional Authorized Uses of Hazardous Substance Response Trust Fund Revenues by Counties

Counties with hazardous waste facilities located within their borders currently may use their 25% share of the hazardous waste tax for training, equipment, and research activities related to emergency response duties. This provision of HEA 1399, will also allow counties to use this money to pay the cost of:

- solid waste removal and remedial action at a particular site, and

- costs associated with developing and implementing a solid waste management district plan.

However, money cannot be used for district planning activities until all other activities have been fulfilled.

Private Causes of Action

Allows a property owner to sue for damages associated with a developer's failure to fulfill a promise to deliver adequate sewer or water service to the property.

Lender Liability Exemptions

Exempts creditors and fiduciaries from environmental cleanup liability of a property unless actual and direct managerial control over the property was exercised, or unless an extension of credit was made solely for the purpose of avoiding environmental liability.

Solid Waste District Board Member Composition for St. Joseph and Lake Counties

The St. Joseph County Solid Waste District Board must include one member of the Mishawaka City Council and one member from a town council, appointed by the judge of the St. Joseph County Circuit Court.

The Lake County Solid Waste Management District Board must include a representative from the largest city in the county and a representative from any town with a solid waste disposal facility.

Environmentalist Representation on District Solid Waste Management Advisory Committees

Requires that within 30 days after establishing a board of directors, a solid waste district must appoint a solid waste management advisory committee. At least 50% of the members of the committee must represent members of "the environmental community" and other citizens who are not employed directly or indirectly by the solid waste management industry.

Finally, HEA 1399 deletes a non-code provision of the Local Emergency Planning Statute that conflicted with IDEM initiated legislation passed last year.

HEA 1429 PCB Incinerators

Prohibits the issuance of a construction or operating permit for a PCB incinerator if:

1) the incinerator will also burn municipal solid waste; and
2) the incinerator is part of a district solid waste management plan unless the district plan incorporating the use of the incinerator has been approved by the commissioner.

A permit to incinerate PCBs also cannot be issued until a study of alternatives to PCB incineration is conducted by IDEM in cooperation with EPA. The study and an accompanying report from the Commissioner to the Governor and the General Assembly must be completed before July 1, 1993.

Senate Bill 589 was later incorporated into HEA 1429. This provision will allow a municipality that owns and operates an ash monofill to practice self insurance in order to satisfy closure and post closure monitoring requirements.

HEA 1583 UST/Petroleum Contaminated Site Cleanup Authority

HEA 1583 was originally initiated by IDEM to clarify and correct some provisions in the Underground Storage Tank chapter of the Indiana Code. Some of the more notable changes to this statute include the following:

1) Language authorizing the Office of Fire and Building Services to adopt rules for inspecting tank removal and certifying tank removal contractors;

2) Language that allows tank owners the option of paying their annual registration fees in four equal installments;

3) Language clarifying the procedures for determining access to the Excess Liability Fund.

The bill was later amended to include two additional changes to the state cleanup statute.

Indiana now becomes the sixth state in the country with statutory authority to order the cleanup of sites contaminated from above ground petroleum releases. If the party responsible for the release cannot be determined, or is unwilling to participate in a remediation plan, IDEM may access the Hazardous Substance Response Trust Fund, to pay for the remedial action; and

IDEM now has the authority to attach a lien to any property for which state funds have been expended in a remedial action, and the responsible party is inaccessible.

HEA 1585 — Flat Fee for Out-Of-State Waste

Requires the Solid Waste Management Board to adopt a flat fee for out-of-state waste to help affect the costs incurred by the State of Indiana that can be attributed to the importation and disposal in Indiana of out-of-state waste. A portion of the revenue generated by this fee will be distributed to solid waste management districts to offset costs incurred by local government. The distribution will be based on the population of the district.

HEA 1585 also establishes a study committee to examine alternatives to hazardous waste disposal. The committee will consist of:

- four members of the House;
- four members of the Senate;
- commissioner of IDEM;
- one representative of the hazardous waste disposal industry;
- one representative of an environmental organization.

The study committee must submit a report to the General Assembly before November 1, 1991.

HEA 1716 — Solid Waste Transportation

Originally this bill contained four major components initiated by the governor that dealt with municipal solid waste transportation. The bill was later amended in the Senate to include a number of other issues somewhat germane to solid waste.

Beginning July 1, 1991 all municipal solid waste brokers, transfer station operators an transporters must demonstrate "good character" in order to operate in Indiana. These "good character" disclosure statements must be submitted on an annual basis.

Any out-of-state broker, hauler, or transfer station must post a security bond necessary to ensure collection and payment of any civil penalties that may result from their activities, and they must sign a consent to jurisdiction of Indiana courts.

If municipal solid waste is collected at a transfer station, the station must be inspected at least every six months. The transfer station must meet minimum standards established by the Solid Waste Management Board. These standards are to be developed in an attempt to ensure that illegal wastes are not being systematically loaded onto vehicles for disposal in Indiana facilities.

Every out-of-state hauler, broker, or transfer station operator must be in compliance with all licensing requirements and other laws of the state where it is located. Otherwise it is prohibited from disposing solid waste in Indiana.

HEA 1716 requires that all municipal waste collection vehicles operating in Indiana must obtain a valid registration and sticker from IDEM before operating in Indiana.

HEA 1716 was amended in the Senate to include definitions for "household hazardous waste" and "white goods," and establishes a "Solid Waste Planning Advisory Council" to help IDEM and the Environmental Policy Commission implement and revise the state solid waste management plan. The council consists of 13 members appointed as follows:

- IDEM commissioner
- Lieutenant governor
- Two members of the Senate
- Two members of the House
- One representative of cities and towns
- One representative of counties
- One representative of industrial waste generators
- One representative of utilities
- One representative of the private recycling industry
- One representative of the private solid waste management industry
- One environmentalist.

Solid waste district plans must now include specific provisions for managing the following waste streams:

- Tires
- Household hazardous waste
- Used oil
- White goods
- Other waste discussed in the state plan. batteries construction waste Condi exempt hazard. was

Language also was inserted into HEA 1716 that clarifies the procedures that two or more county solid waste districts must follow in order to merge into a multi-county district. The Senate majority also added a provision in HEA 1716 that repeals IC 13-7-28. This chapter defines waste-to-energy facilities as being considered disposal facilities and mandates the Solid Waste Management Board to adopt rules that prohibit the disposal of recyclable materials.

HEA 1720 Price Preference for Soybean Oil Based Ink

Requires state government procurement guidelines to authorize a 10% price preference for soybean oil based ink when reviewing bids for printing supplies. Local units of government and state educational institutions are excluded from this requirement.

HEA 1775 State Revolving Loan Fund

This bill clarifies the state's authority to administer the Wastewater Treatment Revolving Loan Fund program. Additionally, the bill creates a supplemental wastewater assistance fund to compliment the SRF program. The supplemental fund will be used to assist communities with proposals that do not score high enough to be eligible in the SRF program. It will also provide for funding of storm water and sewer overflow projects.

SEA 488 Indiana Energy Policy Forum

Establishes the Indiana energy policy forum consisting of twenty members including:

- The lieutenant governor
- 11 members from various energy related industries
- 8 legislators.

In addition, four ex officio advisors are to serve on the forum, including:

- IDEM commissioner
- IDNR director
- Department of Commerce executive director
- Chairman of the Indiana Recycling and Energy Development Board.

The forum is to assist in developing recommendations for state energy policy issues.

SEA 514 Cost Recovery for Environmental Compliance Plans

Authorizes public utilities to include in their rate base, costs associated with developing and implementing plans to comply with the Clean Air Act Amendments of 1990, the Safe Drinking Water Act, or Clean Water Act. These costs must be approved by the Indiana Utility Regulatory Commission (IURC) in consultation with IDEM and other state or federal environmental regulatory agencies.

APPENDIX

H

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FEDERAL WATER POLLUTION CONTROL ACT, AS AMENDED BY THE CLEAN WATER ACT OF 1977
(Commonly Referred to as Clean Water Act)

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(Enacted by Public Law 92-500, October 18, 1972, 86 Stat. 816; 33 U.S.C. 1251 et seq.; Amended by PL 93-207, December 28, 1973, and PL-243, January 2, 1974; PL 93-592, January 2, 1975; PL 94-238, March 23, 1976; PL 94-273, April 21, 1976; PL 94-558, October 19, 1976; PL 95-217, December 28, 1977; PL 95-576, November 2, 1978; PL 96-148, December 16, 1979; PL 96-478, PL 96-483, October 21, 1980; PL 96-510, December 11, 1980; PL 96-561, December 22, 1980; PL 97-35, August 13, 1981; PL 97-117, December 29, 1981; PL 97-164, April 2, 1982; PL 97-440, January 8, 1983; Amended by PL 100-4, February 4, 1987)

[*Editor's note*: The Federal Water Pollution Control Act Amendments of 1972, PL 92-500, replaced the previous language of the Act entirely, including the Water Quality Act of 1965, the Clean Water Restoration Act of 1966, and the Water Quality Improvement Act of 1970, all of which had been amendments of the Federal Water Pollution Control Act first passed in 1956. The 1977 amendments, PL 95-217, further amended PL 92-500, as did PL 95-576.]

TITLE I—RESEARCH AND RELATED PROGRAMS

DECLARATION OF GOALS AND POLICY

Sec. 101. (a) The objective of this Act is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. In order to achieve this objective it is hereby declared that, consistent with the provisions of this Act—

(1) it is the national goal that the discharge of pollutants into the navigable waters be eliminated by 1985;

(2) it is the national goal that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved by July 1, 1983;

(3) it is the national policy that the discharge of toxic pollutants in toxic amounts be prohibited;

(4) it is the national policy that Federal financial assistance be provided to construct publicly owned waste treatment works;

(5) it is the national policy that areawide waste treatment management planning processes be developed and implemented to assure adequate control of sources of pollutants in each State;

(6) it is the national policy that a major research and demonstration effort be made to develop technology necessary to eliminate the discharge of pollutants into the navigable waters, waters of the contiguous zone, and the oceans; and

(7) it is the national policy that programs for the control of nonpoint sources of pollution be developed and implemented in an expeditious manner so as to enable the goals of this Act to be met through the control of both point and nonpoint sources of pollution.

[101(a)(7) added by PL 100-4]

(b) It is the policy of the Congress to recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution, to plan the development and use (including restoration, preservation, and enhancement) of land and water resources, and to consult with the Administrator in the exercise of his authority under this Act. It is the policy of Congress that the States manage the construction grant program under this Act and implement the permit programs under sections 402 and 404 of this Act. It is further the policy of the Congress to support and aid research relating to the prevention, reduction, and elimination of pollution, and to provide Federal technical services and financial aid to State and interstate agencies and municipalities in connection with the prevention, reduction, and elimination of pollution.

(c) It is further the policy of Congress that the President, acting through the Secretary of State and such national and international organizations as he determines appropriate, shall take such action as may be necessary to insure that to the fullest extent possible all foreign countries shall take meaningful action for the prevention, reduction, and elimination of pollution in their waters and in international waters and for the achievement of goals regarding the elimination of discharge of

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pollutants and the improvement of water quality to at least the same extent as the United States does under its laws.

(d) Except as otherwise expressly provided in this Act, the Administrator of the Environmental Protection Agency (hereinafter in this Act called "Administrator") shall administer this Act.

(e) Public participation in the development, revision, and enforcement of any regulation, standard, effluent limitation, plan, or program established by the Administrator or any State under this Act shall be provided for, encouraged, and assisted by the Administrator and the States. The Administrator, in cooperation with the States, shall develop and publish regulations specifying minimum guidelines for public participation in such processes.

(f) It is the national policy that to the maximum extent possible the procedures utilized for implementing this Act shall encourage the drastic minimization of paperwork and interagency decision procedures, and the best use of available manpower and funds, so as to prevent needless duplication and unnecessary delays at all levels of government.

(g) It is the policy of Congress that the authority of each State to allocate quantities of water within its jurisdiction shall not be superseded, abrogated or otherwise impaired by this Act. It is the further policy of Congress that nothing in this Act shall be construed to supersede or abrogate rights to quantities of water which have been established by any State. Federal agencies shall co-operate with State and local agencies to develop comprehensive solutions to prevent, reduce and eliminate pollution in concert with programs for managing water resources.

COMPREHENSIVE PROGRAMS FOR WATER POLLUTION CONTROL

Sec. 102. (a) The Administrator shall, after careful investigation, and in cooperation with other Federal agencies, State water pollution control agencies, interstate agencies, and the municipalities and industries involved, prepare or develop comprehensive programs for preventing, reducing, or eliminating the pollution of the navigable waters and ground waters and improving the sanitary condition of surface and underground waters. In the development of such comprehensive programs due regard shall be given to the improvements which are necessary to conserve such waters for the protection and propagation of fish and aquatic life and wildlife, recreational purposes, and the withdrawal of such waters for public water supply, agricultural, industrial, and other purposes. For the purpose of this section, the Administrator is authorized to make joint investigations with any such agencies of the condition of any waters in any State or States, and of the discharges of any sewage, industrial wastes, or substance which may adversely affect such waters.

(b) (1) In the survey or planning of any reservoir by the Corps of Engineers, Bureau of Reclamation, or other Federal agency, consideration shall be given to inclusion of storage for regulation of streamflow, except that any such storage and water releases shall not be provided as a substitute for adequate treatment or other methods of controlling waste at the source.

(2) The need for and the value of storage or regulation of streamflow (other than for water quality) including but not limited to navigation, salt water intrusion, recreation, esthetics, and fish and wildlife, shall be determined by the Corps of Engineers, Bureau of Reclamation, or other Federal agencies.

(3) The need for, the value of, and the impact of, storage for water quality control shall be determined by the Administrator, and his views on these matters shall be set forth in any report or presentation to Congress proposing authorization or construction of any reservoir including such storage.

(4) The value of such storage shall be taken into account in determining the economic value of the entire project of which it is a part, and costs shall be allocated to the purpose of regulation of streamflow in a manner which will insure that all project purposes, share equitably in the benefits of multiple-purpose construction.

(5) Costs of regulation of streamflow features incorporated in any Federal reservoir or other impoundment under the provisions of this Act shall be determined and the beneficiaries identified and if the benefits are widespread or national in scope, the costs of such features shall be nonreimbursable.

(6) No license granted by the Federal Power Commission for a hydroelectric power project shall include storage for regulation of streamflow for the purpose of water quality control unless the Administrator shall recommend its inclusion and such reservoir storage capacity shall not exceed such proportion of the total storage required for the water quality control plan as the drainage area of such reservoir bears to the drainage area of the river basin or basins involved in such water quality control plan.

(c) (1) The Administrator shall, at the request of the Governor of a State, or a majority of the Governors when more than one State is involved, make a grant to pay not to exceed 50 per centum of the administrative expenses of a planning agency for a period not to exceed three years, which period shall begin after the date of enactment of the Federal Water Pollution Control Act Amendments of 1972, if such agency provides for ade-

quate representation of appropriate State, interstate, local, or (when appropriate) international interests in the basin or portion thereof involved and is capable of developing an effective, comprehensive water quality control plan for a basin or portion thereof.

(2) Each planning agency receiving a grant under this subsection shall develop a comprehensive pollution control plan for the basin or portion thereof which—

(A) is consistent with any applicable water quality standards, effluent and other limitations, and thermal discharge regulations established pursuant to current law within the basin;

(B) recommends such treatment works as will provide the most effective and economical means of collection, storage, treatment, and elimination of pollutants and recommends means to encourage both municipal and industrial use of such works;

(C) recommends maintenance and improvement of water quality within the basin or portion thereof and recommends methods of adequately financing those facilities as may be necessary to implement the plan; and

(D) as appropriate, is developed in cooperation with, and is consistent with any comprehensive plan prepared by the Water Resources Council, any areawide waste management plans developed pursuant to section 208 of this Act, and any State plan developed pursuant to section 303(e) of this Act.

(3) For the purposes of this subsection the term "basin" includes, but is not limited to, rivers and their tributaries, streams, coastal waters, sounds, estuaries; bays, lakes, and portions thereof, as well as the lands drained thereby.

(d) The Administrator, after consultation with the States, and River Basin Commissions established under the Water Resources Planning Act, shall submit a report to Congress on or before July 1, 1978, which analyzes the relationship between programs under this Act, and the programs by which State and Federal agencies allocate quantities of water. Such report shall include recommendations concerning the policy in section 101(g) of the Act to improve coordination of efforts to reduce and eliminate pollution in concert with programs for managing water resources.

INTERSTATE COOPERATION AND UNIFORM LAWS

Sec. 103. (a) The Administrator shall encourage cooperative activities by the States for the prevention, reduction, and elimination of pollution, encourage the enactment of improved and, so far as practicable, uniform State laws relating to the prevention, reduction, and elimination of pollution; and encourage compacts between States for the prevention and control of pollution.

(b) The consent of the Congress is hereby given t two or more States to negotiate and enter into agre ments or compacts, not in conflict with any law treaty of the United States, for (1) cooperative effo and mutual assistance for the prevention and control pollution and the enforcement of their respective lav relating thereto, and (2) the establishment of such age cies, joint or otherwise, as they may deem desirable fc making effective such agreements and compacts. N such agreement or compact shall be binding or obli atory upon any State a party thereto unless and until has been approved by the Congress.

RESEARCH, INVESTIGATIONS, TRAINING, AND INFORMATION

[*Editor's note:* Section 105 of PL 100-4 provides:

"Sec. 105. Research On Effects Of Pollutants.

In carrying out the provisions of section 104(a) of th Federal Water Pollution Control Act, the Administrate shall conduct research on the harmful effects on th health and welfare of persons caused by pollutants i water, in conjunction with the United States Fish an Wildlife Service, the National Oceanic and Atmospher Administration, and other Federal, State, and interstat agencies carrying on such research. Such research sha include, and shall place special emphasis on, the effe that bioaccumulation of these pollutants in aquatic sp cies has upon reducing the value of aquatic commerci and sport industries. Such research shall further stud methods to reduce and remove these pollutants from th relevant affected aquatic species so as to restore an enhance these valuable resources."]

Sec. 104. (a) The Administrator shall establish na tional programs for the prevention, reduction, and elimination of pollution and as part of such program shall—

(1) in cooperation with other Federal, State, and local agencies, conduct and promote the coordination and acceleration of, research, investigations, experi ments, training, demonstrations, surveys, and studies relating to the causes, effects, extent, prevention reduction, and elimination of pollution;

(2) encourage, cooperate with, and render technica services to pollution control agencies and other appro priate public or private agencies, institutions, and or ganizations, and individuals, including the genera public, in the conduct of activities referred to in para graph (1) of this subsection;

(3) conduct, in cooperation with State water pollu tion control agencies and other interested agencies organizations and persons, public investigations concern ing the pollution of any navigable waters, and report or the results of such investigations;

(4) establish advisory committees composed of recognized experts in various aspects of pollution and representatives of the public to assist in the examination and evaluation of research progress and proposals and to avoid duplication of research;

(5) in cooperation with the States, and their political subdivisions, and other Federal agencies establish, equip, and maintain a water quality surveillance system for the purpose of monitoring the quality of the navigable waters and ground waters and the contiguous zone and the oceans and the Administrator shall, to the extent practicable, conduct such surveillance by utilizing the resources of the National Aeronautics and Space Administration, the National Oceanic and Atmospheric Administration, the Geological Survey, and the Coast Guard, and shall report on such quality in the report required under subsection (a) of section 516; and

(6) initiate and promote the coordination and acceleration of research designed to develop the most effective practicable tools and techniques for measuring the social and economic costs and benefits of activities which are subject to regulation under this Act; and shall transmit a report on the results of such research to the Congress not later than January 1, 1974.

(b) In carrying out the provisions of subsection (a) of this section the Administrator is authorized to—

(1) collect and make available, through publications and other appropriate means, the results of and other information, including appropriate recommendations by him in connection therewith, pertaining to such research and other activities referred to in paragraph (1) of subsection (a);

(2) cooperate with other Federal departments and agencies, State water pollution control agencies, interstate agencies, other public and private agencies, institutions, organizations, industries involved, and individuals, in the preparation and conduct of such research and other activities referred to in paragraph (1) of subsection (a);

(3) make grants to State water pollution control agencies, interstate agencies, other public or nonprofit private agencies, institutions, organizations, and individuals, for purposes stated in paragraph (1) of subsection (a) of this section;

(4) contract with public or private agencies, institutions, organizations, and individuals, without regard to sections 3648 and 3709 of the Revised Statutes (31 U.S.C. 529; 41 U.S.C. 5), referred to in paragraph (1) of subsection (a);

(5) establish and maintain research fellowships at public or nonprofit private educational institutions or research organizations;

(6) collect and disseminate, in cooperation wi[illegible]ther Federal departments and agencies, and with[illegible]ner public or private agencies, institutions, and organizations having related responsibilities, basic data on chemical, physical, and biological effects of varying water quality and other information pertaining to pollution and the prevention, reduction, and elimination thereof; and

(7) develop effective and practical processes, methods, and prototype devices for the prevention, reduction, and elimination of pollution.

(c) In carrying out the provisions of subsection (a) of this section the Administrator shall conduct research on, and survey the results of other scientific studies on, the harmful effects on the health or welfare of persons caused by pollutants. In order to avoid duplication of effort, the Administrator shall, to the extent practicable, conduct such research in cooperation with and through the facilities of the Secretary of Health, Education, and Welfare.

(d) In carrying out the provisions of this section the Administrator shall develop and demonstrate under varied conditions (including conducting such basic and applied research, studies, and experiments as may be necessary:

(1) Practicable means of treating municipal sewage, and other waterborne wastes to implement the requirements of section 201 of this Act;

(2) Improved methods and procedures to identify and measure the effects of pollutants, including those pollutants created by new technological developments; and

(3) Methods and procedures for evaluating the effects on water quality of augmented streamflows to control pollution not susceptible to other means of prevention, reduction, or elimination.

(e) The Administrator shall establish, equip, and maintain field laboratory and research facilities, including, but not limited to, one to be located in the northeastern area of the United States, one in the Middle Atlantic area, one in the southeastern area, one in the midwestern area, one in the southwestern area, one in the Pacific Northwest, and one in the State of Alaska, for the conduct of research, investigations, experiments, field demonstrations and studies, and training relating to the prevention, reduction and elimination of pollution. Insofar as practicable, each such facility shall be located near institutions of higher learning in which graduate training in such research might be carried out. In conjunction with the development of criteria under section 403 of this Act, the Administrator shall construct the facilities authorized for the National Marine Water Quality Laboratory established under this subsection.

(f) The Administrator shall conduct research and technical development work, and make studies, with

respect to the quality of the waters of the Great Lakes, including an analysis of the present and projected future water quality of the Great Lakes under varying conditions of waste treatment and disposal, an evaluation of the water quality needs of those to be served by such waters, an evaluation of municipal, industrial, and vessel waste treatment and disposal practices with respect to such waters, and a study of alternate means of solving pollution problems (including additional waste treatment measures) with respect to such waters.

(g) (1) For the purpose of providing an adequate supply of trained personnel to operate and maintain existing and future treatment works and related activities, and for the purpose of enhancing substantially the proficiency of those engaged in such activities, the Administrator shall finance pilot programs, in cooperation with State and interstate agencies, municipalities, educational institutions, and other organizations and individuals, of manpower development and training and retraining of persons in, on entering into, the field of operation and maintenance of treatment works and related activities. Such program and any funds expended for such a program shall supplement, not supplant, other manpower and training programs and funds available for the purposes of this paragraph. The Administrator is authorized under such terms and conditions as he deems appropriate, to enter into agreements with one or more States, acting jointly or severally, or with other public or private agencies or institutions for the development and implementation of such a program.

(2) The Administrator is authorized to enter into agreements with public and private agencies and institutions, and individuals to develop and maintain an effective system for forecasting the supply of, and demand for, various professional and other occupational categories needed for the prevention, reduction, and elimination of pollution in each region, State, or area of the United States and, from time to time, to publish the results of such forecasts.

(3) In furtherance of the purposes of this Act, the Administrator is authorized to—

(A) make grants to public or private agencies and institutions and to individuals for training projects, and provide for the conduct of training by contract with public or private agencies and institutions and with individuals without regard to sections 3648 and 3709 of the Revised Statutes;

(B) establish and maintain research fellowships in the Environmental Protection Agency with such stipends and allowances, including traveling and subsistence expenses, as he may deem necessary to procure the assistance of the most promising research fellows; and

(C) provide, in addition to the program established under paragraph (1) of this subsection, training in technical matters relating to the causes, prevention, reduction, and elimination of pollution for personnel of public agencies and other persons with suitable qualifications.

(4) The Administrator shall submit, through the President, a report to the Congress not later than December 31, 1973, summarizing the actions taken under this subsection and the effectiveness of such actions, and setting forth the number of persons trained, the occupational categories for which training was provided, the effectiveness of other Federal, State, and local training programs in this field, together with estimates of future needs, recommendations on improving training programs, and such other information and recommendations, including legislative recommendations, as he deems appropriate.

(h) The Administrator is authorized to enter into contracts with, or make grants to, public or private agencies and organizations and individuals for (A) the purpose of developing and demonstrating new or improved methods for the prevention, removal, reduction, and elimination of pollution in lakes, including the undesirable effects of nutrients and vegetation, and (B) the construction of publicly owned research facilities for such purpose.

(i) The Administrator, in cooperation with the Secretary of the department in which the Coast Guard is operating, shall—

(1) engage in such research, studies, experiments, and demonstrations as he deems appropriate, relative to the removal of oil from any waters and to the prevention, control, and elimination of oil and hazardous substances pollution;

(2) publish from time to time the results of such activities; and

(3) from time to time, develop and publish in the Federal Register specifications and other technical information on the various chemical compounds used in the control of oil and hazardous substances spills.

In carrying out this subsection, the Administrator may enter into contracts with, or make grants to, public or private agencies and organizations and individuals.

(j) The Secretary of the department in which the Coast Guard is operating shall engage in such research, studies, experiments, and demonstrations as he deems appropriate relative to equipment which is to be installed on board a vessel and is designed to receive, retain, treat, or discharge human body wastes and the wastes from toilets and other receptacles intended to receive or retain body wastes with particular emphasis on equipment to be installed on small recreational vessels. The Secretary of the department in which the Coast

Guard is operating shall report to Congress the results of such research, studies, experiments, and demonstrations prior to the effective date of any regulations established under section 312 of this Act. In carrying out this subsection the Secretary of the department in which the Coast Guard is operating may enter into contracts with, or make grants to, public or private organizations and individuals.

(k) In carrying out the provisions of this section relating to the conduct by the Administrator of demonstration projects and the development of field laboratories and research facilities, the Administrator may acquire land and interests therein by purchase, with appropriated or donated funds, by donation, or by exchange for acquired or public lands under his jurisdiction which he classifies as suitable for disposition. The values of the properties so exchanged either shall be approximately equal, or if they are not approximately equal, the values shall be equalized by the payment of cash to the grantor or to the Administrator as the circumstances require.

(l) (1) The Administrator shall, after consultation with appropriate local, State, and Federal agencies, public and private organizations, and interested individuals, as soon as practicable but not later than January 1, 1973, develop and issue to the States for the purpose of carrying out this Act the latest scientific knowledge available in indicating the kind and extent of effects on health and welfare which may be expected from the presence of pesticides in the water in varying quantities. He shall revise and add to such information whenever necessary to reflect developing scientific knowledge.

(2) The President shall, in consultation with appropriate local, State, and Federal agencies, public and private organizations, and interested individuals, conduct studies and investigations of methods to control the release of pesticides into the environment which study shall include examination of the persistency of pesticides in the water environment and alternatives thereto. The President shall submit reports, from time to time, on such investigations to Congress together with his recommendations for any necessary legislation.

(m) (1) The Administrator shall, in an effort to prevent degradation of the environment from the disposal of waste oil, conduct a study of (A) the generation of used engine, machine, cooling, and similar waste oil, including quantities generated, the nature and quality of such oil, present collecting methods and disposal practices, and alternate uses of such oil; (B) the long-term, chronic biological effects of the disposal of such waste oil; and (C) the potential market for such oils, including the economic and legal factors relating to the sale of products made from such oils, the level of subsidy, if any, needed to encourage the purchase by public and private nonprofit agencies of products from such oil, and the practicability of Federal procurement, on priority basis, of products made from such oil. In conducting such study, the Administrator shall consult with affected industries and other persons.

(2) The Administrator shall report the preliminary results of such study to Congress within six months after the date of enactment of the Federal Water Pollution Control Act Amendments of 1972, and shall submit a final report to Congress within 18 months after such date of enactment.

(n) (1) The Administrator shall, in cooperation with the Secretary of the Army, the Secretary of Agriculture, the Water Resources Council, and with other appropriate Federal, State, interstate, or local public bodies and private organizations, institutions, and individuals, conduct and promote, encourage contributions to, continuing comprehensive studies of the effects of pollution, including sedimentation, in the estuaries and estuarine zones of the United States on fish and wildlife, on sport and commercial fishing, on recreation, on water supply and water power, and on other beneficial purposes. Such studies shall also consider the effect of demographic trends, the exploitation of mineral resources and fossil fuels, land and industrial development, navigation, flood and erosion control, and other uses of estuaries and estuarine zones upon the pollution of the waters therein.

(2) In conducting such studies, the Administrator shall assemble, coordinate, and organize all existing pertinent information on the Nation's estuaries and estuarine zones; carry out a program of investigations and surveys to supplement existing information in representative estuaries and estuarine zones; and identify the problems and areas where further research and study are required.

(3) The Administrator shall submit to Congress, from time to time, reports of the studies authorized by this subsection but at least one such report during any six-year period. Copies of each such report shall be made available to all interested parties, public and private.

(4) For the purpose of this subsection, the term "estuarine zones" means an environmental system consisting of an estuary and those transitional areas which are consistently influenced or affected by water from an estuary such as, but not limited to, salt marshes, coastal and intertidal areas, bays, harbors, lagoons, inshore waters, and channels, and the term "estuary" means all or part of the mouth of a river or stream or other body of water having unimpaired natural connection with open sea and within which the sea water is measurably

diluted with fresh water derived from land drainage.

(o) (1) The Administrator shall conduct research and investigations on devices, systems, incentives, pricing policy, and other methods of reducing the total flow of sewage, including, but not limited to, unnecessary water consumption in order to reduce the requirements for, and the costs of, sewage and waste treatment services. Such research and investigations shall be directed to develop devices, systems, policies, and methods capable of achieving the maximum reduction of unnecessary water consumption.

(2) The Administrator shall report the preliminary results of such studies and investigations to the Congress within one year after the date of enactment of the Federal Water Pollution Control Act Amendments of 1972, and annually thereafter in the report required under subsection (a) of section 516. Such report shall include recommendations for any legislation that may be required to provide for the adoption and use of devices, systems, policies, or other methods of reducing water consumption and reducing the total flow of sewage. Such report shall include an estimate of the benefits to be derived from adoption and use of such devices, systems, policies, or other methods and also shall reflect estimates of any increase in private, public, or other cost that would be occasioned thereby.

(p) In carrying out the provisions of subsection (a) of this section the Administrator shall, in cooperation with the Secretary of Agriculture, other Federal agencies, and the States, carry out a comprehensive study and research program to determine new and improved methods and the better application of existing methods of preventing, reducing, and eliminating pollution from agriculture, including the legal, economic, and other implications of the use of such methods.

(q) (1) The Administrator shall conduct a comprehensive program of research and investigation and pilot project implementation into new and improved methods of preventing reducing, storing, collecting, treating, or otherwise eliminating pollution from sewage in rural and other areas where collection of sewage in conventional, community-wide sewage collection systems is impractical, uneconomical, or otherwise infeasible, or where soil conditions or other factors preclude the use of septic tank and drainage field systems.

(2) The Administrator shall conduct a comprehensive program of research and investigation and pilot project implementation into new and improved methods for the collection and treatment of sewage and other liquid wastes combined with the treatment and disposal of solid wastes.

(3) The Administrator shall establish, either within the Environmental Protection Agency, or through contract with an appropriate public or private non-profit organization, a national clearinghouse which shall (A) receive reports and information resulting from research, demonstrations, and other projects funded under this Act related to paragraph (1) of this subsection and to subsection (e) (2) of section 105; (B) coordinate and disseminate such reports and information for use by Federal and State agencies, municipalities, institutions and persons in developing new and improved methods pursuant to this subsection; and (C) provide for the collection and dissemination of reports and information relevant to this subsection from other Federal and State agencies, institutions, universities, and persons.

(4) Small Flows Clearinghouse. — Notwithstanding section 205(d) of this Act, from amounts that are set aside for a fiscal year under section 205(i) of this Act and are not obligated by the end of the 24-month period of availability for such amounts under section 205(d), the Administrator shall make available $1,000,000 or such unobligated amount, whichever is less, to support a national clearinghouse within the Environmental Protection Agency to collect and disseminate information on small flows of sewage and innovative or alternative wastewater treatment processes and techniques, consistent with paragraph (3). This paragraph shall apply with respect to amounts set aside under section 205(i) for which the 24-month period of availability referred to in the preceding sentence ends on or after September 30, 1986.

[Sec. 104(q)(4) added by PL 100-4]

(r) The Administrator is authorized to make grants to colleges and universities to conduct basic research into the structure and function of fresh water aquatic ecosystems, and to improve understanding of the ecological characteristics necessary to the maintenance of the chemical, physical, and biological integrity of freshwater aquatic ecosystems.

(s) The Administrator is authorized to make grants to one or more institutions of higher education (regionally located and to be designated as "River Study Centers") for the purpose of conducting and reporting on interdisciplinary studies on the nature of river systems, including, hydrology, biology, ecology, economics, the relationship between river uses and land uses, and the effects of development within river basins on river systems and on the value of water resources and water related activities. No such grant in any fiscal year shall exceed $1,000,000.

(t) The Administrator shall, in cooperation with State and Federal agencies and public and private organizations, conduct continuing comprehensive studies of the effects and methods of control of thermal discharges. In evaluating alternative methods of control the studies shall consider (1) such data as are available

on the latest available technology, economic feasibility including cost-effectivness analysis, and (2) the total impact on the environment, considering not only water quality but also air quality, land use, and effective utilization and conservation of fresh water and other natural resources. Such studies shall consider methods of minimizing adverse effects and maximizing beneficial effects of thermal discharges. The results of these studies shall be reported by the Administrator as soon as practicable, but not later than 270 days after enactment of this subsection, and shall be made available to the public and the States, and considered as they become available by the Administrator in carrying out section 316 of this Act and by the States in proposing thermal water quality standards.

(u) There is authorized to be appropriated (1) not to exceed $100,000,000 per fiscal year ending June 30, 1973, the fiscal year ending June 30, 1974, and the fiscal year ending June 30, 1975, not to exceed $14,039,000 for the fiscal year ending September 30, 1980, not to exceed $20,697,000 for the fiscal year ending September 30, 1981, not to exceed $22,770,000 for the fiscal year ending September 30, 1982, such sums as may be necessary for fiscal years 1983 through 1985, and not to exceed $22,770,000 per fiscal year for each of the fiscal years 1986 through 1990, for carrying out the provisions of this section, other than subsections (g)(1) and (2), (p), (r), and (t), except that such authorizations are not for any research, development, or demonstration activity pursuant to such provisions; (2) not to exceed $7,500,000 for fiscal years 1973, 1974, and 1975, $2,000,000 for fiscal year 1977, $3,000,000 for fiscal year 1978, $3,000,000 for fiscal year 1979, $3,000,000 for fiscal year 1980, $3,000,000 for fiscal year 1981, $3,000,000 for fiscal year 1982, such sums as may be necessary for fiscal years 1983 through 1985, and $3,000,000 per fiscal year for each of the fiscal years 1986 through 1990, for carrying out the provisions of subsection (g)(1); (3) not to exceed $2,500,000 for fiscal year 1973, 1974, and 1975, $1,000,000 for fiscal year 1977, $1,500,000 for fiscal year 1978, $1,500,000 for fiscal year 1979, $1,500,000 for fiscal year 1980, $1,500,000 for fiscal year 1981, $1,500,000 for fiscal year 1982, such sums as may be necessary for fiscal years 1983 through 1985, and $1,500,000 per fiscal year for each of the fiscal years 1986 through 1990, for carrying out the provisions of subsection (g)(2); (4) not to exceed $10,000,000 for each of the fiscal years ending June 30, 1973, June 30, 1974, and June 30, 1975, for carrying out the provisions of subsection (p); (5) not to exceed $15,000,000 per fiscal year for the fiscal years ending June 30, 1973, June 30, 1974, and June 30, 1975, for carrying out the provisions of subsection (r); and (6) not to exceed $10,000,000 per fiscal year for the fiscal years ending June 30, 1973, June 30, 1974, and June 30, 1975, for carrying out the provisions of subsection (t).

[Sec. 104(u) amended by PL 95-576; PL 96-483; PL 100-4]

GRANTS FOR RESEARCH AND DEVELOPMENT

Sec. 105. (a) The Administrator is authorized to conduct in the Environmental Protection Agency, and to make grants to any State, municipality, or intermunicipal or interstate agency for the purpose of assisting in the development of—

(1) any project which will demonstrate a new or improved method of preventing, reducing, and eliminating the discharge into any waters of pollutants from sewers which carry storm water or both storm water and pollutants; or

(2) any project which will demonstrate advanced waste treatment and water purification methods (including the temporary use of new or improved chemical additives which provide substantial immediate improvement to existing treatment processes), or new or improved methods of joint treatment systems for municipal and industrial wastes; and to include in such grants such amounts as are necessary for the purpose of reports, plans, and specifications in connection therewith.

(b) The Administrator is authorized to make grants to any State or States or interstate agency to demonstrate, in river basins or portions thereof, advanced treatment and environmental enhancement techniques to control pollution from all sources, within such basins or portions thereof, including nonpoint sources, together with in stream water quality improvement techniques.

(c) In order to carry out the purposes of section 301 of this Act, the Administrator is authorized to (1) conduct in the Environmental Protection Agency, (2) make grants to persons, and (3) enter into contracts with persons, for research and demonstration projects for prevention of pollution of any waters by industry including, but not limited to, the prevention, reduction, and elimination of the discharge of pollutants. No grant shall be made for any project under this subsection unless the Administrator determines that such project will develop or demonstrate a new or improved method of treating industrial wastes or otherwise prevent pollution by industry, which method shall have industrywide application.

(d) In carrying out the provisions of this section, the Administrator shall conduct, on a priority basis, an accelerated effort to develop, refine, and achieve practical application of:

(1) waste management methods applicable to point

and nonpoint-sources of pollutants to eliminate the discharge of pollutants, including, but not limited to, elimination of runoff of pollutants and the effects of pollutants from inplace or accumulated sources;

(2) advanced waste treatment methods applicable to point and nonpoint sources, including inplace or accumulated sources of pollutants, and methods for reclaiming and recycling water and confining pollutants so they will not migrate to cause water or other environmental pollution; and

(3) improved methods and procedures to identify and measure the effects of pollutants on the chemical, physical, and biological integrity of water, including those pollutants created by new technological developments.

(e) (1) The Administrator is authorized to (A) make, in consultation with the Secretary of Agriculture, grants to persons for research and demonstration projects with respect to new and improved methods of preventing, reducing, and eliminating pollution from agriculture, and (B) disseminate, in cooperation with the Secretary of Agriculture, such information obtained under this subsection, section 104(p), and section 304 as will encourage and enable the adoption of such methods in the agricultural industry.

(2) The Administrator is authorized, (A) in consultation with other interested Federal agencies, to make grants for demonstration projects with respect to new and improved methods of preventing, reducing, storing, collecting, treating, or otherwise eliminating pollution from sewage in rural and other areas where collection of sewage in conventional, community-wide sewage collection systems is impractical, uneconomical, or otherwise infeasible, or where soil conditions or other factors preclude the use of septic tank and drainage field systems, and (B) in cooperation with other interested Federal and State agencies, to disseminate such information obtained under this subsection as will encourage and enable the adoption of new and improved methods developed pursuant to this subsection.

(f) Federal grants under subsection (a) of this section shall be subject to the following limitations:

(1) No grant shall be made for any project unless such project shall have been approved by the appropriate State water pollution control agency or agencies and by the Administrator;

(2) No grant shall be made for any project in an amount exceeding 75 per centum of cost thereof as determined by the Administrator; and

(3) No grant shall be made for any project unless the Administrator determines that such project will serve as a useful demonstration for the purpose set forth in clause (1) or (2) of subsection (a).

(g) Federal grants under subsections (c) and (d) of this section shall not exceed 75 per centum of the cost of the project.

(h) For the purpose of this section there is authorized to be appropriated $75,000,000 per fiscal year for the fiscal year ending June 30, 1973, the fiscal year ending June 30, 1974, and the fiscal year ending June 30, 1975, and from such appropriations at least 10 per centum of the funds actually appropriated in each fiscal year shall be available only for the purposes of subsection (e).

(i) The Administrator is authorized to make grants to a municipality to assist in the costs of operating and maintaining a project which received a grant under this section, section 104, or section 113 of this Act prior to the date of enactment of this subsection so as to reduce the operation and maintenance costs borne by the recipients of services from such project to costs comparable to those for projects assisted under title II of this Act.

(j) The Administrator is authorized to make a grant to any grantee who received an increased grant pursuant to section 202(a) (2) of this Act. Such grant may pay up to 100 per centum of the costs of technical evaluation of the operation of the treatment works, costs of training of persons (other than employees of the grantee), and costs of disseminating technical information on the operation of the treatment works.

GRANTS FOR POLLUTION CONTROL PROGRAMS

Sec. 106. (a) There are hereby authorized to be appropriated the following sums, to remain available until expended, to carry out the purposes of this section—

(1) $60,000,000 for the fiscal year ending June 30, 1973; and

(2) $75,000,000 for the fiscal year ending June 30, 1974, and the fiscal year ending June 30, 1975, $100,000,000 per fiscal year for the fiscal years 1977, 1978, 1979, 1980, $75,000,000 per fiscal year for the fiscal years 1981 and 1982, such sums as may be necessary for fiscal years 1983 through 1985, and $75,000,000 per fiscal year for each of the fiscal years 1986 through 1990; for grants to States and to interstate agencies to assist them in administering programs for the prevention, reduction, and elimination of pollution, including enforcement directly or through appropriate State law enforcement officers or agencies.

[Sec. 106(a)(2) amended by PL 96-483; PL 100-4]

(b) From the sums appropriated in any fiscal year, the Administrator shall make allotments to the several States and interstate agencies in accordance with regulations promulgated by him on the basis of the extent of the pollution problem in the respective States.

(c) The Administrator is authorized to pay each State and interstate agency each fiscal year either—

(1) the allotment of such State or agency for such fiscal year under subsection (b), or

(2) the reasonable costs as determined by the Administrator of developing and carrying out a pollution pro-

gram by such State or agency during such fiscal year, whichever amount is the lesser.

(d) No grant shall be made under this section to any State or interstate agency for any fiscal year when the expenditure of non-Federal funds by such State or interstate agency during such fiscal year for the recurrent expenses of carrying out its pollution control program are less than the expenditure by such State or interstate agency of non-Federal funds for such recurrent program expenses during the fiscal year ending June 30, 1971.

(e) Beginning in fiscal year 1974 the Administrator shall not make any grant under this section to any State which has not provided or is not carrying out as a part of its program—

(1) the establishment and operation of appropriate devices, methods, systems, and procedures necessary to monitor, and to compile and analyze data on (including classification according to eutrophic condition), the quality of navigable waters and to the extent practicable, ground waters including biological monitoring; and provision for annually updating such data and including it in the report required under section 305 of this Act;

(2) authority comparable to that in section 504 of this Act and adequate contingency plans to implement such authority.

(f) Grants shall be made under this section on condition that—

(1) Such State (or interstate agency) filed with the Administrator within one hundred and twenty days after the date of enactment of this section:

(A) a summary report of the current status of the State pollution control program, including the criteria used by the State in determining priority of treatment works; and

(B) such additional information, data, and reports as the Administrator may require.

(2) No federally assumed enforcement as defined in section 309 (a) (2) is in effect with respect to such State or interstate agency.

(3) Such State (or interstate agency) submits within one hundred and twenty days after the date of enactment of this section and before October 1 of each year thereafter for the Administrator's approval of its program for the prevention, reduction, and elimination of pollution in accordance with purposes and provisions of this Act in such form and content as the Administrator may prescribe.

[Sec. 106 (f)(3) amended by PL 94-273]

(g) Any sums allotted under subsection (b) in any fiscal year which are not paid shall be reallotted by the Administrator in accordance with regulations promulgated by him.

MINE WATER POLLUTION CONTROL DEMONSTRATIONS

Sec. 107. (a) The Administrator in cooperation with the Appalachian Regional Commission and other Federal agencies is authorized to conduct, to make grants for, or to contract for, projects to demonstrate comprehensive approaches to the elimination or control of acid or other mine water pollution resulting from active or abandoned mining operations and other environmental pollution affecting water quality within all or part of a watershed or river basin, including siltation from surface mining. Such projects shall demonstrate the engineering and economic feasibility and practicality of various abatement techniques which will contribute substantially to effective and practical methods of acid or other mine water pollution elimination or control, and other pollution affecting water quality, including techniques that demonstrate the engineering and economic feasibility and practicality of using sewage sludge materials and other municipal wastes to diminish or prevent pollution affecting water quality from acid, sedimentation, or other pollutants and in such projects to restore affected lands to usefulness for forestry, agriculture, recreation, or other beneficial purposes.

(b) Prior to undertaking any demonstration project under this section in the Appalachian region (as defined in section 403 of the Appalachian Regional Development Act of 1965, as amended), the Appalachian Regional Commission shall determine that such demonstration project is consistent with the objectives of the Appalachian Regional Development Act of 1965, as amended.

(c) The Administrator, in selecting watersheds for the purposes of this section, shall be satisfied that the project area will not be affected adversely by the influx of acid or other mine water pollution from nearby sources.

(d) Federal participation in such projects shall be subject to the conditions—

(1) that the State shall acquire any land or interests therein necessary for such project; and

(2) that the State shall provide legal and practical protection to the project area to insure against any activities which will cause future acid or other mine water pollution.

(e) There is authorized to be appropriated $30,000,000 to carry out the provisions of this section, which sum shall be available until expended.

POLLUTION CONTROL IN GREAT LAKES

Sec. 108. (a) The Administrator, in cooperation with other Federal departments, agencies, and instrumentalities is authorized to enter, into agreements with any State, political subdivision, interstate agency, or other public agency, or combination thereof, to carry out one

or more projects to demonstrate new methods and techniques and to develop preliminary plans for the elimination or control of pollution, within all or any part of the watersheds of the Great Lakes. Such projects shall demonstrate the engineering and economic feasibility and practicality of removal of pollutants and prevention of any polluting matter from entering into the Great Lakes in the future and other reduction and remedial techniques which will contribute substantially to effective and practical methods of pollution prevention, reduction, or elimination.

(b) Federal participation in such projects shall be subject to the condition that the State, political subdivision, interstate agency, or other public agency, or combination thereof, shall pay not less than 25 per centum of the actual project costs, which payment may be in any form, including, but not limited to, land or interests therein that is needed for the project, and personal property or services the value of which shall be determined by the Administrator.

(c) There is authorized to be appropriated $20,000,000 to carry out the provisions of subsections (a) and (b) of this section, which sum shall be available until expended.

(d) (1) In recognition of the serious conditions which exist in Lake Erie, the Secretary of the Army, acting through the Chief of Engineers, is directed to design and develop a demonstration waste water management program for the rehabilitation and environmental repair of Lake Erie. Prior to the initiation of detailed engineering and design, the program, along with the specific recommendations shall be submitted to the Congress for statutory approval. This authority is in addition to, and not in lieu of, other waste water studies aimed at eliminating pollution emanating from select sources around Lake Erie.

(2) This program is to be developed in cooperation with the Environmental Protection Agency, other interested departments, agencies, and instrumentalities of the Federal Government, and the States and their political subdivisions. This program shall set forth alternative systems for managing waste water on a regional basis and shall provide local and State governments with a range of choice as to the type of system to be used for the treatment of waste water. These alternative systems shall include both advanced waste treatment technology and land disposal systems including aerated treatment-spray irrigation technology and will also include provisions for the disposal of solid wastes, including sludge. Such program should include measures to control point sources of pollution, area sources of pollution, including acid-mine drainage, urban runoff and rural runoff, and in place sources of pollution, including bottom loads, sludge banks, and polluted harbor dredgings.

(e) There is authorized to be appropriated $5,000,000 to carry out the provisions of subsection (d) of this section, which sum shall be available until expended.

[*Editor's Note:* Section 521 of PL 100-4 states:

"Sec. 521. Great Lakes Consumptive Use Study.

(a) Study of Consumptive Uses. — In recognition of the serious impacts on the Great Lakes environment that may occur as a result of increased consumption of Great Lakes water, including loss of wetlands and reduction of fish spawning and habitat areas, as well as serious economic losses to vital Great Lakes industries, and in recognition of the national goal to provide evironmental protection and preservation of our natural resources while allowing for continued economic growth, the Secretary of the Army in cooperation with the Administrator, other interested departments, agencies, and instrumentalities of the United States, and the eight Great Lakes States, is authorized to conduct a study of the effects of Great Lakes water consumption on economic growth and environmental quality in the Great Lakes region and of control measures that can be implemented to reduce the quantity of water consumed.

(b) Matters Included. — The study authorized by this section shall at a minimum include the following:

(1) a review of the methodologies used to forecast Great Lakes consumptive uses, including an analysis of the sensitivity of key variables affecting such uses;

(2) an analysis of the effect that enforcement of provisions of the Federal Water Pollution Control Act relating to thermal discharges has had on consumption of Great Lakes water;

(3) an anlysis of the effect of laws, regulations, and national policy objectives on consumptive uses of Great Lakes water used in manufacturing;

(4) an analysis of the associated environmental impacts and of the economic effects on industry and other interests in the Great Lakes region associated with individual consumptive use control strategies; and

(5) a summary discussion containing recommendations for methods of controlling consumptive uses which methods maximize benefits to the Great Lakes ecosystem and also provide for continued full economic growth for consuming industries as well as other industries which depend on the use of Great Lakes water.

(c) Great Lakes States Defined. — For purposes of this section, the "Great Lakes States" means Minnesota, Wisconsin, Illinois, Ohio, Michigan, Indiana, Pennsylvania, and New York.

(d) Authorization of Appropriations. — There is authorized to be appropriated for fiscal years beginning after September 30, 1986, $750,000 to carry out this section. Sums appropriated under this section shall remain available until expended."]

TRAINING GRANTS AND CONTRACTS

Sec. 109. (a) The Administrator is authorized to make grants to or contracts with institutions of higher education, or combinations of such institutions, to assist them in planning, developing, strengthening, improving, or carrying out programs or projects for the preparation of undergraduate students to enter an occupation which involves the design, operation, and maintenance of treatment works, and other facilities whose purpose is water quality control. Such grants or contracts may include payment of all or part of the cost of programs or projects such as—

(A) planning for the development or expansion of programs or projects for training persons in the operation and maintenance of treatment works;

(B) training and retraining of faculty members;

(C) conduct of short-term or regular session institutes for study by persons engaged in, or preparing to engage in, the preparation of students preparing to enter an occupation involving the operation and maintenance of treatment works;

(D) carrying out innovative and experimental programs of cooperative education involving alternate periods of full-time or part-time academic study at the institution and periods of full-time or part-time employment involving the operation and maintenance of treatment works; and

(E) research into, and development of, methods of training students or faculty, including the preparation of teaching materials and the planning of curriculum.

(b) (1) The Administrator may pay 100 per centum of any additional cost of construction of treatment works required for a facility to train and upgrade waste treatment works operation and maintenance personnel and for the costs of other State treatment works operator training programs, including mobile training units, classroom rental, specialized instructors, and instructional material.

(2) The Administrator shall make no more than one grant for such additional construction in any State (to serve a group of States, where, in his judgment, efficient training programs require multi-State programs), and shall make such grant after consultation with and approval by the State or States on the basis of (A) the suitability of such facility for training operation and maintenance personnel for treatment works throughout such State or States; and (B) a commitment by the State agency or agencies to carry out at such facility a program of training approved by the Administrator. In any case where a grant is made to serve two or more States, the Administrator is authorized to make an additional grant for a supplemental facility in each such State.

(3) The Administrator may make such grant out of the sums allocated to a State under section 205 of this Act, except that in no event shall the Federal cost of any such training facilities exceed $500,000.

(4) The Administrator may exempt a grant under this section from any requirement under section 204(a)(3) of this Act. Any grantee who received a grant under this section prior to enactment of the Clean Water Act of 1977 shall be eligible to have its grant increased by funds made available under such Act.

APPLICATION FOR TRAINING GRANT OR CONTRACT; ALLOCATION OF GRANTS OR CONTRACTS

Sec. 110. (1) A grant or contract authorized by section 109 may be made only upon application to the Administrator at such time or times and containing such information as he may prescribe, except that no such application shall be approved unless it—

(A) sets forth programs, activities, research, or development for which a grant is authorized under section 109 and describes the relation to any program set forth by the applicant in an application, if any, submitted pursuant to section 111;

(B) provides such fiscal control and fund accounting procedures as may be necessary to assure proper disbursement of and accounting for Federal funds paid to the applicant under this section; and

(C) provides for making such reports, in such form and containing such information, as the Administrator may require to carry out his functions under this section, and for keeping such records and for affording such access thereto as the Administrator may find necessary to assure the correctness and verification of such reports.

(2) The Administrator shall allocate grants or contracts under section 109 in such manner as will most nearly provide an equitable distribution of the grants or contracts throughout the United States among institutions of higher education which show promise of being able to use funds effectively for the purpose of this section.

(3) (A) Payments under this section may be used in accordance with regulations of the Administrator, and subject to the terms and conditions set forth in an application approved under paragraph (1), to pay part of the compensation of students employed in connection with the operation and maintenance of treatment works, other than as an employee in connection with the operation and maintenance of treatment works or as an employee in any branch of the Government of the United States, as part of a program for which a grant has been approved pursuant to this section.

(B) Departments and agencies of the United States are encouraged, to the extent consistent with efficient administration, to enter into arrangements with institutions of higher education for the full-time, part-time, or temporary employment, whether in the competitive or excepted service, of students enrolled in programs set forth in applications approved under paragraph (1).

AWARD OF SCHOLARSHIPS

Sec. 111. (1) The Administrator is authorized to award scholarships in accordance with the provisions of this section for undergraduate study by persons who plan to enter an occupation involving the operation and maintenance of treatment works. Such scholarships shall be awarded for such periods as the Administrator may determine but not to exceed four academic years.

(2) The Administrator shall allocate scholarships under this section among institutions of higher education with programs approved under the provisions of this section for the use of individuals accepted into such programs, in such manner and accordance to such plan as will insofar as practicable—

(A) provide an equitable distribution of such scholarships throughout the United States; and

(B) attract recent graduates of secondary schools to enter an occupation involving the operation and maintenance of treatment works.

(3) The Administrator shall approve a program of any institution of higher education for the purposes of this section only upon application by the institution and only upon his finding—

(A) that such program has a principal objective the education and training of persons in the operation and maintenance of treatment works;

(B) that such program is in effect and of high quality, or can be readily put into effect and may reasonably be expected to be of high quality;

(C) that the application describes the relation of such program to any program, activity, research, or development set forth by the applicant in an application, if any, submitted pursuant to section 110 of this Act; and

(D) that the application contains satisfactory assurances that (i) the institution will recommend to the Administrator for the award of scholarships under this section, for study in such program, only persons who have demonstrated to the satisfaction of the institution a serious intent, upon completing the program, to enter an occupation involving the operation and maintenance of treatment works, and (ii) the institution will make reasonable continuing efforts to encourage recipients of scholarships under this section, enrolled in such program, to enter occupations involving the operation and maintenance of treatment works upon completing the program.

(4) (A) The Administrator shall pay to persons awarded scholarships under this section such stipends (including such allowances for subsistence and other expenses for such persons and their dependents) as he may determine to be consistent with prevailing practices under comparable federally supported programs.

(B) The Administrator shall (in addition to the stipends paid to persons under paragraph (1)) pay to the institution of higher education at which such person is pursuing his course of study such amount as he may determine to be consistent with prevailing practices under comparable federally support programs.

(5) A person awarded a scholarship under the provisions of this section shall continue to receive the payments provided in this section only during such periods as the Administrator finds that he is maintaining satisfactory proficiency and devoting full time to study or research in the field in which such scholarship was awarded in an institution of higher education, and is not engaging in gainful employment other than employment approved by the Administrator by or pursuant to regulation.

(6) The Administrator shall by regulation provide that any person awarded a scholarship under this section shall agree in writing to enter and remain in an occupation involving the design, operation, or maintenance of treatment works for such period after completion of this course of studies as the Administrator determines appropriate.

DEFINITIONS AND AUTHORIZATIONS

Sec. 112. (a) As used in sections 109 through 112 of this Act—

(1) The term "institution of higher education" means an educational institution described in the first sentence of section 1201 of the Higher Education Act of 1965 (other than an institution of any agency of the United States) which is accredited by a nationally recognized accrediting agency of association approved by the Administrator for this purpose. For purposes of this subsection, the Administrator shall publish a list of nationally recognized accrediting agencies or associations which he determines to be reliable authority as to the quality of training offered.

(2) The term "academic year" means an academic year or its equivalent, as determined by the Administrator.

(b) The Administrator shall annually report his activities under section 109 through 112 of this Act, including recommendations for needed revisions in the provisions thereof.

(c) There are authorized to be appropriated $25,000,000 per fiscal year for the fiscal years ending June 30, 1973, June 30, 1974, and June 30, 1975, $6,000,000 for the fiscal year ending September 30, 1977, $7,000,000 for the fiscal year ending September 30, 1978, $7,000,000 for the fiscal year ending September 30, 1979, $7,000,000 for the fiscal year ending September 30, 1980, $7,000,000 for the fiscal year ending September 30, 1981, $7,000,000 for the fiscal year ending September 30, 1982, such sums as may be necessary for fiscal years 1983 through 1985, and

$7,000,00 per fiscal year for each of the fiscal years 1986 through 1990, to carry out sections 109 through 112 of this Act.

[Sec. 112(c) amended by PL 96-483; PL 100-4]

ALASKA VILLAGE DEMONSTRATION PROJECTS

Sec. 113. (a) The Administrator is authorized to enter into agreements with the State of Alaska to carry out one or more projects to demonstrate methods to provide for central community facilities for safe water and elimination or control of pollution in those native villages of Alaska without such facilities. Such project shall include provisions for community safe water supply systems, toilets, bathing and laundry facilities, sewage disposal facilities, and other similar facilities, and educational and informational facilities and programs relating to health and hygiene. Such demonstration projects shall be for the further purpose of developing preliminary plans for providing such safe water and such elimination or control of pollution for all native villages in such State.

(b) In carrying out this section the Administrator shall cooperate with the Secretary of Health, Education, and Welfare for the purpose of utilizing such of the personnel and facilities of that Department as may be appropriate.

(c) The Administrator shall report to Congress not later than July 1, 1973, the results of the demonstration projects authorized by this section together with his recommendations, including any necessary legislation, relating to the establishment of a statewide program.

(d) There is authorized to be appropriated not to exceed $2,000,000 to carry out this section. In addition, there is authorized to be appropriated to carry out this section not to exceed $200,000 for the fiscal year ending September 30, 1978 and $220,000 for the fiscal year ending September 30, 1979.

(e) The Administrator is authorized to coordinate with the Secretary of the Department of Health, Education, and Welfare, the Secretary of the Department of Housing and Urban Development, the Secretary of the Department of the Interior, the Secretary of the Department of Agriculture, and the heads of any other departments or agencies he may deem appropriate to conduct a joint study with representatives of the State of Alaska and the appropriate Native organizations (as defined in Public Law 92-203) to develop a comprehensive program for achieving adequate sanitation services in Alaska villages. This study shall be coordinated with the programs and projects authorized by sections 104(q) and 105(e)(2) of this Act. The Administrator shall submit a report of the results of the study, together with appropriate supporting data and such recommendations as he deems desirable, to the Committee on Environment and Public Works of the Senate and to the Committee on Public Works and Transportation of the House of Representatives not later than December 31, 1979. The Administrator shall also submit recommended administrative actions, procedures, and any proposed legislation necessary to implement the recommendations of the study no later than June 30, 1980.

(f) The Administrator is authorized to provide technical, financial and management assistance for operation and maintenance of the demonstration projects constructed under this section, until such time as the recommendations of subsection (e) are implemented.

(g) For the purpose of this section, the term "village" shall mean an incorporated or unincorporated community with a population of ten to six hundred people living within a two-mile radius. The term "sanitation services" shall mean water supply, sewage disposal, solid waste disposal and other services necessary to maintain generally accepted standards of personal hygiene and public health.

LAKE TAHOE STUDY

Sec. 114. (a) The Administrator, in consultation with the Tahoe Regional Planning Agency, the Secretary of Agriculture, other Federal agencies, representatives of State and local governments, and members of the public, shall conduct a thorough and complete study on the adequacy of and need for extending Federal oversight and control in order to preserve the fragile ecology of Lake Tahoe.

(b) Such study shall include an examination of the interrelationships and responsibilities of the various agencies of the Federal Government and State and local governments with a view to establishing the necessity for redefinition of legal and other arrangements between these various governments, and making specific legislative recommendations to Congress. Such study shall consider the effect of various actions in terms of their environmental impact on the Tahoe Basin, treated as an ecosystem.

(c) The Administrator shall report on such study to Congress not later than one year after the date of enactment of this subsection.

(d) There is authorized to be appropriated to carry out this section not to exceed $500,000.

IN-PLACE TOXIC POLLUTANTS

Sec. 115. The Administrator is directed to identify the location of in-place pollutants with emphasis on toxic pollutants in harbors and navigable waterways and is authorized, acting through the Secretary of the Army, to make contracts for the removal and appropriate disposal of such materials from critical port and harbor

areas. There is authorized to be appropriated $15,000,000 to carry out the provisions of this section, which sum shall be available until expended.

HUDSON RIVER PCB RECLAMATION DEMONSTRATION PROJECT

Sec. 116. (a) The Administrator is authorized to enter into contracts and other agreements with the State of New York to carry out a project to demonstrate methods for the selective removal of polychlorinated biphenyls contaminating bottom sediments of the Hudson River, treating such sediments as required, burying such sediments in secure landfills, and installing monitoring systems for such landfills. Such demonstration project shall be for the purpose of determining the feasibility of indefinite storage in secure landfills of toxic substances and of ascertaining the improvement of the rate of recovery of a toxic contaminated national waterway. No pollutants removed pursuant to this paragraph shall be placed in any landfill unless the Administrator first determines that disposal of the pollutants in such landfill would provide a higher standard of protection of the public health, safety, and welfare than disposal of such pollutants by any other method including, but not limited to, incineration or a chemical destruction process.

(b) The Administrator is authorized to make grants to the State of New York to carry out this section from funds allotted to such State under section 205(a) of this Act, except that the amount of any such grant shall be equal to 75 per centum of the cost of the project and such grant shall be made on condition that non-Federal sources provide the remainder of the cost of such project. The authority of this section shall be available until September 30, 1983. Funds allotted to the State of New York under section 205(a) shall be available under this subsection only to the extent that funds are not available, as determined by the Administrator, to the State of New York for the work authorized by this section under section 115 or 311 of this Act or a comprehensive hazardous substance response and clean up fund. Any funds used under the authority of this subsection shall be deducted from any estimate of the needs of the State of New York prepared under section 616(b) of this Act. The Administrator may not obligate or expend more than $20,000,000 to carry out this section.

[Sec. 116 added by PL 96-483]

[*Editor's note:* Section 12 of PL 96-483 provides:

"Sec. 12. The Administrator of the Environmental Protection Agency is authorized to make grants to States to undertake a demonstration program for the cleanup of State-owned abandoned mines which can be used as hazardous waste disposal sites. The State shall pay 10 percentum of project costs. At a minimum, the Administrator shall undertake projects under such program in the States of Ohio, Illinois, and West Virginia. There are authorized to be appropriated $10,000,000 per fiscal year for each of the fiscal years ending September 30, 1982, September 30, 1983, and September 30, 1984, to carry out this section. Such projects shall be undertaken in accordance with all applicable laws and regulations."]

Sec. 117. Chesapeake Bay.

[Sec. 117 added by PL 100-4]

(a) Office. — The Administrator shall continue the Chesapeake Bay Program and shall establish and maintain in the Environmental Protection Agency an office, division, or branch of Chesapeake Bay Programs to—

(1) collect and make available, through publications and other appropriate means, information pertaining to the environmental quality of the Chesapeake Bay (hereinafter in this subsection referred to as the 'Bay');

(2) coordinate Federal and State efforts to improve the water quality of the Bay;

(3) determine the impact of sediment deposition in the Bay and identify the sources, rates, routes, and distribution patterns of such sediment deposition; and

(4) determine the impact of natural and man-induced environmental changes on the living resources of the Bay and the relationships among such changes, with particular emphasis placed on the impact of pollutant loadings of nutrients, chlorine, acid precipitation, dissolved oxygen, and toxic pollutants, including organic chemicals and heavy metals, and with special attention given to the impact of such changes on striped bass.

(b) Interstate Development Plan Grants.—

(1) Authority. — The Administrator shall, at the request of the Governor of a State affected by the interstate management plan developed pursuant to the Chesapeake Bay Program (hereinafter in this section referred to as the 'plan'), make a grant for the purpose of implementing the management mechanisms contained in the plan if such State has, within 1 year after the date of the enactment of this section, approved and committed to implement all or substantially all aspects of the plan. Such grants shall be made subject to such terms and conditions as the Administrator considers appropriate.

(2) Submission of Proposal. — A State or combination of States may elect to avail itself of the benefits of this subsection by submitting to the Administrator a comprehensive proposal to implement management mechanisms contained in the plan which shall include (A) a description of proposed abatement actions which the State or combination of States commits to take within a specified time period to reduce pollution in the Bay and to meet applicable water quality standards, and (B) the estimated cost of the abatement actions proposed to be taken during the next fiscal year. If the Administrator finds that such proposal is consistent with the national policies set forth in section 101(a) of this Act

and will contribute to the achievement of the national goals set forth in such section, the Administrator shall approve such proposal and shall finance the costs of implementing segments of such proposal.

(3) Federal share. — Grants under this subsection shall not exceed 50 percent of the costs of implementing the management mechanims contained in the plan in any fiscal year and shall be made on condition that non-Federal sources provide the remainder of the cost of implementing the management mechanisms contained in the plan during such fiscal year.

(4) Administrative costs. — Administrative costs in the form of salaries, overhead, or indirect costs for services provided and charged against programs or projects supported by funds made available under this subsection shall not exceed in any one fiscal year 10 percent of the annual Federal grant made to a State under this subsection.

(c) Reports. — Any State or combination of States that receives a grant under subsection (b) shall, within 18 months after the date of receipt of such grant and biennially thereafter, report to the Adminstrator on the progress made in implementing the interstate management plan developed pursuant to the Chesapeake Bay Program. The Administrator shall transmit each such report along with the comments of the administrator on such report to Congress.

(d) Authorization of Appropriations. — There are hereby authorized to be appropriated the following sums, to remain available until expended, to carry out the purposes of this section:

(1) $3,000,000 per fiscal year for each of the fiscal years 1987, 1988, 1989, and 1990, to carry out subsection (a); and

(2) $10,000,000 per fiscal year for each of the fiscal years 1987, 1988, 1989, and 1990, for grants to States under subsction (b).

Sec. 118. Great Lakes.

[Sec. 118 added by PL 100-4]

(a) Findings, Purpose, and Definitions.—

(1) Findings. — The Congress finds that—

(A) the Great Lakes are a valuable national resource, continuously serving the people of the United States and other nations as an important source of food, fresh water, recreation, beauty, and enjoyment;

(B) the United States should seek to attain the goals embodied in the Great Lakes Water Quality Agreement of 1978 with particular emphasis on goals related to toxic pollutants; and

(C) the Environmental Protection Agency should take the lead in the effort to meet those goals, working with other Federal agencies and State and local authorities.

(2) Purpose. — It is the purpose of this section to achieve the goals embodied in the Great Lakes Water Quality Agreement of 1978 through improved organization and definition of mission on the part of the Agency, funding of State grants for pollution control in the Great Lakes area, and improved accountability for implementation of such agreement.

(3) Definitions. — For purposes of this section, the term—

(A) "Agency" means the Environmental Protection Agency;

(B) "Great Lakes" means Lake Ontario, Lake Erie, Lake Huron (including Lake St. Clair), Lake Michigan, and Lake Superior, and the connecting channels (Saint Mary's River, Saint Clair River, Detroit River, Niagara River, and Saint Lawrence River to the Canadian Border);

(C) "Great Lakes System" means all the streams, rivers, lakes, and other bodies of water within the drainage basin of the Great Lakes;

(D) "Program Office" means the Great Lakes National Program Office established by this section; and

(E) "Research Office" means the Great Lakes Research Office established by subsection (d).

(b) Great Lakes National Program Office. — The Great Lakes National Program Office (previously established by the Administrator) is hereby established within the Agency. The Program Office shall be headed by a Director who, by reason of management experience and technical expertise relating to the Great Lakes, is highly qualified to direct the development of programs and plans on a variety of Great Lakes issues. The Great Lakes National Program Office shall be located in a Great Lakes State.

(c) Great Lakes Management.—

(1) Functions. — The Program Office shall—

(A) in cooperation with appropriate Federal, State, tribal, and international agencies, and in accordance with section 101(e) of this Act, develop and implement specific action plans to carry out the responsibilities of the United States under the Great Lakes Water Quality Agreement of 1978;

(B) establish a Great Lakes system-wide surveillance network to monitor the water quality of the Great Lakes, with specific emphasis on the monitoring of toxic pollutants;

(C) serve as the liaison with, and provide information to, the Canadian members of the International Joint Commission and the Canadian counterpart to the Agency;

(D) coordinate actions of the Agency (including actions by headquarters and regional offices thereof) aimed at improving Great Lakes water quality; and

(E) coordinate actions of the Agency with the actions of other Federal agencies and State and local authorities, so as to ensure the input of those agencies and authorities in developing water quality strategies and

obtain the support of those agencies and authorities in achieving the objectives of such agreement.

(2) 5-Year Plan and Program. — The Program Office shall develop, in consultation with the States, a five-year plan and program for reducing the amount of nutrients introduced into the Great Lakes. Such program shall incorporate any management program for reducing nutrient runoff from nonpoint sources established under section 319 of this Act and shall include a program for monitoring nutrient runoff into, and ambient levels in, the Great Lakes.

(3) 5-Year Study and Demonstration Projects. — The Program Office shall carry out a five-year study and demonstration projects relating to the control and removal of toxic pollutants in the Great Lakes, with emphasis on the removal of toxic pollutants from bottom sediments. In selecting locations for conducting demonstration projects under this paragraph, priority consideration shall be given to projects at the following locations: Saginaw Bay, Michigan; Sheboygan Harbor, Wisconsin; Grand Calumet River, Indiana; Ashtabula River, Ohio; and Buffalo River, New York.

(4) Administrator's Responsibility. — The Administrator shall ensure that the Program Office enters into agreements with the various organizational elements of the Agency involved in Great Lakes activities and the appropriate State agencies specifically delineating—

(A) the duties and responsibilities of each such element in the Agency with respect to the Great Lakes;

(B) the time periods for carrying out such duties and responsibilities; and

(C) the resources to be committed to such duties and responsibilities.

(5) Budget Item. — The Administrator shall, in the Agency's annual budget submission to Congress, include a funding request for the Program Office as a separate budget line item.

(6) Comprehensive Report. — Within 90 days after the end of each fiscal year, the Administrator shall submit to Congress a comprehensive report which—

(A) describes the achievements in the preceding fiscal year in implementing the Great Lakes Water Quality Agreement of 1978 and shows by categories (including judicial enforcement, research, State cooperative efforts, and general administration) the amounts expended on Great Lakes water quality initiatives in such preceding fiscal year;

(B) describes the progress made in such preceding fiscal year in implementing the system of surveillance of the water quality in the Great Lakes System, including the monitoring of groundwater and sediment, with particular reference to toxic pollutants;

(C) describes the long-term prospects for improving the condition of the Great Lakes; and

(D) provides a comprehensive assessment of the planned efforts to be pursued in the succeeding fiscal year for implementing the Great Lakes Water Quality Agreement of 1978, which assessment shall—

(i) show by categories (including judicial enforcement, research, State cooperative efforts, and general administration) the amount anticipated to be expended on Great Lakes water quality initiatives in the fiscal year to which the assessment relates; and

(ii) include a report of current programs administered by other Federal agencies which make available resources to the Great Lakes water quality management efforts.

(d) Great Lakes Research.—

(1) Establishment of Research Office. — There is established within the National Oceanic and Atmospheric Administration the Great Lakes Research Office.

(2) Identification of Issues. — The Research Office shall identify issues relating to the Great Lakes resources on which research is needed. The Research Office shall submit a report to Congress on such issues before the end of each fiscal year which shall identify any changes in the Great Lakes system with respect to such issues.

(3) Inventory. — The Research Office shall identify and inventory Federal, State, university, and tribal environmental research programs (and, to the extent feasible, those of private organizations and other nations) relating to the Great Lakes system, and shall update that inventory every four years.

(4) Research Exchange. — The Research Office shall establish a Great Lakes research exchange for the purpose of facilitating the rapid identification, acquisition, retrieval, dissemination, and use of information concerning research projects which are ongoing or completed and which affect the Great Lakes System.

(5) Research Program. — The Research Office shall develop, in cooperation with the Coordination Office, a comprehensive environmental research program and data base for the Great Lakes system. The data base shall include, but not be limited to, data relating to water quality, fisheries, and biota.

(6) Monitoring. — The Research Office shall conduct, through the Great Lakes Environmental Research Laboratory, the National Sea Grant College program, other Federal laboratories, and the private sector, appropriate research and monitoring activities which address priority issues and current needs relating to the Great Lakes.

(7) Location. — The Research Office shall be located in a Great Lakes State.

(e) Research and Management Coordination. —

(1) Joint Plan. Before October 1 of each year, the Program Office and the Research Office shall prepare a joint research plan for the fiscal year which begins in the following calendar year.

(2) Contents of Plan. — Each plan prepared under paragraph (1) shall —

(A) identify all proposed research dedicated to activities conducted under the Great Lakes Water Quality Agreement of 1978;

(B) include the Agency's assessment of priorities for research needed to fulfill the terms of such Agreement; and

(C) identify all proposed research that may be used to develop a comprehensive environmental data base for the Great Lakes System and establish priorities for development of such data base.

(f) Interagency Cooperation. — The head of each department, agency, or other instrumentality of the Federal Government which is engaged in, is concerned with, or has authority over programs relating to research, monitoring, and planning to maintain, enhance, preserve, or rehabilitate the environmental quality and natural resources of the Great Lakes, including the Chief of Engineers of the Army, the Chief of the Soil Conservation Service, the Commandant of the Coast Guard, the Director of the Fish and Wildlife Service, and the Administrator of the National Oceanic and Atmospheric Administration, shall submit an annual report to the Administrator with respect to the activities of that agency or office affecting compliance with the Great Lakes Water Quality Agreement of 1978.

(g) Relationship to Existing Federal and State Laws and International Treaties. — Nothing in this section shall be construed to affect the jurisdiction, powers, or prerogatives of any department, agency, or officer of the Federal Government or of any State government, or of any tribe, nor any powers, jurisdiction, or prerogatives of any international body created by treaty with authority relating to the Great Lakes.

(h) Authorizations of Great Lakes Appropriations. — There are authorized to be appropriated to the Administrator to carry out this section not to exceed $11,000,000 per fiscal year for the fiscal years 1987, 1988, 1989, 1990, and 1991. Of the amounts appropriated each fiscal year—

(1) 40 percent shall be used by the Great Lakes National Program Office on demonstration projects on the feasibility of controlling and removing toxic pollutants;

(2) 7 percent shall be used by the Great Lakes National Program Office for the program of nutrient monitoring; and

(3) 30 percent shall be transferred to the National Oceanic and Atmospheric Administration for use by the Great Lakes Research Office.

TITLE II—GRANTS FOR CONSTRUCTION OF TREATMENT WORKS

[*Editors note:* Section 202(f) of PL 100-4 states:

"(f) Availability of Certain Funds for Non-Federal Share. — Notwithstanding any other provision of law, Federal assistance made available by the Farmers H[illegible] Administration to any political subdivision of a [illegible] may be used to provide the non-Federal share of the cost of any construction project carried out under section 201 of the Federal Water Pollution Control Act."]

PURPOSE

Sec. 201. (a) It is the purpose of this title to require and to assist the development and implementation of waste treatment management plans and practices which will achieve the goals of this Act.

(b) Waste treatment management plans and practices shall provide for the application of the best practicable waste treatment technology before any discharge into receiving waters, including reclaiming and recycling of water, and confined disposal of pollutants so they will not migrate to cause water or other environmental pollution and shall provide for consideration of advanced waste treatment techniques.

(c) To the extent practicable, waste treatment management shall be on an areawide basis and provide control or treatment of all point and nonpoint sources of pollution, including in place or accumulated pollution sources.

(d) The Administrator shall encourage waste treatment management which results in the construction of revenue producing facilities providing for—

(1) the recycling of potential sewage pollutants through the production of agriculture, silviculture, aquaculture products, or any combination thereof;

(2) the confined and contained disposal of pollutants not recycled;

(3) the reclamation of wastewater; and

(4) the ultimate disposal of sludge in a manner that will not result in environmental hazards.

(e) The Administrator shall encourage waste treatment management which results in integrating facilities for sewage treatment and recycling with facilities to treat, dispose of, or utilize other industrial and municipal wastes, including but not limited to solid waste and waste heat and thermal discharges. Such integrated facilities shall be designed and operated to produce revenues in excess of capital and operation and maintenance costs and such revenues shall be used by the designated regional management agency to aid in financing other environmental improvement programs.

(f) The Administrator shall encourage waste treatment management which combines "open space" and recreational considerations with such management.

(g) (1) The Administrator is authorized to make grants to any State, municipality, or intermunicipal or interstate agency for the construction of publicly owned treatment works. On and after October 1, 1984, grants under this title shall be made only for projects for secondary treatment or more stringent treatment, or any

cost effective alternative thereto, new interceptors and appurtenances, and infiltration-in-flow correction. Notwithstanding the preceding sentences, the Administrator may make grants on and after October 1, 1984, for (A) any project within the definition set forth in section 212(2) of this Act, other than for a project referred to in the preceding sentence, and (B) any purpose for which a grant may be made under sections 319(h) and (i) of this Act (including any innovative and alternative approaches for the control of nonpoint sources of pollution), except that not more than 20 per centum (as determined by the Governor of the State) of the amount allotted to a State under section 205 of this Act for any fiscal year shall be obligated in such State under authority of this sentence.

[Sec. 201(g)(1) revised by PL 97-117; amended by PL 100-4]

[*Editor's note:* Section 213(b) — (d) and Section 214 of PL 100-4, stipulate:

"(b) Walker and Smithfield Townships, Pennsylvania. — Out of funds available for grants in the State of Pennsylvania under the third sentence of section 201(g)(1) of the Federal Water Pollution Control Act in fiscal year 1987, the Administrator shall make grants —

(1) to Walker Township, Pennsylvania, for developing a collector system and connecting its wastewater treatment system into the Huntingdon Borough, Pennsylvania, sewage treatment plant, and

(2) to Smithfield Township, Pennsylvania, for rehabilitating and extending its collector system.

(c) Taylor Mill, Kentucky. — Notwithstanding section 201(g)(1) of the Federal Water Pollution Control Act or any other provision of law, the Administrator shall make a grant of $250,000 from funds allotted under section 205 of such Act to the State of Kentucky for fiscal year 1986 to the city of Taylor Mill, Kentucky, for the repair and reconstruction, as necessary, of the publicly owned treatment works of such city.

(d) Nevada County, California. — Out of funds available for grants in the State of California under the third sentence of section 201(g)(1) of the Federal Water Pollution Control Act in fiscal year 1987, the Administrator shall make a grant for the construction of a collection system serving the Glenshire/Devonshire area of Nevada County, California, to deliver waste to the Tahoe-Truckee Sanitary District's regional wastewater treatment facility."

"Sec. 214. Chicago Tunnel and Reservoir Project.

The Chicago tunnel and reservoir project may receive grants under the last sentence of section 201(g)(1) of the Federal Water Pollution Control Act without regard to the limitation contained in such sentence if the Administrator determines that such project meets the cost-effectiveness requirements of sections 217 and 218 of such Act without any redesign or reconstruction and if the Governor of the affected State demonstrates to the satisfaction of the Administrator the water quality benefits of such project."]

(2) The Administrator shall not make grants from funds authorized for any fiscal year beginning after June 30, 1974, to any State, municipality, or intermunicipal or interstate agency for the erection, building, acquisition, alteration, remodeling, improvement, or extension of treatment works unless the grant applicant has satisfactorily demonstrated to the Administrator that—

(A) alternative waste management techniques have been studied and evaluated and the works proposed for grant assistance will provide for the application of the best practicable waste treatment technology over the life of the works consistent with the purposes of this title; and

(B) as appropriate, the works proposed for grant assistance will take into account and allow to the extent practicable the application of technology at a later date which will provide for the reclaiming or recycling of water or otherwise eliminate the discharge of pollutants.

(3) The Administrator shall not approve any grant after July 1, 1973, for treatment works under this section unless the applicant shows to the satisfaction of the Administrator that each sewer collection system discharging into such treatment works is not subject to excessive infiltration.

(4) The Administrator is authorized to make grants to applicants for treatment works grants under this section for such sewer system evaluation studies as may be necessary to carry out the requirements of paragraph (3) of this subsection. Such grants shall be made in accordance with rules and regulations promulgated by the Administrator. Initial rules and regulations shall be promulgated under this paragraph not later than 120 days after the date of enactment of the Federal Water Pollution Control Act Amendments of 1972.

(5) The Administrator shall not make grants from funds authorized for any fiscal year beginning after September 30, 1978, to any State, municipality, or inter municipal or interstate agency for the erection, building, acquisition, alteration, remodeling, improvement or extension of treatment works unless the grant applicant has satisfactorily demonstrated to the Administrator that innovative and alternative wastewater treatment processes and techniques which provide for the reclaiming and reuse of water, otherwise eliminate the discharge of pollutants, and utilize recycling techniques land treatment, new or improved methods of waste treatment management for municipal and industrial waste (discharged into municipal systems) and the confined disposal of pollutants, so that pollutants will not migrate to cause water or other environmental pollu

tion, have been fully studied and evaluated by the applicant taking into account section 201(d) of this Act and taking into account and allowing to the extent practicable the more efficient use of energy and resources.

[*Editor's note:* Section 517 of PL 100-4 provides:

"**Sec. 517. Study of Effectiveness of Innovative and Alternative Processes and Techniques.**

(a) Effectiveness Study. — The Administrator shall study the effectiveness on waste treatment of innovative and alternative wastewater treatment processes and techniques referred to in section 201(g)(5) of the Federal Water Pollution Control Act which have been utilized in treatment works constructed under such Act. In conducting such study, the Administrator shall compile information, by State, on the types of such processes and techniques utilized, on the number of facilities constructed with such processes and techniques, and a description of such processes and techniques which have not performed to design standards. The Administrator shall also determine which States have not obligated the full amount set aside under section 205(i) of such Act for such processes and techniques and the reasons for each such State's failure to make such obligations.

(b) Report. — Not later than one year after the date of the enactment of this Act, the Administrator shall submit to the Committee on Public Works and Transportation of the House of Representatives and the Committee on Environment and Public Works of the Senate a report on the results of such study, along with recommendations for providing more effective incentives for innovative and alternative wastewater treatment processes and techniques."]

(6) The Administrator shall not make grants from funds authorized for any fiscal year beginning after September 30, 1978, to any State, municipality, or intermunicipal or interstate agency for the erection, building, acquisition, alteration, remodeling, improvement, or extension of treatment works unless the grant applicant has satisfactorily demonstrated to the Administrator that the applicant has analyzed the potential recreation and open space opportunities in the planning of the proposed treatment works.

(h) A grant may be made under this section to construct a privately owned treatment works serving one or more principal residences or small commercial establishments constructed prior to, and inhabited on the date of enactment of this subsection where the Administrator finds that—

(1) a public body otherwise eligible for a grant under subsection (g) of this section has applied on behalf of a number of such units and certified that public ownership of such works is not feasible;

(2) such public body has entered into an agreement with the Administrator which guarantees that such treatment works will be properly operated and maintained and will comply with all other requirements of section 204 of this Act and includes a system of charges to assure that each recipient of waste treatment services under such a grant will pay its proportionate share of the cost of operation and maintenance (including replacement); and

(3) the total cost and environmental impact of providing waste treatment services to such residences or commercial establishments will be less than the cost of providing a system of collection and central treatment of such wastes.

(i) The Administrator shall encourage waste treatment management methods, processes, and techniques which will reduce total energy requirements.

(j) The Administrator is authorized to make a grant for any treatment works utilizing processes and techniques meeting the guidelines promulgated under section 304(d) (3) of this Act, if the Administrator determines it is in the public interest and if in the cost effectiveness study made of the construction grant application for the purpose of evaluating alternative treatment works, the life cycle cost of the treatment works for which the grant is to be made does not exceed the life cycle cost of the most effective alternative by more than 15 per centum.

(k) No grant made after November 15, 1981, for a publicly owned treatment works, other than for facility planning and the preparation of construction plans and specifications, shall be used to treat, store, or convey the flow of any industrial user into such treatment works in excess of a flow per day equivalent to fifty thousand gallons per day of sanitary waste. This subsection shall not apply to any project proposed by a grantee which is carrying out an approved project to prepare construction plans and specifications for a facility to treat wastewater, which received its grant approval before May 15, 1980. This subsection shall not be in effect after November 15, 1981.

[Sec. 201(k) added by PL 96-483; amended by PL 97-117]

[*Editor's note:* Section 4 of PL 96-483 provides:

"Sec. 4. The Administrator of the Environmental Protection Agency shall study and report to the Congress not later than March 15, 1981, on the effect of the amendment by section 3* on the construction of publicly owned treatment works, industrial participation in publicly owned treatment works, treatment of industrial discharges, and the appropriate degree of Federal and non-Federal participation in the funding of publicly owned treatment works."]

*Section 3 of PL 96-483 amended Section 201 of this Act by adding subsection (k).

(l)(1) After the date of enactment of this subsection, Federal grants shall not be made for the purpose of providing assistance solely for facility plans, or plans, specifications, and estimates for any proposed project for the construction of treatment works. In the event that the proposed project receives a grant under this section for construction, the Administrator shall make an allowance in such grant for non-Federal funds expended during the facility planning and advanced engineering and design phase at the prevailing Federal share under section 202(a) of this Act, based on the percentage of total project costs which the Administrator determines is the general experience for such projects.

(2)(A) Each State shall use a portion of the funds allotted to such State each fiscal year, but not to exceed 10 per centum of such funds, to advance to potential grant applicants under this title the costs of facility planning or the preparation of plans, specifications, and estimates.

(B) Such an advance shall be limited to the allowance for such costs which the Administrator establishes under paragraph (1) of this subsection, and shall be provided only to a potential grant applicant which is a small community and which in the judgment of the State would otherwise be unable to prepare a request for a grant for construction costs under this section.

(C) In the event a grant for construction costs is made under this section for a project for which an advance has been made under this paragraph, the Administrator shall reduce the amount of such grant by the allowance established under paragraph (1) of this subsection. In the event no such grant is made, the State is authorized to seek repayment of such advance on such terms and conditions as it may determine.

[Sec. 201(l) added by PL 97-117]

MITIGATION AND SPECIAL PROCESSES

(m)(1) Notwithstanding any other provisions of this title, the Administrator is authorized to make a grant from any funds otherwise allotted to the State of California under section 205 of this Act to the project (and in the amount) specified in Order WQG 81-1 of the California State Water Resources Control Board.

(2) Notwithstanding any other provisions of this Act, the Administrator shall make a grant from any funds otherwise allotted to the State of California to the city of Eureka, California, in connection with project numbered C-06-2772, for the purchase of one hundred and thirty-nine acres of property as environmental mitigation for siting of the proposed treatment plant.

(3) Notwithstanding any other provision of this Act, the Administrator shall make a grant from any funds otherwise allotted to the State of California to the city of San Diego, California, in connection with that city's aquaculture sewage process (total resources recovery system) as an innovative and alternative waste treatment process.

[Sec. 201(m) added by PL 97-117]

COMBINED SEWER OVERFLOW

(n)(1) On and after October 1, 1984, upon the request of the Governor of an affected State, the Administrator is authorized to use funds available to such State under section 205 to address water quality problems due to the impacts of discharges from combined storm water and sanitary sewer overflows, which are not otherwise eligible under this subsection, were correction of such discharges is a major priority for such State.

(2) Beginning fiscal year 1983, the Administrator shall have available $200,000,000 per fiscal year in addition to those funds authorized in section 207 of this Act to be utilized to address water quality problems of marine bays and estuaries subject to lower levels of water quality due to the impacts of discharges from combined storm water and sanitary sewer overflows from adjacent urban complexes, not otherwise eligible under this subsection. Such sums may be used as deemed appropriate by the Administrator as provided in paragraphs (1) and (2) of this subsection, upon the request of and demonstration of water quality benefits by the Governor of an affected State.

[Sec. 201(n) added by PL 97-117]

(o) The Administrator shall encourage and assist applicants for grant assistance under this title to develop and file with the Administrator a capital financing plan which, at a minimum —

(1) projects the future requirements for waste treatment services within the applicant's jurisdiction for a period of no less than ten years;

(2) projects the nature, extent, timing, and costs of future expansion and reconstruction of treatment works which will be necessary to satisfy the applicant's projected future requirements for waste treatment services; and

(3) sets forth with specificity the manner in which the applicant intends to finance such future expansion and reconstruction.

[Sec. 201(o) added by PL 97-117]

(p) Time Limit on Resolving Certain Disputes. — In any case in which a dispute arises with respect to the awarding of a contract for construction of treatment works by a grantee of funds under this title and a party to such dispute files an appeal with the Administrator under this title for resolution of such dispute, the Administrator shall make a final decision on such appeal within 90 days of the filing of such appeal.

[Sec. 201(p) added by PL 100-4]

FEDERAL SHARE

Sec. 202. (a)(1) The amount of any grant for treatment works made under this Act from funds authorized for any fiscal year beginning after June 30, 1971, and ending before October 1, 1984, shall be 75 per centum of the cost of construction thereof (as approved by the Administrator), and for any fiscal year beginning on or after October 1, 1984, shall be 55 per centum of the cost of construction thereof (as approved by the Administrator), unless modified to a lower percentage rate uniform throughout a State by the Governor of that State with the concurrence of the Administrator. Within ninety days after the enactment of this sentence the Administrator shall issue guidelines for concurrence in any such modification, which shall provide for the consideration of the unobligated balance of sums allocated to the State under section 205 of this Act, the need for assistance under this title in such State, and the availability of State grant assistance to replace the Federal share reduced by such modification. The payment of any such reduced Federal share shall not constitute an obligation on the part of the United States or a claim on the part of any State or grantee to reimbursement for the portion of the Federal share reduced in any such State. Any grant (other than for reimbursement) made prior to the date of enactment of the Federal Water Pollution Control Act Amendments of 1972 from any funds authorized for any fiscal year beginning after June 30, 1971, shall, upon the request of the applicant, be increased to the applicable percentage under this section. Notwithstanding the first sentence of this paragraph, in any case where a primary, secondary, or advanced waste treatment facility or its related interceptors or a project for infiltration-in-flow correction has received a grant for erection, building, acquisition, alteration, remodeling, improvement, extension, or correction before October 1, 1984, all segments and phases of such facility, interceptors, and project for infiltration-in-flow correction shall be eligible for grants at 75 per centum of the cost of construction thereof for any grant made pursuant to a State obligation which obligation occurred before October 1, 1990. Notwithstanding the first sentence of this paragraph, in the case of a project for which an application for a grant under this title has been made to the Administrator before October 1, 1984, and which project is under judicial injunction on such date prohibiting its construction, such project shall be eligible for grants at 75 percent of the cost of construction thereof. Notwithstanding the first sentence of this paragraph, in the case of the Wyoming Valley Sanitary Authority project mandated by judicial order under a proceeding begun prior to October 1, 1984, and a project for wastewater treatment for Altoona, Pennsylvania, such projects shall be eligible for grants at 75 percent of the cost of construction thereof.

[Sec. 202(a)(1) amended by PL 96-483; PL 97-117; PL 100-4]

(2) The amount of any grant made after September 30, 1978, and before October 1, 1981, for any eligible treatment works or significant portion thereof utilizing innovative or alternative wastewater treatment processes and techniques referred to in section 201(g)(5) shall be 85 per centum of the cost of construction thereof unless modified by the Governor of the State with the concurrence of the Administrator, to a percentage rate no less than 15 percentum greater than the modified uniform percentage rate in which the Administrator has concurred pursuant to paragraph (1) of this subsection. The amount of any grant made after September 30, 1981, for any eligible treatment works or unit processes and techniques thereof utilizing innovative or alternative wastewater treatment processes and techniques referred to in section 201(g)(5) shall be a percentage of the cost of construction thereof equal to 20 per centum greater than the percentage in effect under paragraph (1) of this subsection for such works or unit processes and techniques, but in no event greater than 85 per centum of the cost of construction thereof. No grant shall be made under this paragraph for construction of a treatment works in any State unless the proportion of the State contribution to the non-Federal share of construction costs for all treatment works in such State receiving a grant under this paragraph is the same as or greater than the proportion of the State contribution (if any) to the non-Federal share of construction costs for all treatment works receiving grants in such State under paragraph (1) of this subsection.

[Sec. 202(a)(2) amended by PL 96-483; PL 97-117]

[*Editor's note:* Section 202(e) of PL 100-4 stipulates: "(e) Innovative Process. — The activated bio-filter feature of the project for treatment works of the city of Little Falls, Minnesota, shall be deemed to be an innovative wastewater process and technique for purposes of section 202(a)(2) of the Federal Water Pollution Control Act and the amount of any grant under such Act for such feature shall be 85 percent of the cost thereof."]

(3) In addition to any grant made pursuant to paragraph (2) of this subsection, the Administrator is authorized to make a grant to fund all of the costs of the modification or replacement of any facilities constructed with a grant made pursuant to paragraph (2) if the Administrator finds that such facilities have not met design performance specifications unless such failure is attributable to negligence on the part of any person and if such failure has significantly increased capital or operating and maintenance expenditures. In addition, the Administrator is authorized to make a grant to fund all of the costs of the modification or replacement of biodisc equipment (rotating biological contactors) in any publicly owned treatment works if the Administrator finds that such equipment has failed to meet design performance specifications, unless such failure is attributable to negligence on the part of any person, and if such failure has

significantly increased capital or operating and maintenance expenditures.

[Sec. 202(a)(3) amended by PL 100-4]

(4) For the purposes of this section, the term "eligible treatment works" means those treatment works in each State which meet the requirements of section 201(g) (5) of this Act and which can be fully funded from funds available for such purpose in such State.

[Sec. 202(a)(4) amended by PL 97-117]

(b) The amount of the grant for any project approved by the Administrator after January 1, 1971, and before July 1, 1971, for the construction of treatment works, the actual erection, building or acquisition of which was not commenced prior to July 1, 1971, shall, upon the request of the applicant, be increased to the applicable percentage under subsection (a) of this section for grants for treatment works from funds for fiscal years beginning after June 30, 1971, with respect to the cost of such actual erection, building, or acquisition. Such increased amount shall be paid from any funds allocated to the State in which the treatment works is located without regard to the fiscal year for which such funds were authorized. Such increased amount shall be paid for such project only if—

(1) a sewage collection system that is a part of the same total waste treatment system as the treatment works for which such grant was approved is under construction or is to be constructed for use in conjunction with such treatment works, and if the cost of such sewage collection system exceeds the cost of such treatment works, and

(2) the State water pollution control agency or other appropriate State authority certifies that the quantity of available ground water will be insufficient, inadequate, or unsuitable for public use, including the ecological preservation and recreational use of surface water bodies, unless effluents from publicly owned treatment works after adequate treatment are returned to the ground water consistent with acceptable technological standards.

[*Editor's note:* Section 27 of PL 97-117 provides:

"BATH TOWNSHIP

Sec. 27. For purposes of the Federal Water Pollution Control Act, the project for publicly owned treatment works for Bath Township, Michigan, shall be eligible for payments from sums allocated to the State of Michigan under such Act in an amount equal to the amount such works would be eligible for under section 202 of such Act if such works were to be constructed after the date of enactment of this Act, at the original construction cost."]

PLANS, SPECIFICATIONS, ESTIMATES, AND PAYMENTS

Sec. 203. (a)(1) Each applicant for a grant shall submit to the Administrator for his approval, plans, specifications, and estimates for each proposed project for the construction of treatment works for which a grant is applied for under section 201 (g) (1) from funds allotted to the State under section 205 and which otherwise meets the requirements of this Act. The Administrator shall act upon such plans, specifications, and estimates as soon as practicable after the same have been submitted, and his approval of any such plans, specifications, and estimates shall be deemed a contractual obligation of the United States for the payment of its proportional contribution to such project.

[Sec. 203(a) amended by PL 96-483; (a)(1) designated by PL 100-4]

(2) Agreement on Eligible Costs.—

(A) Limitation on Modifications. — Before taking final action on any plans, specifications, and estimates submitted under this subsection after the 60th day following the date of the enactment of the Water Quality Act of 1987, the Administrator shall enter into a written agreement with the applicant which establishes and specifies which items of the proposed project are eligible for Federal payments under this section. The Administrator may not later modify such eligibility determinations unless they are found to have been made in violation of applicable Federal statutes and regulations.

(B) Limitation on Effect. — Eligibility determinations under this paragraph shall not preclude the Administrator from auditing a project pursuant to section 501 of this Act, or other authority, or from withholding or recovering Federal funds for costs which are found to be unreasonable, unsupported by adequate documentation, or otherwise unallowable under applicable Federal cost principles, or which are incurred on a project which fails to meet the design specifications or effluent limitations contained in the grant agreement and permit pursuant to section 402 of this Act for such project.

[Sec. 203(a)(2) added by PL 100-4]

(3) In the case of a treatment works that has an estimated total cost of $8,000,000 or less (as determined by the Administrator), and the population of the applicant municipality is twenty-five thousand or less (according to the most recent United States census), upon completion of an approved facility plan, a single grant may be awarded for the combined Federal share of the cost of preparing construction plans and specifications, and the building and erection of the treatment works.

[Sec. 203(a)(3) designated by PL 100-4]

(b) The Administrator shall, from time to time as the work progresses, make payments to the recipient of a grant for costs of construction incurred on a project. These payments shall at no time exceed the Federal share of the cost of construction incurred to the date of the voucher covering such payment plus the Federal share of the value of the materials which have been stockpiled in the vicinity of such construction in conformity to plans and specifications for the project.

(c) After completion of a project and approval of the final voucher by the Administrator, he shall pay out of the appropriate sums the unpaid balance of the Federal share payable on account of such project.

(d) Nothing in this Act shall be construed to require, or to authorize the Administrator to require, that grants under this Act for construction of treatment works be made only for projects which are operable units usable for sewage collection, transportation, storage, waste treatment, or for similar purposes without additional construction.

(e) At the request of a grantee under this title, the Administrator is authorized to provide technical and legal assistance in the administration and enforcement of any contract in connection with treatment works assisted under this title, and to intervene in any civil action involving the enforcement of such a contract.

(f) Design/Build Projects.—

[Sec. 203(f) added by PL 100-4]

(1) Agreement. — Consistent with State law, an applicant who proposes to construct waste water treatment works may enter into an agreement with the Administrator under this subsection providing for the preparation of construction plans and specifications and the erection of such treatment works, in lieu of proceeding under the other provisions of this section.

(2) Limitation on Projects. — Agreements under this subsection shall be limited to projects under an approved facility plan which projects are—

(A) treatment works that have an estimated total cost of $8,000,000 or less; and

(B) any of the following types of waste water treatment systems: aerated lagoons, trickling filters, stabilization ponds, land application systems, sand filters, and subsurface disposal systems.

(3) Required Terms. — An agreement entered into under this subsection shall—

(A) set forth an amount agreed to as the maximum Federal contribution to the project, based upon a competitively bid document of basic design data and applicable standard construction specifications and a determination of the federally eligible costs of the project at the applicable Federal share under section 202 of this Act;

(B) set forth dates for the start and completion of construction of the treatment works by the applicant and a schedule of payments of the Federal contribution to the project;

(C) contain assurances by the applicant that (i) engineering and management assistance will be provided to manage the project; (ii) the proposed treatment works will be an operable unit and will meet all the requirements of this title; and (iii) not later than 1 year after the date specified as the date of completion of construction of the treatment works, the treatment works will be operating so as to meet the requirements of any applicable permit for such treatment works under section 402 of this Act;

(D) require the applicant to obtain a bond from the contractor in an amount determined necessary by the Administrator to protect the Federal interest in the project; and

(E) contain such other terms and conditions as are necessary to assure compliance with this title (except as provided in paragraph (4) of this subsection).

(4) Limitation on Application. — Subsections (a), (b), and (c) of this section shall not apply to grants made pursuant to this subsection.

(5) Reservation to Assure Compliance. — The Administrator shall reserve a portion of the grant to assure contract compliance until final project approval as defined by the Administrator. If the amount agreed to under paragraph (3)(A) exceeds the cost of designing and constructing the treatment works, the Administrator shall reallot the amount of the excess to the State in which such treatment works are located for the fiscal year in which such audit is completed.

(6) Limitation on Obligations. — The Administrator shall not obligate more than 20 percent of the amount allotted to a State for a fiscal year under section 205 of this Act for grants pursuant to this subsection.

(7) Allowance. — The Administrator shall determine an allowance for facilities planning for projects constructed under this subsection in accordance with section 201(1).

(8) Limitation on Federal Contributions. — In no event shall the Federal contribution for the cost of preparing construction plans and specifications and the building and erection of treatment works pursuant to this subsection exceed the amount agreed upon under paragraph (3).

(9) Recovery Action. — In any case in which the recipient of a grant made pursuant to this subsection does not comply with the terms of the agreement entered into under paragraph (3), the Administrator is authorized to take such action as may be necessary to recover the amount of the Federal contribution to the project.

(10) Prevention of Double Benefits. — A recipient of a grant made pursuant to this subsection shall not be eligible for any other grants under this title for the same project.

LIMITATIONS AND CONDITIONS

Sec. 204. (a) Before approving grants for any project for any treatment works under section 201(g)(1) the Administrator shall determine—

(1) that any required areawide waste treatment management plan under section 208 of this Act (A) is being

implemented for such area and the proposed treatment works are included in such plan, or (B) is being developed for such area and reasonable progress is being made toward its implementation and the proposed treatment works will be included in such plan;

[204(a)(1) and (2) revised by PL 100-4]

(2) that (A) the State in which the project is to be located (i) is implementing any required plan under section 303(e) of this Act and the proposed treatment works are in conformity with such plan, or (ii) is developing such a plan and the proposed treatment works will be in conformity with such plan, and (B) such State is in compliance with section 305(b) of this Act;

[*Editor's note:* Sec. 205(f) of PL 100-4 states the revisions to 204(a)(1) and (2) "shall take effect on the last day of the two-year period" beginning on the date of enactment that law [February 4, 1987.]]

(3) that such works have been certified by the appropriate State water pollution control agency as entitled to priority over such other works in the State in accordance with any applicable State plan under section 303(e) of this Act, except that any priority list developed pursuant to section 303(e) (3) (H) may be modified by such State in accordance with regulations promulgated by the Administrator to give higher priority for grants for the Federal share of the cost of preparing construction drawings and specifications for any treatment works utilizing processes and techniques meeting the guidelines promulgated under section 304(d) (3) of this Act and for grants for the combined Federal share of the cost of preparing construction drawings and specifications and the building and erection of any treatment works meeting the requirements of the next to the last sentence of section 203(a) of this Act which utilizes processes and techniques meeting the guidelines promulgated under section 304(d) (3) of this Act;

(4) that the applicant proposing to construct such works agrees to pay the non-Federal costs of such works and has made adequate provisions satisfactory to the Administrator for assuring proper and efficient operation, including the employment of trained management and operations personnel, and the maintenance of such works in accordance with a plan of operation approved by the State water pollution control agency or, as appropriate, the interstate agency, after construction thereof;

(5) that the size and capacity of such works relate directly to the needs to be served by such works, including sufficient reserve capacity. The amount of reserve capacity provided shall be approved by the Administrator on the basis of a comparison of the cost of constructing such reserves as a part of the works to be funded and the anticipated cost of providing expanded capacity at a date when such capacity will be required after taking into account, in accordance with regulations promulgated by the Administrator, efforts to reduce total flow of sewage and unnecessary water consumption. The amount of reserve capacity eligible for a grant under this title shall be determined by the Administrator taking into account the projected population and associated commercial and industrial establishments within the jurisdiction of the applicant to be served by such treatment works as identified in an approved facilities plan, an areawide plan under section 208; or an applicable municipal master plan of development. For the purpose of this paragraph, section 208, and any such plan, projected population shall be determined on the basis of the latest information available from the United States Department of Commerce or from the States as the Administrator, by regulation, determines appropriate. Beginning October 1, 1984, no grant shall be made under this title to construct that portion of any treatment works providing reserve capacity in excess of existing needs (including existing needs of residential, commercial, industrial, and other users) on the date of approval of a grant for the erection, building, acquisition, alteration, remodeling, improvement, or extension of a project for secondary treatment or more stringent treatment or new interceptors and appurtenances, except that in no event shall reserve capacity of a facility and its related interceptors to which this subsection applies be in excess of existing needs on October 1, 1990. In any case in which an applicant proposes to provide reserve capacity greater than that eligible for Federal financial assistance under this title, the incremental costs of the additional reserve capacity shall be paid by the applicant;

[Sec. 204(a)(5) amended by PL 97-117]

(6) that no specification for bids in connection with such works shall be written in such a manner as to contain proprietary, exclusionary, or discriminatory requirements other than those based upon performance, unless such requirements are necessary to test or demonstrate a specific thing or to provide for necessary interchangeability of parts and equipment. When in the judgment of the grantee, it is impractical or uneconomical to make a clear and accurate description of the technical requirements, a "brand name or equal" description may be used as a means to define the performance or other salient requirements of a procurement, and in doing so the grantee need not establish the existence of any source other than the brand or source so named.

[Sec. 204(a)(6) amended by PL 97-117]

(b) (1) Notwithstanding any other provision of this title, the Administrator shall not approve any grant for any treatment works under section 201(g) (1) after March 1, 1973, unless he shall first have determined that the applicant (A) has adopted or will adopt a system of charges to assure that each recipient of waste treatment services within the applicant's jurisdiction, as deter-

mined by the Administrator, will pay its proportionate share (except as otherwise provided in this paragraph) of the costs of operation and maintenance (including replacement) of any waste treatment services provided by the applicant; and (B) has legal, institutional, managerial, and financial capability to insure adequate construction, operation, and maintenance of treatment works throughout the applicant's jurisdiction, as determined by the Administrator. In any case where an applicant which, as of the date of enactment of this sentence, uses a system of dedicated ad valorem taxes and the Administrator determines that the applicant has a system of charges which results in the distribution of operation and maintenance costs for treatment works within the applicant's jurisdiction, to each user class, in proportion to the contribution to the total cost of operation and maintenance of such works by each user class (taking into account total waste water loading of such works, the constituent elements of the waste, and other appropriate factors) and such applicant is otherwise in compliance with clause (A) of this paragraph with respect to each industrial user, then such dedicated ad valorem tax system shall be deemed to be the user charge system meeting the requirements of clause (A) of this paragraph for the residential user class and such small non-residential user classes as defined by the Administrator. In defining small non-residential users, the Administrator shall consider the volume of wastes discharged into the treatment works by such users and the constituent elements of such wastes as well as such other factors as he deems appropriate. A system of user charges which imposes a lower charge for low-income residential users (as defined by the Administrator) shall be deemed to be a user charge system meeting the requirements of clause (A) of this paragraph if the Administrator determines that such system was adopted after public notice and hearing.

[Sec. 204(b)(1) amended by PL 96-483; PL 100-4]

[*Editor's note:* Section 215 of PL 100-4 provides:

"Sec. 215. Ad Valorem Tax Dedication.

For the purposes of complying with section 204(b)(1) of the Federal Water Pollution Control Act, the ad valorem tax user charge systems of the town of Hampton and the city of Nashua, New Hampshire, shall be deemed to have been dedicated as of December 27, 1977. The Administrator shall review such ad valorem tax user charge systems for compliance with the remaining requirements of such section and related regulations of the Environmental Protection Agency."]

(2) The Administrator shall, within one hundred and eighty days after the date of enactment of the Federal Water Pollution Control Act Amendments of 1972, and after consultation with appropriate State, interstate, municipal, and intermunicipal agencies, issue guidelines applicable to payment of waste treatment costs by industrial and nonindustrial recipients of waste treatment services which shall establish (A) classes of users of such services, including categories of industrial users; (B) criteria against which to determine the adequacy of charges imposed on classes and categories of users reflecting all factors that influence the cost of waste treatment, including strength, volume, and delivery flow rate characteristics of waste; and (C) model systems and rates of user charges typical of various treatment works serving municipal-industrial communities.

(3) Approval by the Administrator of a grant to an interstate agency established by interstate compact for any treatment works shall satisfy any other requirement that such works be authorized by Act of Congress.

[Sec. 204(b)(3) repealed and (4) redesignated as (3) by PL 96-483]

(4) A system of charges which meets the requirement of clause (A) of paragraph (1) of this subsection may be based on something other than metering the sewage or water supply flow of residential recipients of waste treatment services, including ad valorem taxes. If the system of charges is based on something other than metering the Administrator shall require (A) the applicant to establish a system by which maintenance of the treatment works; and (B) the applicant to establish a procedure under which the residential user will be notified as to that portion of his total payment which will be allocated to the costs of the waste treatment services.

[Sec. 204(b)(5) redesignated as (4) by PL 96-483]

(6) [Sec. 204(b)(6) repealed by PL 96-483]

[*Editor's note:* Section 2(c) of PL 96-483 provides:

(c) "The Administrator of the Environmental Protection Agency shall take such action as may be necessary to remove from any grant made under section 201(g)(1) of the Federal Water Pollution Control Act after March 1, 1973, and prior to the date of enactment of this Act, any condition or requirement no longer applicable as a result of the repeals made by subsections (a) and (b)* of this section or release any grant recipient of the obligations established by such conditions of other requirement."

Section 2(g) of PL 96-483 provides:

"(g) The amendments made by this section** shall take effect on December 27, 1977."]

(c) The next to the last sentence of paragraph (5) of subsection (a) of this section shall not apply in any case where a primary, secondary, or advanced waste treatment facility or its related interceptors has received a

*Section 2 (a) and (b) of PL 96-483 amended or repealed portions of Section 204 (b) of the Federal Water Pollution Control Act

**Sec. 2 of PL 96-483.

grant for erection, building, acquisition, alteration, remodeling, improvement, or extension before October 1, 1984, and all segments and phases of such facility and interceptors shall be funded based on a 20-year reserve capacity in the case of such facility and a 20-year reserve capacity in the case of such interceptors, except that, if a grant for such interceptors has been approved prior to the date of enactment of the Municipal Wastewater Treatment Construction Grant Amendments of 1981, such interceptors shall be funded based on the approved reserve capacity not to exceed 40 years.

[Sec. 204(c) added by PL 97-117]

(d)(1) A grant for the construction of treatment works under this title shall provide that the engineer or engineering firm supervising construction or providing architect engineering services during construction shall continue its relationship to the grant applicant for a period of one year after the completion of construction and initial operation of such treatment works. During such period such engineer or engineering firm shall supervise operation of the treatment works, train operating personnel, and prepare curricula and training material for operating personnel. Costs associated with the implementation of this paragraph shall be eligible for Federal assistance in accordance with this title.

(2) On the date one year after the completion of construction and initial operation of such treatment works, the owner and operator of such treatment works shall certify to the Administrator whether or not such treatment works meet the design specifications and effluent limitations contained in the grant agreement and permit pursuant to section 402 of the Act for such works. If the owner and operator of such treatment works cannot certify that such treatment works meet such design specifications and effluent limitations, any failure to meet such design specifications and effluent limitations shall be corrected in a timely manner, to allow such affirmative certification, at other than Federal expense.

(3) Nothing in this section shall be construed to prohibit a grantee under this title from requiring more assurances, guarantees, or indemnity or other contractual requirements from any party to a contract pertaining to a project assisted under this title, than those provided under this subsection.

[Sec. 204(d) added by PL 97-117]

ALLOTMENT

Sec. 205. (a) Sums authorized to be appropriated pursuant to section 207 for each fiscal year beginning after June 30, 1972, and before September 30, 1977, shall be allotted by the Administrator not later than the January 1st immediately preceding the beginning of the fiscal year for which authorized, except that the allotment for fiscal year 1973 shall be made not later than 30 days after the date of enactment of the Federal Water Pollution Control Act Amendments of 1972. Such sums shall be allotted among the States by the Administrator in accordance with regulations promulgated by him, in the ratio that the estimated cost of constructing all needed publicly owned treatment works in each State bears to the estimated cost of construction of all needed publicly owned treatment works in all of the States. For the fiscal years ending June 30, 1973, and June 30, 1974, such ratio shall be determined on the basis of the table III of House Public Works Committee Print No. 92-50.

For the fiscal year ending June 30, 1975, such ratio shall be determined one-half on the basis of table I of House Public Works Committee Print Numbered 93-28 and one-half on the basis of table II of such print, except that no State shall receive an allotment less than that which it received for the fiscal year ending June 30, 1972, as set forth in table III of such print. Allotments for fiscal years which begin after the fiscal year ending June 30, 1975 shall be made only in accordance with a revised cost estimate made and submitted to Congress in accordance with section 516(b) of this Act and only after such revised cost estimate shall have been approved by law specifically enacted hereafter.

(b) (1) Any sums allotted to a State under subsection (a) shall be available for obligation under section 203 on and after the date of such allotment. Such sums shall continue available for obligation in such State for a period of one year after the close of the fiscal year for which such sums are authorized. Any amount so allotted which are not obligated by the end of such one-year period shall be immediately reallotted by the Administrator, in accordance with regulations promulgated by him, generally on the basis of the ratio used in making the last allotment of sums under this section. Such reallotted sums shall be added to the last allotments made to the States. Any sum made available to a State by reallotment under this subsection shall be in addition to any funds otherwise allotted to such State for grants under this title during any fiscal year.

(2) Any sums which have been obligated under section 203 and which are released by the payment of the final voucher for the project shall be immediately credited to the State to which such sums were last allotted. Such released sums shall be added to the amounts last allotted to such State and shall be immediately available for obligation in the same manner and to the same extent as such last allotment.

(c)(1) Sums authorized to be appropriated pursuant to section 207 for the fiscal years during the period beginning October 1, 1977, and ending September 30, 1981, shall be allotted for each such year by the Administrator not later than the tenth day which begins after the date of enactment of the Clean Water Act of 1977. Notwithstanding any other provision of law, sums authorized

for the fiscal years ending September 30, 1978, September 30, 1979, September 30, 1980, and September 30, 1981, shall be allotted in accordance with table 3 of Committee Print Numbered 95-30 of the Committee on Public Works and Transportation of the House of Representatives.

(2) Sums authorized to be appropriated pursuant to section 207 for the fiscal years 1982, 1983, 1984, and 1985 shall be allotted for each such year by the Administrator not later than the tenth day which begins after the date of enactment of the Municipal Wastewater Treatment Construction Grant Amendments of 1981. Notwithstanding any other provision of law, sums authorized for the fiscal year ending September 30, 1982, shall be allotted in accordance with table 3 of Committee Print Numbered 95-30 of the Committee on Public Works and Transportation of the House of Representatives. Sums authorized for the fiscal years ending September 30, 1983, September 30, 1984, September 30, 1985, and September 30, 1986, shall be allotted in accordance with the following table:

States	Fiscal years 1983 through 1986
Alabama	.011388
Alaska	.008101
Arizona	.008886
Arkansas	.006668
California	.072891
Colorado	.008154
Connecticut	.312487
Delaware	.004966
District of Columbia	.004966
Florida	.034407
Georgia	.017254
Hawaii	.007886
Idaho	.004966
Illinois	.046101
Indiana	.024566
Iowa	.012798
Kansas	.008891
Kentucky	.012972
Louisiana	.011266
Maine	.007732
Maryland	.024668
Massachusetts	.034608
Michigan	.048988
Minnesota	.018736
Mississippi	.009184
Missouri	.028857
Montana	.004966
Nebraska	.008814
Nevada	.004966
New Hampshire	.010188
New Jersey	.041684
New Mexico	.004966
New York	.112897
North Carolina	.018886
North Dakota	.004966
Ohio	.057888
Oklahoma	.008886
Oregon	.011818
Pennsylvania	.048877
Rhode Island	.005788
South Carolina	.010448
South Dakota	.004966
Tennessee	.014897
Texas	.068728
Utah	.006871
Vermont	.004966
Virginia	.020881
Washington	.017728
West Virginia	.018886
Wisconsin	.027387
Wyoming	.004966
Samoa	.000818
Guam	.000682
Northern Marianas	.000455
Puerto Rico	.013286
Pacific Trust Territories	.001206
Virgin Islands	.000681
United States totals	.999999

[Sec. 205(c)(2) added by PL 97-117; amended by PL 100-4]

(3) Fiscal years 1987-1990. — Sums authorized to be appropriated pursuant to section 207 for the fiscal years 1987, 1988, 1989, and 1990 shall be allotted for each such year by the Administrator not later than the 10th day which begins after the date of the enactment of this paragraph. Sums authorized for such fiscal years shall be allotted in accordance with the following table:

States	
Alabama	.011209
Alaska	.008153
Arizona	.008811
Arkansas	.006616
California	.072333
Colorado	.008090
Connecticut	.012390
Delaware	.004965
District of Columbia	.004965
Florida	.034161
Georgia	.017130
Hawaii	.007833
Idaho	.004965
Illinois	.045741
Indiana	.024374
Iowa	.012698
Kansas	.008829
Kentucky	.012872
Louisiana	.011118
Maine	.007675
Maryland	.024461
Massachusetts	.034338
Michigan	.048487
Minnesota	.018589
Mississippi	.009112
Missouri	.028637
Montana	.004965
Nebraska	.008173
Nevada	.004965
New Hampshire	.010107
New Jersey	.041329
New Mexico	.004965
New York	.111622
North Carolina	.018253
North Dakota	.004965
Ohio	.056938
Oklahoma	.008171
Oregon	.011425
Pennsylvania	.048082
Rhode Island	.005791
South Carolina	.010361
South Dakota	.004965
Tennessee	.014492
Texas	.068228
Utah	.006829
Vermont	.004965
Virginia	.020690
Washington	.017588
West Virginia	.018766
Wisconsin	.027342
Wyoming	.004965
American Samoa	.000908
Guam	.000657
Northern Marianas	.000422
Puerto Rico	.013191
Pacific Trust Territories	.001295
Virgin Islands	.000627

[205(c)(3) added by PL 100-4]

[*Editor's note:* Section 213(a) and (e) — (g) of PL 100-4 state:

"**Sec. 213. Improvement Projects.**

(a) Avalon, California. — The Administrator shall make a grant of $3,000,000 from funds allotted under section 205 of the Federal Water Pollution Control Act to the State of California for fiscal year 1987 to the city of Avalon, California, for improvements to the publicly owned treatment works of such city.

(e) Treatment Works for Wanaque, New Jersey. — In fiscal year 1987 and succeeding fiscal years, the Administrator shall make grants to the Wanaque Va. Re-

gional Sewerage Authority, New Jersey from funds allotted under section 205 of the Federal Water Pollution Control Act to the State of New Jersey for such fiscal year, for the construction of treatment works with a total treatment capacity of 1,050,000 gallons per day (including a treatment module with a treatment capacity of 350,000 gallons per day). Notwithstanding section 202 of such Act, the Federal share of the cost of construction of such treatment works shall be 75 percent.

(f) Treatment Works for Lena, Illinois. — The Administrator shall make grants to the village of Lena, Illinois, from funds allotted under section 205 of the Federal Water Pollution Control Act to the State of Illinois for fiscal years beginning after September 30, 1986, for the construction of a replacement moving bed filter press of the treatment works of such village. Notwithstanding section 202 of the Federal Water Pollution Control Act, the Federal share of the cost of construction of such project shall be 75 percent.

(g) Priority for Court-Ordered and Other Projects. — The State of Pennsylvania, from funds allotted to it under section 205 of the Federal Water Pollution Control Act, shall give priority for construction of—

(1) the Wyoming Valley Sanitary Authority Secondary Treatment project mandated under Federal court order, regardless of the date of start of construction made pursuant to the court order; and

(2) a project for wastewater treatment for Altoona, Pennsylvania."]

(d) Sums allotted to the States for a fiscal year shall remain available for obligation for the fiscal year for which authorized and for the period of the next succeeding twelve months. The amount of any allotment not obligated by the end of such twenty-four-month period shall be immediately reallotted by the Administrator on the basis of the same ratio as applicable to sums allotted for the then current fiscal year, except that none of the funds reallotted by the Administrator for fiscal year 1978 and for fiscal years thereafter shall be allotted to any State which failed to obligate any of the funds being reallotted. Any sum made available to a State by reallotment under this subsection shall be in addition to any funds otherwise allotted to such State for grants under this title during any fiscal year. .

[*Editor's note:* Section 7 of PL 96-483 provides:

"Sec. 7. Notwithstanding section 205(d) of the Federal Water Pollution Control Act (33 U.S.C. 1285), sums allotted to the States for the fiscal year 1979 shall remain available for obligation for the fiscal year for which authorized and for the period of the next succeeding twenty-four months. The amount of any allotment not obligated by the end of such thirty-six month period shall be immediately reallotted by the Administrator on the basis of the same ratio as applicable to sums allotted for the then current fiscal year, except that none of the funds reallotted by the Administrator for fiscal year 1979 shall be allotted to any State which failed to obligate any of the funds being reallotted. Any sum made available to a State by reallotment under this section shall be in addition to any funds otherwise allotted to such State for grants under title II of the Federal Water Pollution Control Act during any fiscal year. This section shall take effect on September 30, 1980."]

(e) For the fiscal years, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, and 1990, no State shall receive less than one-half of 1 per centum of the total allotment under subsection (c) of this section, except that in the case of Guam, Virgin Islands, American Samoa, and the Trust Territories not more than thirty-three one-hundredths of 1 per centum on the aggregate shall be allotted to all four of these jurisdictions. For the purpose of carrying out this subsection there are authorized to be appropriated, subject to such amounts as are provided in appropriation Acts, not to exceed $75,000,000 for each of fiscal years 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, and 1990. If for any fiscal year the amount appropriated under authority of this subsection is less than the amount necessary to carry out this subsection, the amount each State receives under this subsection for such year shall bear the same ratio to the amount such State would have received under this subsection in such year if the amount necessary to carry it out had been appropriated as the amount appropriated for such year bears to the amount necessary to carry out this subsection for such year.

[Sec. 205(e) amended by PL 97-117; PL 100-4]

(f) Notwithstanding any other provision of this section, sums made available between January 1, 1975, and March 1, 1975, by the Administrator for obligation shall be available for obligation until September 30, 1978.

(g) (1) The Administrator is authorized to reserve each fiscal year not to exceed 2 percentum of the amount authorized under section 207 of this title for purposes of the allotment made to each State under this section on or after October 1, 1977, except in the case of any fiscal year beginning on or after October 1, 1981, and ending before October 1, 1994, in which case the percentage authorized to be reserved shall not exceed 4 per centum, or $400,000 whichever amount is the greater. Sums so reserved shall be available for making grants to such State under paragraph (2) of this subsection for the same period as sums are available from such allotment under subsection (d) of this section, and any such grant shall be available for obligation only during such period. Any grant made from sums reserved under this subsection which has not been obligated by the end of the period for which available shall be added to the amount last

allotted to such State under this section and shall be immediately available for obligation in the same manner and to the same extent as such last allotment. Sums authorized to be reserved by this paragraph shall be in addition to and not in lieu of any other funds which may be authorized to carry out this subsection.

[Sec. 205(g)(1) amended by PL 96-483; PL 97-117; PL 100-4]

(2) The Administrator is authorized to grant to any State from amounts reserved to such State under this subsection, the reasonable costs of administering any aspects of sections 201, 203, 204, and 212 of this Act the responsibility for administration of which the Administrator has delegated to such State. The Administrator may increase such grant to take into account the reasonable costs of administering an approved program under section 402 or 404, administering a statewide waste treatment management planning program under section 208(b) (4), and managing waste treatment construction grants for small communities.

(h) The Administrator shall set aside from funds authorized for each fiscal year beginning on or after October 1, 1978, a total (as determined by the Governor of the State) of not less than 4 percent nor more than 7½ percent of the sums allotted to any State with a rural population of 25 per centum or more of the total population of such State, as determined by the Bureau of the Census. The Administrator may set aside no more than 7½ of the sums allotted to any other State for which the Governor requests such action. Such sums shall be available only for alternatives to conventional sewage treatment works for municipalities having a population of three thousand five hundred or less, or for the highly dispersed sections of larger municipalities, as defined by the Administrator.

[Sec. 205(h) amended by PL 100-4]

(i) Set-Aside for Innovative and Alternative Projects. — Not less than ½ of 1 percent of funds allotted to a State for each of the fiscal years ending September 30, 1979, through September 30, 1990, under subsection (c) of this section shall be expended only for increasing the Federal share of grants for construction of treatment works utilizing innovative processes and techniques pursuant to section 202(a)(2) of this Act. Including the expenditures authorized by the preceding sentence, a total of 2 percent of the funds allotted to a State for each of the fiscal years ending September 30, 1979, and September 30, 1980, and 3 percent of the funds allotted to a State for the fiscal year ending September 30, 1981, under subsection (c) of this section shall be expended only for increasing grants for construction of treatment works pursuant to section 202(a)(2) of this Act. Including the expenditures authorized by the first sentence of this subsection, a total (as determined by the Governor of the State) of not less than 4 percent nor more than [illegible] percent of the funds allotted to such State under subsection (c) of this section for each of the fiscal years ending September 30, 1982, through September 30, 1990, shall be expended only for increasing the Federal share of grants for construction of treatment works pursuant to section 202(a)(2) of this Act.

[Sec. 205(i) amended by PL 97-117; PL 100-4]

(j)(1) The Administrator shall reserve each fiscal year not to exceed 1 per centum of the sums allotted and available for obligation to each State under this section for each fiscal year beginning on or after October 1, 1981, or $100,000, whichever amount is the greater.

[Sec. 205(j) added by PL 97-117]

(2) Such sums shall be used by the Administrator to make grants to the States to carry out water quality management planning, including, but not limited to—

(A) identifying most cost effective and locally acceptable facility and non-point measures to meet and maintain water quality standards;

(B) developing an implementation plan to obtain State and local financial and regulatory commitments to implement measures developed under subparagraph (A);

(C) determining the nature, extent, and causes of water quality problems in various areas of the State and interstate region, and reporting on these annually; and

(D) determining those publicly owned treatment works which should be constructed with assistance under this title, in which areas and in what sequence, taking into account the relative degree of effluent reduction attained, the relative contributions to water quality of other point or nonpoint sources, and the consideration of alternatives to such construction, and implementing section 303(e) of this Act.

(3) In carrying out planning with grants made under paragraph (2) of this subsection, a State shall develop jointly with local, regional, and interstate entities, a plan for carrying out the program and give funding priority to such entities and designated or undesignated public comprehensive planning organizations to carry out the purposes of this subsection. In giving such priority, the State shall allocate at least 40 percent of the amount granted to such State for a fiscal year under paragraph (2) of this subsection to regional public comprehensive planning organizations in such State and appropriate interstate organizations for the development and implementation of the plan described in this paragraph. In any fiscal year for which the Governor, in consultation with such organizations and with the approval of the Administrator, determines that allocation of at least 40 percent of such amount to such organizations will not result in significant participation by such organizations in water quality management planning and not signifi-

cantly assist in development and implementation of the plan described in this paragraph and achieving the goals of this Act, the allocation to such organization may be less than 40 percent of such amount.

[Sec. 205(j)(3) amended by PL 100-4]

"(4) All activities undertaken under this subsection shall be in coordination with other related provisions of this Act.

(5) Nonpoint Source Reservation. — In addition to the sums reserved under paragraph (1), the Administrator shall reserve each fiscal year for each State 1 percent of the sums allotted and available for obligation to such State under this section for each fiscal year beginning on or after October 1, 1986, or $100,000, whichever is greater, for the purpose of carrying out section 319 of this Act. Sums so reserved in a State in any fiscal year for which such State does not request the use of such sums, to the extent such sums exceed $100,000, may be used by such State for other purposes under this title.

[Sec. 205(j)(5) added by PL 100-4]

CONVENTION CENTER

(k) The Administrator shall allot to the State of New York from sums authorized to be appropriated for the fiscal year ending September 30, 1982, an amount necessary to pay the entire cost of conveying sewage from the Convention Center of the city of New York to the Newtown sewage treatment plant, Brooklyn-Queens area, New York. The amount allotted under this subsection shall be in addition to and not in lieu of any other amounts authorized to be allotted to such State under this Act.

[Sec. 205(k) added by PL 97-117]

(l) Marine Estuary Reservation.—

(1) Reservation of Funds.—

(A) General Rule. — Prior to making allotments among the States under subsection (c) of this section, the Administrator shall reserve funds from sums appropriated pursuant to section 207 for each fiscal year beginning after September 30, 1986.

(B) Fiscal Years 1987 and 1988. — For each of fiscal years 1987 and 1988 the reservation shall be 1 percent of the sums appropriated pursuant to section 207 for such fiscal year.

(C) Fiscal Years 1989 and 1990. — For each of fiscal years 1989 and 1990 the reservation shall be 1½ percent of the funds appropriated pursuant to section 207 for such fiscal year.

(2) Use of Funds. — Of the sums reserved under this subsection, two-thirds shall be available to address water quality problems of marine bays and estuaries subject to lower levels of water quality due to the impacts of discharges from combined storm water and sanitary sewer overflows from adjacent urban complexes, and one-third shall be available for the implementation of section 320 of this Act, relating to the national estuary program.

(3) Period of availability. — Sums reserved under this subsection shall be subject to the period of availability for obligation established by subsection (d) of this section.

(4) Treatment of Certain Body of Water. — For purposes of this section and section 201(n), Newark Bay, New Jersey, and the portion of the Passaic River up to Little Falls, in the vicinity of Beatties Dam, shall be treated as a marine bay and estuary.

[Sec. 205(l) added by PL 100-4]

(m) Discretionary Deposits Into State Water Pollution Control Revolving Funds.—

(1) From Construction Grant Allotments. — In addition to any amounts deposited in a water pollution control revolving fund established by a State under title VI, upon request of the Governor of such State, the Administrator shall make available to the State for deposit, as capitalization grants, in such fund in any fiscal year beginning after September 30, 1986, such portion of the amounts allotted to such State under this section for such fiscal year as the Governor considers appropriate; except that (A) in fiscal year 1987, such deposit may not exceed 50 percent of the amounts allotted to such State under this section for such fiscal year, and (B) in fiscal year 1988, such deposit may not exceed 75 percent of the amounts allotted to such State under this section for this fiscal year.

(2) Notice Requirement. — The Governor of a State may make a request under paragraph (1) for a deposit into the water pollution control revolving fund of such State—

(A) in fiscal year 1987 only if no later than 90 days after the date of the enactment of this subsection, and

(B) in each fiscal year thereafter only if 90 days before the first day of such fiscal year,

the State provides notice of its intent to make such deposit.

(3) Exception. — Sums reserved under section 205(j) of this Act shall not be available for obligation under this subsection.

[Sec. 205(m) added by PL 100-4]

REIMBURSEMENT AND ADVANCED CONSTRUCTION

Sec. 206. (a) Any publicly owned treatment works in a State on which construction was initiated after June 30, 1966, but before July 1, 1973, which was approved by the appropriate State water pollution control agency

and which the Administrator finds meets the requirements of section 8 of this Act in effect at the time of the initiation of construction shall be reimbursed a total amount equal to the difference between the amount of Federal financial assistance, if any, received under such section 8 for such project and 50 per centum of the cost of such project, or 55 per centum of the project cost where the Administrator also determines that such treatment works was constructed in conformity with a comprehensive metropolitan treatment plan as described in section 8(f) of the Federal Water Pollution Control Act as in effect immediately prior to the date of enactment of the Federal Water Pollution Control Act Amendments of 1972. Nothing in this subsection shall result in any such works receiving Federal grants from all sources in excess of 80 per centum of the cost of such project.

(b) Any publicly owned treatment works constructed with or eligible for Federal financial assistance under this Act in a State between June 30, 1956, and June 30, 1966, which was approved by the State water pollution control agency and which the Administrator finds meets the requirements of section 8 of this Act prior to the date of enactment of the Federal Water Pollution Control Act Amendments of 1972 but which was constructed without assistance under such section 8 or which received such assistance in an amount less than 30 per centum of the cost of such project shall qualify for payments and reimbursement of State or local funds used for such project from sums allocated to such State under this section in an amount which shall not exceed the difference between the amount of such assistance, if any, received for such project and 30 per centum of the cost of such project.

(c) No publicly owned treatment works shall receive any payment or reimbursement under subsection (a) or (b) of this section unless an application for such assistance is filed with the Administrator within the one year period which begins on the date of enactment of the Federal Water Pollution Control Act Amendments of 1972. Any application filed within such one year period may be revised from time to time, as may be necessary.

[*Editor's Note:* Section 29 of Public Law 93-207 states: "Sec. 29. Notwithstanding section 206(c) of the Federal Water Pollution Control Act and section 2 of Public Law 93-207, in the case of publicly owned treatment works for which a grant was made under the Federal Water Pollution Control Act, as amended by the Water Pollution Control Act Amendments of 1956 (Public Law 660, 84th Congress) before July 1, 1972, and on which construction was initiated before July 1, 1973, applications for assistance under such section 206 shall be filed not later than the ninetieth day after the date of enactment of the Clean Water Act of 1977."]

(d) The Administrator shall allocate to each qualified project under subsection (a) of this section each fiscal year for which funds are appropriated under subsection (e) of this section an amount which bears the same ratio to the unpaid balance of the reimbursement due such project as the total of such funds for such year bears to the total unpaid balance of reimbursement due all such approved projects on the date of enactment of such appropriations. The Administrator shall allocate to each qualified project under subsection (b) of this section each fiscal year for which funds are appropriated under subsection (e) of this section an amount which bears the same ratio to the unpaid balance of the reimbursement due such project as the total of such funds for such years bears to the total unpaid balance of reimbursement due all such approved projects on the date of enactment of such appropriation.

[*Editor's Note:* Section 3 of Public Law 93-207 provides: "Sec. 3. Funds available for reimbursement under Public Law 92-399 shall be allocated in accordance with subsection (d) of section 206 of the Federal Water Pollution Control Act (86 Stat. 838), pro rata among all projects eligible under subsection (a) of such section 206 for which applications have been submitted and approved by the Administrator pursuant to such Act. Notwithstanding the provisions of subsection (d) of such section 206, (1) the Administrator is authorized to make interim payments to each such project for which an application has been approved on the basis of estimates of maximum pro rata entitlement of all applicants under section 206 (a) and (2) for the purpose of determining allocation of sums available under Public Law 92-399, the unpaid balance of reimbursement due such projects shall be computed as of January 31, 1974. Upon completion by the Administrator of his audit and approval of all projects for which an application has been filed under subsection (a) of such section 206, the Administrator shall, within the limits of appropriated funds, allocate to each such qualified project the amount remaining, if any, of its total entitlement. Amounts allocated to projects which are later determined to be in excess of entitlement shall be available for reallocation, until expended, to other qualified projects under subsection (a) of such section 206. In no event, however, shall any payments exceed the Federal share of the cost of construction incurred to the date of the voucher covering such payments plus the Federal Share of the value of the materials which have been stockpiled in the vicinity of such construction in conformity to plans and specifications for the project."]

(e) There is authorized to be appropriated to carry out subsection (a) of this section not to exceed $2,600,000,000 and to carry out subsection (b) of this section, not to exceed $750,000,000. The authorizations contained in this subsection shall be the sole source of funds for reimbursements authorized by this section.

(f)(1) In any case where a substantial portion of the

funds allotted to a State for the current fiscal year under this title have been obligated under section 201(g), or will be so obligated in a timely manner (as determined by the Administrator), and there is construction of any treatment work project without the aid of Federal funds and in accordance with all procedures and all requirements applicable to treatment works projects, except those procedures and requirements which limit construction of projects to those constructed with the aid of previously allotted Federal funds, the Administrator, upon his approval of an application made under this subsection therefor, is authorized to pay the Federal share of the cost of construction of such project when additional funds are allotted to the State under this title if prior to the construction of the project the Administrator approves plans, specifications, and estimates therefor in the same manner as other treatment works projects. The Administrator may not approve an application under this subsection unless an authorization is in effect for the first fiscal year in the period for which the application requests payment and such requested payment for that fiscal year does not exceed the State's expected allotment from such authorization. The Administrator shall not be required to make such requested payment for any fiscal year —

(A) to the extent that such payment would exceed such State's allotment of the amount appropriated for such fiscal year; and

(B) unless such payment is for a project which, on the basis of an approved funding priority list of such State, is eligible to receive such payment based on the allotment and appropriation for such fiscal year.

To the extent that sufficient funds are not appropriated to pay the full Federal share with respect to a project for which obligations under the provisions of this subsection have been made, the Administrator shall reduce the Federal share to such amount less than 75 percentum as such appropriations do provide.

[Sec. 206 (f)(1) amended by PL 96-483]

(2) In determining the allotment for any fiscal year under this title, any treatment works project constructed in accordance with this section and without the aid of Federal funds shall not be considered completed until an application under the provisions of this subsection with respect to such project has been approved by the Administrator, or the availability of funds from which this project is eligible for reimbursement has expired, whichever first occurs.

AUTHORIZATION

Sec. 207. There is authorized to be appropriated to carry out this title, other than sections 206 (e), 208 and 209, for the fiscal year ending June 30, 1973, not to exceed $5,000,000,000, for the fiscal year ending June 30, 1974, not to exceed $6,000,000,000, and for the fiscal year ending June 30, 1975, not to exceed $7,000,000,000, and, subject to such amounts as are provided in appropriation Acts, for the fiscal year ending September 30, 1977, $1,000,000,000 for the fiscal year ending September 30, 1978, $4,500,000,000 and for the fiscal years ending September 30, 1979, September 30, 1980, not to exceed $5,000,000,000; for the fiscal year ending September 30, 1981, not to exceed $2,548,837,000; and for the fiscal years ending September 30, 1982, September 30, 1983, September 30, 1984 and September 30, 1985, not to exceed $2,400,000,000 per fiscal year; and for each of the fiscal years ending September 30, 1986, September 30, 1987, and September 30, 1988, not to exceed $2,400,000,000; and for each of the fiscal years ending September 30, 1989, and September 30, 1990, not to exceed $1,200,000,000.

[Sec. 207 amended by PL 97-35; 97-117; PL 100-4]

AREAWIDE WASTE TREATMENT MANAGEMENT

Sec. 208. (a) For the purpose of encouraging and facilitating the development and implementation of areawide waste treatment management plans—

(1) The Administrator, within ninety days after the date of enactment of this Act and after consultation with appropriate Federal, State, and local authorities, shall by regulation publish guidelines for the identification of those areas which, as a result of urban-industrial concentrations or other factors, have substantial water quality control problems.

(2) The Governor of each State, within sixty days after publication of the guidelines issued pursuant to paragraph (1) of this subsection, shall identify each area within the State which, as a result of urban-industrial concentrations or other factors, has substantial water quality control problems. Not later than one hundred and twenty days following such identification and after consultation with appropriate elected and other officials of local governments having jurisdiction in such areas, the Governor shall designate (A) the boundaries of each such area, and (B) a single representative organization, including elected officials from local governments or their designees, capable of developing effective areawide waste treatment management plans for such area. The Governor may in the same manner at any later time identify any additional area (or modify an existing area) for which he determines areawide waste treatment management to be appropriate, designate the boundaries of such area, and designate an organization capable of developing effective areawide waste treatment management plans for such area.

(3) With respect to any area which, pursuant to the guidelines published under paragraph (1) of this subsection, is located in two or more States, the Governors of the respective States shall consult and cooperate in

carrying out the provisions of paragraph (2), with a view toward designating the boundaries of the interstate area having common water quality control problems and for which areawide waste treatment management plans would be most effective, and toward designating, within one hundred and eighty days after publication of guidelines issued pursuant to paragraph (1) of this subsection, of a single representative organization capable of developing effective areawide waste treatment management plans for such area.

(4) If a Governor does not act, either by designating or determining not to make a designation under paragraph (2) of this subsection, within the time required by such paragraph, or if, in the case of an interstate area, the Governors of the States involved do not designate a planning organization within the time required by paragraph (3) of this subsection, the chief elected officials of local governments within an area may by agreement designate (A) the boundaries for such an area, and (B) a single representative organization including elected officials from such local governments, or their designees, capable of developing an areawide waste treatment management plan for such area.

(5) Existing regional agencies may be designated under paragraphs (2), (3), and (4) of this subsection.

(6) The State shall act as a planning agency for all portions of such State which are not designated under paragraphs (2), (3), or (4) of this subsection.

(7) Designations under this subsection shall be subject to the approval of the Administrator.

(b) (1) (A) Not later than one year after the date of designation of any organization under subsection (a) of this section such organization shall have in operation a continuing areawide waste treatment management planning process consistent with section 201 of this Act. Plans prepared in accordance with this process shall contain alternatives for waste treatment management, and be applicable to all wastes generated within the area involved. The initial plan prepared in accordance with such process shall be certified by the Governor and submitted to the Administrator not later than two years after the planning process is in operation.

(B) For any agency designated after 1975 under subsection (a) of this section and for all portions of a State for which the State is required to act as the planning agency in accordance with subsection (a) (6), the initial plan prepared in accordance with such process shall be certified by the Governor and submitted to the Administrator not later than three years after the receipt of the initial grant award authorized under subsection (f) of this section.

(2) Any plan prepared under such process shall include, but not be limited to—

(A) the identification of treatment works necessary to meet the anticipated municipal and industrial waste treatment needs of the area over a twenty-year period, annually updated (including an analysis of alternative waste treatment systems), including any requirements for the acquisition of land for treatment purposes; the necessary waste water collection and urban storm water runoff systems; and a program to provide the necessary financial arrangements for the development of such treatment works, and an identification of open space and recreation opportunities that can be expected to result from improved water quality, including consideration of potential use of lands associated with treatment works and increased access to water-based recreation;

(B) the establishment of construction priorities for such treatment works and time schedules for the initiation and completion of all treatment works;

(C) the establishment of a regulatory program to—

(i) implement the waste treatment management requirements of section 201(c),

(ii) regulate the location, modification, and construction of any facilities within such area which may result in any discharge in such area, and

(iii) assure that any industrial or commercial waste discharged into any treatment works in such area meet applicable pretreatment requirements;

(D) the identification of those agencies necessary to construct, operate, and maintain all facilities required by the plan and otherwise to carry out the plan;

(E) the identification of the measures necessary to carry out the plan (including financing), the period of time necessary to carry out the plan, the costs of carrying out the plan within such time, and the economic, social, and environmental impact of carrying out the plan within such time;

(F) a process to (i) identify, if appropriate, agriculturally and silviculturally related nonpoint sources of pollution, including return flows from irrigated agriculture, and their cumulative effects, runoff from manure disposal areas, and from land used for livestock and crop production, and (ii) set forth procedures and methods (including land use requirements) to control to the extent feasible such sources;

(G) a process of (i) identify, if appropriate, mine-related sources of pollution including new, current, and abandoned surface and underground mine runoff, and (ii) set forth procedures and methods (including land use requirements) to control to the extent feasible such sources;

(H) a process to (i) identify construction activity related sources of pollution, and (ii) set forth procedures and methods (including land use requirements) to control to the extent feasible such sources;

(I) a process to (i) identify, if appropriate, salt water intrusion into rivers, lakes, and estuaries resulting from reduction of fresh water flow from any cause, including irrigation, obstruction, ground water extraction, and

diversion, and (ii) set forth procedures and methods to control such intrusion to the extent feasible where such procedures and methods are otherwise a part of the waste treatment management plan;

(J) a process to control the disposition of all residual waste generated in such area which could affect water quality; and

(K) a process to control the disposal of pollutants on land or in subsurface excavations within such area to protect ground and surface water quality.

(3) Areawide waste treatment management plans shall be certified annually by the Governor or his designee (or Governors or their designees, where more than one State is involved) as being consistent with applicable basin plans and such areawide waste treatment management plans shall be submitted to the Administrator for his approval.

(4) (A) Whenever the Governor of any State determines (and notifies the Administrator) that consistency with a statewide regulatory program under section 303 so requires, the requirements of clauses (F) through (K) of paragraph (2) of this subsection shall be developed and submitted by the Governor to the Administrator for approval for application to a class or category of activity throughout each State.

(B) Any program submitted under subparagraph (A) of this paragraph which, in whole or in part, is to control the discharge or other placement of dredged or fill material into the navigable waters shall include the following:

(i) A consultation process which includes the State agency with primary jurisdiction over fish and wildlife resources.

(ii) A process to identify and manage the discharge or other placement of dredged or fill material which adversely affects navigable waters, which shall complement and be coordinated with a State program under section 404 conducted pursuant to this Act.

(iii) A process to assure that any activity conducted pursuant to a best management practice will comply with the guidelines established under section 404(b) (1), and sections 307 and 403 of this Act.

(iv) A process to assure that any activity conducted pursuant to a best management practice can be terminated or modified for cause including, but not limited to, the following:

(I) violation of any condition of the best management practice;

(II) change in any activity that requires either a temporary or permanent reduction or elimination of the discharge pursuant to the best management practice.

(v) A process to assure continued coordination with Federal and Federal-State water-related planning and reviewing processes, including the National Wetlands Inventory.

(C) If the Governor of a State obtains approval from the Administrator of a statewide regulatory program which meets the requirements of subparagraph (B) of this paragraph and if such State is administering a permit program under section 404 of this Act, no person shall be required to obtain an individual permit pursuant to such section, or to comply with a general permit issued pursuant to such section, with respect to any appropriate activity within such State for which a best management practice has been approved by the Administrator under the program approved by the Administrator pursuant to this paragraph.

(D) (i) Whenever the Administrator determines after public hearing that a State is not administering a program approved under this section in accordance with the requirements of this section, the Administrator shall so notify the State, and if appropriate corrective action is not taken within a reasonable time, not to exceed ninety days, the Administrator shall withdraw approval of such program. The Administrator shall not withdraw approval of any such program unless he shall first have notified the State, and made public, in writing, the reasons for such withdrawal.

(ii) In the case of a State with a program submitted and approved under this paragraph, the Administrator shall withdraw approval of such program under this subparagraph only for a substantial failure of the State to administer its program in accordance with the requirements of this paragraph.

(c) (1) The Governor of each State, in consultation with the planning agency designated under subsection (a) of this section, at the time a plan is submitted to the Administrator, shall designate one or more waste treatment management agencies (which may be an existing or newly created local, regional or State agency or potential subdivision) for each area designated under subsection (a) of this section and submit such designations to the Administrator.

(2) The Administrator shall accept any such designation, unless, within 120 days of such designation, he finds that the designated management agency (or agencies) does not have adequate authority—

(A) to carry out appropriate portions of an areawide waste treatment management plan developed under subsection (b) of this section;

(B) to manage effectively waste treatment works and related facilities serving such area in conformance with any plan required by subsection (b) of this section;

(C) directly or by contract, to design and construct new works, and to operate and maintain new and existing works as required by any plan developed pursuant to subsection (b) of this section;

(D) to accept and utilize grants, or other funds from any source, for waste treatment management purposes;

(E) to raise revenues, including the assessment of

waste treatment charges;

(F) to incur short- and long-term indebtedness;

(G) to assure in implementation of an areawide waste treatment management plan that each participating community pays its proportionate share of treatment costs;

(H) to refuse to receive any wastes from any municipality or subdivision thereof, which does not comply with any provisions of an approved plan under this section applicable to such area; and

(I) to accept for treatment industrial wastes.

(d) After a waste treatment management agency having the authority required by subsection (c) has been designated under such subsection for an area and a plan for such area has been approved under subsection (b) of this section, the Administrator shall not make any grant for construction of a publicly owned treatment works under section 201 (g) (1) within such area except to such designated agency and for works in conformity with such plan.

(e) No permit under section 402 of this Act shall be issued for any point source which is in conflict with a plan approved pursuant to subsection (b) of this section.

(f) (1) The Administrator shall make grants to any agency designated under subsection (a) of this section for payment of the reasonable costs of developing and operating a continuing areawide waste treatment management planning process under subsection (b) of this section.

(2) For the two-year period beginning on the date the first grant is made under paragraph (1) of this subsection to an agency, if such first grant is made before October 1, 1977, the amount of each such grant to such agency shall be 100 per centum of the costs of developing and operating a continuing areawide waste treatment management planning process under subsection (b) of this section, and thereafter the amount granted to such agency shall not exceed 75 per centum of such costs in each succeeding one-year period. In the case of any other grant made to an agency under such paragraph (1) of this subsection, the amount of such grant shall not exceed 75 per centum of the costs of developing and operating a continuing areawide waste treatment management planning process in any year.

(3) Each applicant for a grant under this subsection shall submit to the Administrator for his approval each proposal for which a grant is applied for under this subsection. The Administrator shall act upon such proposal as soon as practicable after it has been submitted, and his approval of that proposal shall be deemed a contractual obligation of the United States for the payment of its contribution to such proposal, subject to such amounts as are provided in appropriation Acts. There is authorized to be appropriated to carry out this subsection not to exceed $50,000,000 for the fiscal year ending June 30, 1973, not to exceed $100,000,000 for the fiscal year ending June 30, 1974, not to exceed $150,000,000 per fiscal year for the fiscal years ending June 30, 1975, September 30, 1977, September 30, 1978, September 30, 1979, and September 30, 1980, not to exceed $100,000,000 per fiscal year for the fiscal years ending September 30, 1981, and September 30, 1982, and such sums as may be necessary for fiscal years 1983 through 1990.

[Sec. 208(f)(3) amended by PL 96-483; PL 100-4]

(g) The Administrator is authorized, upon request of the Governor or the designated planning agency, and without reimbursement, to consult with, and provide technical assistance to, any agency designated under subsection (a) of this section in the development of areawide waste treatment management plans under subsection (b) of this section.

(h) (1) The Secretary of the Army, acting through the Chief of Engineers, in cooperation with the Administrator is authorized and directed, upon request of the Governor or the designated planning organization, to consult with, and provide technical assistance to, any agency designed under subsection (a) of this section in developing and operating a continuing areawide waste treatment management planning process under subsection (b) of this section.

(2) There is authorized to be appropriated to the Secretary of the Army, to carry out this subsection, not to exceed $50,000,000 per fiscal year for the fiscal years ending June 30, 1973, and June 30, 1974.

(i) (1) The Secretary of the Interior, acting through the Director of the United States Fish and Wildlife Service, shall, upon request of the Governor of a State, and without reimbursement, provide technical assistance to such State in developing a statewide program for submission to the Administrator under subsection (b) (4) (B) of this section and in implementing such program after its approval.

(2) There is authorized to be appropriated to the Secretary of the Interior $6,000,000 to complete the National Wetlands Inventory of the United States, by December 31, 1981, and to provide information from such inventory to States as it becomes available to assist such States in the development and operation of programs under this Act.

(j) (1) The Secretary of Agriculture, with the concurrence of the Administrator, and acting through the Soil Conservation Service and such other agencies of the Department of Agriculture as the Secretary may designate,

is authorized and directed to establish and administer a program to enter into contracts of not less than five years nor more than ten years with owners and operators having control of rural land for the purpose of installing and maintaining measures incorporating best management practices to control nonpoint source pollution for improved water quality in those States or areas for which the Administrator has approved a plan under subsection (b) of this section where the practices to which the contracts apply are certified by the management agency designated under subsection (c) (1) of this section to be consistent with such plans and will result in improved water quality. Such contracts may be entered into during the period ending not later than September 31, 1988. Under such contracts the land owner or operator shall agree—

(i) to effectuate a plan approved by a soil conservation district, where one exists, under this section for his farm, ranch, or other land substantially in accordance with the schedule outlined therein unless any requirement thereof is waived or modified by the Secretary;

(ii) to forfeit all rights to further payments or grants under the contract and refund to the United States all payments and grants received thereunder, with interest, upon his violation of the contract at any stage during the time he has control of the land if the Secretary, after considering the recommendations of the soil conservation district where one exists, and the Administrator, determines that such violation is of such a nature as to warrant termination of the contract, or to make refunds or accept such payment adjustments as the Secretary may deem appropriate if he determines that the violation by the owner or operator does not warrant termination of the contract;

(iii) upon transfer of his right and interest in the farm, ranch, or other land during the contract period to forfeit all rights to further payments or grants under the contract and refund to the United States all payments or grants received thereunder, with interest, unless the transferee of any such land agrees with the Secretary to assume all obligations of the contract;

(iv) not to adopt any practice specified by the Secretary on the advice of the Administrator in the contract as a practice which would tend to defeat the purposes of the contract;

(v) to such additional provisions as the Secretary determines are desirable and includes in the contract to effectuate the purposes of the program or to facilitate the practical administration of the program.

(2) In return for such agreement by the landowner or operator the Secretary shall agree to provide technical assistance and share the cost of carrying out those conservation practices and measures set forth in the contract for which he determines that cost sharing is appropriate and in the public interest and which are approved for cost sharing by the agency designated to impleme the plan developed under subsection (b) of this sectic The portion of such cost (including labor) to be shar shall be that part which the Secretary determines necessary and appropriate to effectuate the installati of the water quality management practices and me sures under the contract, but not to exceed 50 per ce tum of the total cost of the measures set forth in t contract; except the Secretary may increase the matc ing cost share where he determines that (1) the ma benefits to be derived from the measures are related improving offsite water quality, and (2) the matchir share requirement would place a burden on the lan owner which would probably prevent him from pa ticipating in the program.

(3) The Secretary may terminate any contract with landowner or operator by mutual agreement with t owner or operator if the Secretary determines that suc termination would be in the public interest, and ma agree to such modification of contracts previously e tered into as he may determine to be desirable to carr out the purposes of the program or facilitate the pract cal administration thereof or to accomplish equitab treatment with respect to other conservation, land us or water quality programs.

(4) In providing assistance under this subsection th Secretary will give priority to those areas and sourc that have the most significant effect upon water qualit Additional investigations or plans may be made, whe necessary, to supplement approved water quality mar agement plans, in order to determine priorities.

(5) The Secretary shall, where practicable, enter int agreements with soil conservation districts, State sc and water conservation agencies, or State water qualit agencies to administer all or part of the program estal lished in this subsection under regulations developed b the Secretary. Such agreements shall provide for th submission of such reports as the Secretary deems nece: sary, and for payment by the United States of such por tion of the costs incurred in the administration of th program as the Secretary may deem appropriate.

(6) The contracts under this subsection shall be en tered into only in areas where the management agenc designated under subsection (c) (1) of this section as sures an adequate level of participation by owners an operators having control of rural land in such area: Within such areas the local soil conservation distric where one exists, together with the Secretary of Agricu ture, will determine the priority of assistance among ir dividual landowners and operators to assure that th most critical water quality problems are addressed.

(7) The Secretary, in consultation with the Adminis trator and subject to section 304(k) of this Act, shal not later than September 30, 1978, promulgate regula tions for carrying out this subsection and for suppor

and cooperation with other Federal and non-Federal agencies for implementation of this subsection.

(8) This program shall not be used to authorize or finance projects that would otherwise be eligible for assistance under the terms of Public Law 83-566.

(9) There are hereby authorized to be appropriated to the Secretary of Agriculture $200,000,000 for fiscal year 1979, $400,000,000 for fiscal year 1980, $100,000,000 for fiscal year 1981, $100,000,000 for fiscal year 1982, and such sums as may be necessary for fiscal years 1983 through 1990, to carry out this subsection. The program authorized under this subsection shall be in addition to, and not in substitution of, other programs in such area authorized by this or any other public law.

[Sec. 208(j)(9) amended by PL 96-483; PL 100-4]

BASIN PLANNING

Sec. 209. (a) The President, acting through the Water Resources Council, shall, as soon as practicable, prepare a Level B plan under the Water Resources Planning Act for all basins in the United States. All such plans shall be completed not later than January 1, 1980, except that priority in the preparation of such plans shall be given to those basins and portions thereof which are within those areas designated under paragraphs (2), (3), and (4) of subsection (a) of section 208 of this Act.

(b) The President, acting through the Water Resources Council, shall report annually to Congress on progress being made in carrying out this section. The first such report shall be submitted not later than January 31, 1973.

(c) There is authorized to be appropriated to carry out this section not to exceed $200,000,000.

ANNUAL SURVEY

Sec. 210. The Administrator shall annually make a survey to determine the efficiency of the operation and maintenance of treatment works constructed with grants made under this Act, as compared to the efficiency planned at the time the grant was made. The results of such annual survey shall be included in the report required under section 516(a) of this Act.

SEWAGE COLLECTION SYSTEMS

Sec. 211. (a) No grant shall be made for a sewage collection system under this title unless such grant (1) is for replacement or major rehabilitation of an existing collection system and is necessary to the total integrity and performance of the waste treatment works servicing such community, or (2) is for a new collection system in an existing community with sufficient existing or planned capacity adequately to treat such collected sewage and is consistent with section 201 of this Act.

(b) If the Administrator uses population density as a test for determining the eligibility of a collector sewer for assistance it shall be only for the purpose of evaluating alternatives and determining the needs for such system in relation to ground or surface water quality impact.

(c) No grant shall be made under this title from funds authorized for any fiscal year during the period beginning October 1, 1977, and ending September 30, 1990, for treatment works for control of pollutant discharges from separate storm sewer systems.

[Sec. 211(c) amended by PL 97-117; PL 100-4]

DEFINITIONS

Sec. 212. As used in this title—

(1) The term "construction" means any one or more of the following: preliminary planning to determine the feasibility of treatment works, engineering, architectural, legal, fiscal, or economic investigations or studies, surveys, designs, plans, working drawings, specifications, procedures, field testing of innovative or alternative waste water treatment processes and techniques meeting guidelines promulgated under section 304 (d)(3) of this Act, or other necessary actions, erection, building, acquisition, alteration, remodeling, improvement, or extension of treatment works, or the inspection or supervision of any of the foregoing items.

[Sec. 212(1) amended by PL 97-117]

(2) (A) The term "treatment works" means any devices and systems used in the storage, treatment, recycling, and reclamation of municipal sewage or industrial wastes of a liquid nature to implement section 201 of this act, or necessary to recycle or reuse water at the most economical cost over the estimated life of the works, including intercepting sewers, outfall sewers, sewage collection systems, pumping, power, and other equipment, and their appurtenances; extensions, improvements, remodeling, additions, and alterations thereof; elements essential to provide a reliable recycled supply such as standby treatment units and clear well facilities; and any works, including site acquisition of the land that will be an integral part of the treatment process (including land use for the storage of treated wastewater in land treatment systems prior to land application) or is used for ultimate disposal of residues resulting from such treatment.

(B) In addition to the definition contained in subparagraph (A) of this paragraph, "treatment works" means any other method or system for preventing, abating, reducing, storing, treating, separating, or disposing of municipal waste, including storm water runoff, or industrial waste, including waste in combined storm water and sanitary sewer systems. Any application for construction grants which includes wholly or in part such methods or systems shall, in accordance with guidelines published by the Administrator pursuant to subparagraph (C) of this paragraph, contain adequate data and analysis demonstrating such proposal to be, over the life

of such works, the most cost efficient alternative to comply with sections 301 or 302 of this act, or the requirements of section 201 of this act.

(C) For the purposes of subparagraph (B) of this paragraph, the Administrator shall, within one hundred and eighty days after the date of enactment of this title, publish and thereafter revise no less often than annually, guidelines for the evaluation of methods, including cost effective analysis, described in subparagraph (B) of this paragraph.

(3) The term "replacement" as used in this title means those expenditures for obtaining and installing equipment, accessories, or appurtenances during the useful life of the treatment works necessary to maintain the capacity and performance for which such works are designed and constructed.

LOAN GUARANTEES FOR CONSTRUCTION OF TREATMENT WORKS

Sec. 213. (a) Subject to the conditions of this section and to such terms and conditions as the Administrator determines to be necessary to carry out the purposes of this title, the Administrator is authorized to guarantee, and to make commitments to guarantee, the principal and interest (including interest accruing between the date of default and the date of the payment in full of the guarantee) of any loan, obligation, or participation therein of any State, municipality, or intermunicipal or interstate agency issued directly and exclusively to the Federal Financing Bank to finance that part of the cost of any grant-eligible project for the construction of publicly owned treatment works not paid for with Federal financial assistance under this title (other than this section), which project the Administrator has determined to be eligible for such financial assistance under this title, including, but not limited to, projects eligible for reimbursement under section 206 of this title.

(b) No guarantee, or commitment to make a guarantee, may be made pursuant to this section—

(1) unless the Administrator certifies that the issuing body is unable to obtain on reasonable terms sufficient credit to finance its actual needs without such guarantee; and

(2) unless the Administrator determines that there is a reasonable assurance of repayment of the loan, obligation, or participation therein.

A determination of whether financing is available at reasonable rates shall be made by the Secretary of the Treasury with relationship to the current average yield on outstanding marketable obligations of municipalities of comparable maturity.

(c) The Administrator is authorized to charge reasonable fees for the investigation of an application for a guarantee and for the issuance of a commitment to make a guarantee.

(d) The Administrator, in determining whether th is a reasonable assurance of repayment, may require commitment which would apply to such repayme Such commitment may include, but not be limited any funds received by such grantee from the amounts a propriated under section 206 of this act.

[Sec. 213(d) amended by PL 96-483]

PUBLIC INFORMATION

Sec. 214. The Administrator shall develop and ope ate within one year of the date of enactment of this se tion, a continuing program of public information ar education on recycling and reuse of wastewater (inclu ing sludge), the use of land treatment, and methods f the reduction of wastewater volume.

REQUIREMENTS FOR AMERICAN MATERIALS

Sec. 215. Notwithstanding any other provision c law, no grant for which application is made after Febru ary 1, 1978, shall be made under this title for any treat ment works unless only such unmanufactured articles materials, and supplies as have been mined or produce in the United States, and only such manufactured ar ticles, materials, and supplies as have been manufac tured in the United States, substantially all from arti cles, materials, or supplies mined, produced, or manu factured, as the case may be, in the United States will b used in such treatment works. This section shall no apply in any case where the Administrator determines based upon those factor the Administrator deem relevant, including the available resources of th agency, it to be inconsistent with the public interes (including multilateral government procurement agree ments) or the cost to be unreasonable, or if articles, materials, or supplies of the class or kind to be used or the articles, material, or supplies from which they are manufactured are not mined, produced, or manufactured, as the case may be, in the United States in sufficient and reasonably available commercial quantities and of a satisfactory quality.

DETERMINATION OF PRIORITY

Sec. 216. Notwithstanding any other provision of this Act, the determination of the priority to be given each category of projects for construction of publicly owned treatment works within each State shall be made solely by that State, except that if the Administrator, after a public hearing, determines that a specific project will not result in compliance with the enforceable requirements of this Act, such project shall be removed from the State's priority list and such State shall submit a revised priority list. These categories shall include, but not be limited to (A) secondary treatment, (B) more stringent treatment, (C) infiltration-in-flow correction,

(D) major sewer system rehabilitation, (E) new collector sewers and appurtenances, (F) new interceptors and appurtenances, and (G) correction of combined sewer overflows. Not less than 25 per centum of funds allocated to a State in any fiscal year under this title for construction of publicly owned treatment works in such State shall be obligated for those types of projects referred to in clauses (D), (E), (F), and (G) of this section, if such projects are on such State's priority list for that year and are otherwise eligible for funding in that fiscal year. It is the policy of Congress that projects for wastewater treatment and management undertaken with Federal financial assistance under this Act by any State, municipality, or intermunicipal or interstate agency shall be projects which, in the estimation of the State, are designed to achieve optimum water quality management, consistent with the public health and water quality goals and requirements of the Act.

[Sec. 216 amended by PL 97-117]

COST-EFFECTIVENESS GUIDELINES

Sec. 217. Any guidelines for cost-effectiveness analysis published by the Administrator under this title shall provide for the identification and selection of cost effective alternatives to comply with the objective and goals of this Act and sections 201 (b), 201 (d), 201 (g) (2) (A), and 301 (b) (2) (B) of this Act.

COST EFFECTIVENESS

Sec. 218. (a) It is the policy of Congress that a project for waste treatment and management undertaken with Federal financial assistance under this Act by any State, municipality, or intermunicipal or interstate agency shall be considered as an overall waste treatment system for waste treatment and management, and shall be that system which constitutes the most economical and cost-effective combination of devices and systems used in the storage, treatment, recycling, and reclamation of municipal sewage or industrial wastes of a liquid nature to implement section 201 of this Act, or necessary to recycle or reuse water at the most economical cost over the estimated life of the works, including intercepting sewers, outfall sewers, sewage collection systems, pumping power, and other equipment, and their appurtenances; extension, improvements, remodeling, additions, and alterations thereof; elements essential to provide a reliable recycled supply such as standby treatment units and clear well facilities; and any works, including site acquisition of the land that will be an integral part of the treatment process (including land use for the storage of treated wastewater in land treatment systems prior to land application) or which is used for ultimate disposal of residues resulting from such treatment; water efficiency measures and devices; and any other method or system for preventing, abating, reducing, storing, treating, separating, or disposing of municipal waste, including storm water runoff, or industrial waste, including waste in combined storm water and sanitary sewer systems; to meet the requirements of this Act.

(b) In accordance with the policy set forth in subsection (a) of this section, before the Administrator approves any grant to any State, municipality, or intermunicipal or interstate agency for the erection, building, acquisition, alteration, remodeling, improvement, or extension of any treatment works the Administrator shall determine that the facilities plan of which such treatment works are a part constitutes the most economical and cost-effective combination of treatment works over the life of the project to meet the requirements of this Act, including, but not limited to, consideration of construction costs, operation, maintenance, and replacement costs.

(c) In furtherance of the policy set forth in subsection (a) of this section, the Administrator shall require value engineering review in connection with any treatment works, prior to approval of any grant for the erection, building, acquisition, alteration, remodeling, improvement, or extension of such treatment works, in any case in which the cost of such erection, building, acquisition, alteration, remodeling, improvement, or extension is projected to be in excess of $10,000,000. For purposes of this subsection, the term "value engineering review" means a specialized cost control technique which uses a systematic and creative approach to identify and to focus on unnecessarily high cost in a project in order to arrive at a cost saving without sacrificing the reliability or efficiency of the project.

(d) This section applies to projects for waste treatment and management for which no treatment works including a facilities plan for such project have received Federal financial assistance for the preparation of construction plans and specifications under this Act before the date of enactment of this section.

[Sec. 218 added by PL 97-117]

STATE CERTIFICATION OF PROJECTS

Sec. 219. Whenever the Governor of a State which has been delegated sufficient authority to administer the construction grant program under this title in that State certifies to the Administrator that a grant application meets applicable requirements of Federal and State law for assistance under this title, the Administrator shall approve or disapprove such application within 45 days of the date of receipt of such application. If the Administrator does not approve or disapprove such application within 45 days of receipt, the application shall be deemed approved. If the Administrator disapproves such application the Administrator shall state in writing the reasons for such disapproval. Any grant approved or deemed approved under this section shall be subject to amounts

provided in appropriation Acts.

[Sec. 219 added by PL 97-117]

TITLE III—STANDARDS AND ENFORCEMENT

EFFLUENT LIMITATIONS

Sec. 301. (a) Except as in compliance with this section and sections 302, 306, 307, 318, 402, and 404 of this Act, the discharge of any pollutant by any person shall be unlawful.

(b) In order to carry out the objective of this Act there shall be achieved—

(1) (A) not later than July 1, 1977, effluent limitations for point sources, other than publicly owned treatment works, (i) which shall require the application of the best practicable control technology currently available as defined by the Administrator pursuant to section 304 (b) of this Act, or (ii) in the case of a discharge into a publicly owned treatment works which meets the requirements of subparagraph (B) of this paragraph, which shall require compliance with any applicable pretreatment requirements and any requirements under section 307 of this Act; and

(B) for publicly owned treatment works in existence on July 1, 1977, or approved pursuant to section 203 of this Act prior to June 30, 1974 (for which construction must be completed within four years of approval), effluent limitations based upon secondary treatment as defined by the Administrator pursuant to section 304(d) (1) of this Act; or,

(C) not later than July 1, 1977, any more stringent limitation, including those necessary to meet water quality standards, treatment standards, or schedule of compliance, established pursuant to any State law or regulations, (under authority preserved by section 510) or any other Federal law or regulation, or required to implement any applicable water quality standard established pursuant to this Act.

(2) (A) for pollutants identified in subparagraphs (C), (D), and (F) of this paragraph, effluent limitations for categories and classes of point sources, other than publicly owned treatment works, which (i) shall require application of the best available technology economically achievable for such category or class, which will result in reasonable further progress toward the national goal of eliminating the discharge of all pollutants, as determined in accordance with regulations issued by the Administrator pursuant to section 304(b) (2) of this Act, which such effluent limitations shall require the elimination of discharges of all pollutants if the Administrator finds, on the basis of information available to him (including information developed pursuant to section 315), that such elimination is technologically and economically achievable for category or class of point sources as determined in accordance with regulations issued by the Administrator pursuant to section 304(b) (2) of this Act, or (ii) in the case of the introduction of a pollutant into a publicly owned treatment works which meets the requirements of subparagraph (b) of this paragraph, shall require compliance with any applicable pretreatment requirements and any other requirement under section 307 of this Act;

(B) [Repealed]

[Sec. 301(b)(2)(B) repealed by PL 97-117]

(C) with respect to all toxic pollutants referred to in table 1 of Committee Print Number 95-30 of the Committee on Public Works and Transportation of the House of Representatives compliance with effluent limitations in accordance with subparagraph (A) of this paragraph as expeditiously as practicable but in no case later than three years after the date such limitations are promulgated under section 304(b), and in no case later than March 31, 1989.

[Sec. 301(b)(2)(C) amended by PL 100-4]

[*Editor's note:* Section 301(f) of PL 100-4 provides: "(f) Deadlines for Regulations for Certain Toxic Pollutants. — The Administrator shall promulgate final regulations establishing effluent limitations in accordance with sections 301(b)(2)(A) and 307(b)(1) of the Federal Water Pollution Control Act for all toxic pollutants referred to in table 1 of Committee Print Numbered 95-30 of the Committee on Public Works and Transportation of the House of Representatives which are discharged from the categories of point sources in accordance with the following table:

Category	Date by which the final regulation shall be promulgated
Organic chemicals and plastics and synthetic fibers	December 31, 1986.
Pesticides	December 31, 1986."]

(D) for all toxic pollutants listed under paragraph (1) of subsection (a) of section 307 of this Act which are not referred to in subparagraph (C) of this paragraph compliance with effluent limitation in accordance with subparagraph (A) of this paragraph as expeditiously as practicable, but in no case later than three years after date such limitations are promulgated under section 304(b), and in no case later than March 31, 1989;

[Sec. 301(b)(2)(D) amended by PL 100-4]

(E) as expeditiously as practicable but in no case later than three years after the date such limitations are promulgated under section 304(b), and in no case later than March 31, 1989, compliance with effluent limitations for categories and classes of point sources, other than publicly owned treatment works, which in the case of pollutants identified pursuant to section 304(a) (4) of this Act shall require application of the best convention-

al pollutant control technology as determined in accordance with regulations issued by the Administrator pursuant to section 304(b)(4) of this Act; and

[301(b)(2)(E) amended by PL 100-4]

(F) for all pollutants (other than those subject to subparagraphs (C), (D), or (E) of this paragraph) compliance with effluent limitations in accordance with subparagraph (A) of this paragraph as expeditiously as practicable but in no case later than 3 years after the date such limitations are established, and in no case later than March 31, 1989.

[Sec. 301(b)(2)(F) amended by PL 100-4]

(3)(A) for effluent limitations under paragraph (1)(A)(i) of this subsection promulgated after January 1, 1982, and requiring a level of control substantially greater or based on fundamentally different control technology than under permits for an industrial category issued before such date, compliance as expeditiously as practicable but in no case later than three years after the date such limitations are promulgated under section 304(b), and in no case later than March 31, 1989; and

(B) for any effluent limitation in accordance with paragraph (1)(A)(i), (2)(A)(i), or (2)(E) of this subsection established only on the basis of section 402(a)(1) in a permit issued after enactment of the Water Quality Act of 1987, compliance as expeditiously as practicable but in no case later than three years after the date such limitations are established, and in no case later than March 31, 1989.

[Sec. 301(b)(3) added by PL 100-4]

(c) The Administrator may modify the requirements of subsection (b) (2) (A) of this section with respect to any point source for which a permit application is filed after July 1, 1977, upon a showing by the owner or operator of such point source satisfactory to the Administrator that such modified requirements (1) will represent the maximum use of technology within the economic capability of the owner or operator; and (2) will result in reasonable further progress toward the elimination of the discharge of pollutants.

(d) Any effluent limitation required by paragraph (2) of subsection (b) of this section shall be reviewed at least every five years and, if appropriate, revised pursuant to the procedure established under such paragraph.

(e) Effluent limitations established pursuant to this section or section 302 of this Act shall be applied to all point sources of discharge of pollutants in accordance with the provisions of this Act.

(f) Notwithstanding any other provisions of this Act it shall be unlawful to discharge any radiological, chemical, or biological warfare agent or high-level radioactive waste into the navigable waters.

(g) Modifications for Certain Nonconventional Pollutants.—

(1) General Authority. — The Administrator, with the concurrence of the State, may modify the requirements of subsection (b)(2)(A) of this section with respect to the discharge from any point source of ammonia, chlorine, color, iron, and total phenols (4AAP) (when determined by the Administrator to be a pollutant covered by subsection (b)(2)(F)) and any other pollutant which the Administrator lists under paragraph (4) of this subsection.

[Former Sec. 301(g)(1) deleted and new (1) and (2) added by PL 100-4]

(2) Requirements for Granting Modifications. — A modification under this subsection shall be granted only upon a showing by the owner or operator of a point source satisfactory to the Administrator that—

(A) such modified requirements will result at a minimum in compliance with the requirements of subsection (b) (1) (A) or (C) of this section, whichever is applicable;

(B) such modified requirements will not result in any additional requirements on any other point or nonpoint source; and

(C) such modification will not interfere with the attainment of maintenance of that water quality which shall assure protection of public water supplies, and the protection and propagation of a balanced population of shellfish, fish, and wildlife, and allow recreational activities, in and on the water and such modification will not result in the discharge of pollutants in quantities which may reasonably be anticipated to pose an unacceptable risk to human health or the environment because of bioaccumulation, persistency in the environment, acute toxicity, chronic toxicity (including carcinogenicity, mutagenicity or teratogenicity), or synergistic propensities.

(3) Limitation on Authority to Apply for Subsection (c) Modification — If an owner or operator of a point source applies for a modification under this subsection with respect to the discharge of any pollutant, such owner or operator shall be eligible to apply for modification under subsection (c) of this section with respect to such pollutant only during the same time-period as he is eligible to apply for a modification under this subsection.

[Former Sec. 301(g)(2) amended and redesignated as (3) by PL 100-4]

(4) Procedures for Listing Additional Pollutants.—

(A) General Authority. — Upon petition of any person, the Administrator may add any pollutant to the list of pollutants for which modification under this section is authorized (except for pollutants identified pursuant to section 304(a)(4) of this Act, toxic pollutants subject to section 307(a) of this Act, and the thermal component of discharges) in accordance with the provisions of this paragraph.

(B) Requirements for Listing.—

(i) Sufficient Information. — The person petitioning for listing of an additional pollutant under this subsection shall submit to the Administrator sufficient information to make the determinations required by this subparagraph.

(ii) Toxic Criteria Determination. — The Administrator shall determine whether or not the pollutant meets the criteria for listing as a toxic pollutant under section 307(a) of this Act.

(iii) Listing as Toxic Pollutant. — If the Administrator determines that the pollutant meets the criteria for listing as a toxic pollutant under section 307(a), the Administrator shall list the pollutant as a toxic pollutant under section 307(a).

(iv) Nonconventional Criteria Determination. — If the Administrator determines that the pollutant does not meet the criteria for listing as a toxic pollutant under such section and determines that adequate test methods and sufficient data are available to make the determinations required by paragraph (2) of this subsection with respect to the pollutant, the Administrator shall add the pollutant to the list of pollutants specified in paragraph (1) of this subsection for which modifications are authorized under this subsection.

(C) Requirements for Filing of Petitions. — A petition for listing of a pollutant under this paragraph—

(i) must be filed not later than 270 days after the date of promulgation of an applicable effluent guideline under section 304;

(ii) may be filed before promulgation of such guideline; and

(iii) may be filed with an application for a modification under paragraph (1) with respect to the discharge of such pollutant.

(D) Deadline for Approval of Petition. — A decision to add a pollutant to the list of pollutants for which modifications under this subsection are authorized must be made within 270 days after the date of promulgation of an applicable effluent guideline under section 304.

(E) Burden of Proof. — The burden of proof for making the determinations under subparagraph (B) shall be on the petitioner.

[Sec. 301(g)(4) added by PL 100–4]

(5) Removal of Pollutants. — The Administrator may remove any pollutant from the list of pollutants for which modifications are authorized under this subsection if the Administrator determines that adequate test methods and sufficient data are no longer available for determining whether or not modifications may be granted with respect to such pollutant under paragraph (2) of this subsection.

[Sec. 301(g)(5) added by PL 100–4]

[*Editor's note:* Section 302(e) of PL 100–4 states:

"(e) Application.—

(1) General Rule. — Except as provided in paragraph (2), the amendments made by this section shall apply to all requests for modifications under section 301(g) of the Federal Water Pollution Control Act pending on the date of the enactment of this Act and shall not have the effect of extending the deadline established in section 301(j)(1)(B) of such Act.

(2) Exception. — The amendments made by this section shall not affect any application for a modification with respect to the discharge of ammonia, chlorine, color, iron, or total phenols (4AAP) under section 301(g) of the Federal Water Pollution Control Act pending on the date of the enactment of this Act; except that the Administrator must approve or disapprove such application not later than 365 days after the date of such enactment."]

(h) The Administrator, with the concurrence of the State, may issue a permit under section 402 which modifies the requirements of subsection (b)(1)(B) of this section with respect to the discharge of any pollutant from a publicly owned treatment works into marine waters, if the applicant demonstrates to the satisfaction of the Administrator that—

(1) there is an applicable water quality standard specific to the pollutant for which the modification is requested, which has been identified under section 304(a)(6) of this Act;

(2) the discharge of pollutants in accordance with such modified requirements will not interfere, alone or in combination with pollutants from other sources, with the attainment or maintenance of that water quality which assures protection of public water supplies and protection and propagation of a balanced, indigenous population of shellfish, fish and wildlife, and allows recreational activities, in and on the water;

(3) the applicant has established a system for monitoring the impact of such discharge on a representative sample of aquatic biota, to the extent practicable, and the scope of such monitoring is limited to include only those scientific investigations which are necessary to study the effects of the proposed discharge;

[Sec. 301(h)(3) amended by PL 100–4]

[*Editor's note:* Section 303(b)(2) of PL 100–4 states the amendment to 301(h)(3), "shall only apply to modifications and renewals of modifications which are tentatively or finally approved after the date of the enactment o this Act."]

(4) such modified requirements will not result in any additional requirements on any other point or nonpoint source;

(5) all applicable pretreatment requirements for sources introducing waste into such treatment works will be enforced;

(6) in the case of any treatment works serving a population of 50,000 or more, with respect to any toxic pollutant introduced into such works by an industrial discharger for which pollutant there is no applicable pretreatment requirement in effect, sources introducing waste into such works are in compliance with all applica

ble pretreatment requirements, the applicant will enforce such requirements, and the applicant has in effect a pretreatment program which, in combination with the treatment of discharges from such works, removes the same amount of such pollutant as would be removed if such works were to apply secondary treatment to discharges and if such works had no pretreatment program with respect to such pollutant;

[New Sec. 301(h)(6) added by PL 100-4]

(7) to the extent practicable, the applicant has established a schedule of activities designed to eliminate the entrance of toxic pollutants from nonindustrial sources into such treatment works;

[Former Sec. 301(h)(8) deleted by PL 97-117; former (6) and (7) redesignated as (7) and (8) by PL 100-4]

(8) there will be no new or substantially increased discharges from the point source of the pollutant to which the modification applies above that volume of discharge specified in the permit;

(9) the applicant at the time such modification becomes effective will be discharging effluent which has received at least primary or equivalent treatment and which meets the criteria established under section 304(a)(1) of this Act after initial mixing in the waters surrounding or adjacent to the point at which such effluent is discharged.

[Sec. 301(h)(9) added by PL 100-4]

For the purposes of this subsection the phrase "the discharge of any pollutant into marine waters" refers to a discharge into deep waters of the territorial sea or the waters of the contiguous zone, or into saline estuarine waters where there is strong tidal movement and other hydrological and geological characteristics which the Administrator determines necessary to allow compliance with paragraph (2) of this subsection, and section 101(a)(2) of this Act. For the purposes of paragraph (9), "primary or equivalent treatment" means treatment by screening, sedimentation, and skimming adequate to remove at least 30 percent of the biological oxygen demanding material and of the suspending solids in the treatment works influent, and disinfection, where appropriate. A municipality which applies secondary treatment shall be eligible to receive a permit pursuant to this subsection which modifies the requirements of subsection (b)(1)(B) of this section with respect to the discharge of any pollutant from any treatment works owned by such municipality into marine waters. No permit issued under this subsection shall authorize the discharge of sewage sludge into marine waters. In order for a permit to be issued under this subsection for the discharge of a pollutant into marine waters, such marine waters must exhibit characteristics assuring that water providing dilution does not contain significant amounts of previously discharged effluent from such treatment works. No permit issued under this subsection shall authorize the discharge of any pollutant into saline estuarine waters which at the time of application do not support a balanced indigenous population of shellfish, fish and wildlife, or allow recreation in and on the waters or which exhibit ambient water quality below applicable water quality standards adopted for the protection of public water supplies, shellfish, fish and wildlife or recreational activities or such other standards necessary to assure support and protection of such uses. The prohibition contained in the preceding sentence shall apply without regard to the presence or absence of a causal relationship between such characteristics and the applicant's current or proposed discharge. Notwithstanding any other provisions of this subsection, no permit may be issued under this subsection for discharge of a pollutant into the New York Bight Apex consisting of the ocean waters of the Atlantic Ocean westward of 73 degrees 30 minutes west longitude and northward of 40 degrees 10 minutes north latitude.

[Sec. 301(h) amended by PL 97-117; PL 100-4]

[*Editor's note:* Section 303(g) of PL 100-4 states the amendments to 301(h) and (h)(2), as well as the provisions of (h)(6) and (h)(9), "shall not apply to an application for a permit under section 301(h) of the Federal Water Pollution Control Act which has been tentatively or finally approved by the Administrator before the date of the enactment of this Act; except that such amendments shall apply to renewals of such permits after such date of enactment."]

(i) (1) Where construction is required in order for a planned or existing publicly owned treatment works to achieve limitations under subsection (b) (1) (B) or (b) (1) (C) of this section, but (A) construction cannot be completed within the time required in such subsection, or (B) the United States has failed to make financial assistance under this Act available in time to achieve such limitations by the time specified in such subsection, the owner or operator of such treatment works may request the Administrator (or if appropriate the State) to issue a permit pursuant to section 402 of this Act or to modify a permit issued pursuant to that section to extend such time for compliance. Any such request shall be filed with the Administrator (or if appropriate the State) within 180 days after the date of enactment of the Water Quality Act of 1987. The Administrator (or if appropriate the State) may grant such request and issue or modify such a permit, which shall contain a schedule of compliance for the publicly owned treatment works based on the earliest date by which such financial assistance will be available from the United States and construction can be completed, but in no event later than July 1, 1988, and shall contain such other terms and conditions, including those necessary to carry out subsections (b) through (g) of section 201 of this Act, section

307 of this Act, and such interim effluent limitations applicable to that treatment works as the Administrator determines are necessary to carry out the provisions of this Act.

[Sec. 301(i)(1) amended by PL 100-4]

[*Editor's note:* Section 304(b) of PL 100-4 states the amendment to 301(i)(1), "shall not apply to those treatment works which are subject to a compliance schedule established before the date of the enactment of this Act by a court order or a final administrative order."]

(2) (A) Where a point source (other than a publicly owned treatment works) will not achieve the requirements of subsections (b) (1) (A) and (b) (1) (C) of this section and—

(i) if a permit issued prior to July 1, 1977, to such point source is based upon a discharge into a publicly owned treatment works; or

(ii) if such point source (other than a publicly owned treatment works) had before July 1, 1977, a contract (enforceable against such point source) to discharge into a publicly owned treatment works; or

(iii) if either an application made before July 1, 1977, for a construction grant under this Act for a publicly owned treatment works, or engineering or architectural plans or working drawings made before July 1, 1977, for a publicly owned treatment works, show that such point source was to discharge into such publicly owned treatment works, and such publicly owned treatment works is presently unable to accept such discharge without construction, and in the case of a discharge to an existing publicly owned treatment works, such treatment works has an extension pursuant to paragraph (1) of this subsection, the owner or operator of such point source may request the Administrator (or if appropriate the State) to issue or modify such a permit pursuant to such section 402 to extend such time for compliance. Any such request shall be filed with the Administrator (or if appropriate the State) within 180 days after the date of enactment of this subsection or the filing of a request by the appropriate publicly owned treatment works under paragraph (1) of this subsection, whichever is later. If the Administrator (or if appropriate the State) finds that the owner or operator of such point source has acted in good faith, he may grant such request and issue or modify such a permit, which shall contain a schedule of compliance for the point source to achieve the requirements of subsections (b) (1) (A) and (C) of this section and shall contain such other terms and conditions, including pretreatment and interim effluent limitations and water conservation requirements applicable to that point source, as the Administrator determines are necessary to carry out the provisions of this Act.

(B) No time modification granted by the Administrator (or if appropriate the State) pursuant to paragraph (2) (A) of this subsection shall extend beyond the earliest date practicable for compliance or beyond the date of any extension granted to the appropriate publicly owned treatment works pursuant to paragraph (1) of this subsection, but in no event shall it extend beyond July 1, 1988; and no such time modification shall be granted unless (i) the publicly owned treatment works will be in operation and available to the point source before July 1, 1988, and will meet the requirements to subsections (b) (1) (B) and (C) of this section after receiving the discharge from that point source; and (ii) the point source and the publicly owned treatment works have entered into an enforceable contract requiring the point source to discharge into the publicly owned treatment works, the owner or operator of such point source to pay the costs required under section 204 of this Act, and the publicly owned treatment works to accept the discharge from the point source; and (iii) the permit for such point source requires point source to meet all requirements under section 307 (a) and (b) during the period of such time modification.

[Sec. 301(i) amended by PL 97-117]

[*Editor's note:* Section 21 of PL 97-117 in addition to extending the compliance date from July 1, 1983 to July 1, 1988, also provides: "The amendment made by this subsection shall not be interpreted or applied to extend the date for compliance with section 301(b)(1)(B) or (C) of the Federal Water Pollution Control Act beyond schedules for compliance in effect as of the date of enactment of this Act, except in cases where reductions in the amount of financial assistance under this Act or changed conditions affecting the rate of construction beyond the control of the owner or operator will make it impossible to complete construction by July 1, 1983."]

(j) (1) Any application filed under this section for a modification of the provisions of—

(A) subsection (b)(1)(B) under subsection (h) of this section shall be filed not later that[n] the 365th day which begins after the date of enactment of the Municipal Wastewater Treatment Construction Grant Amendments of 1981, except that a publicly owned treatment works which prior to December 31, 1982, had a contractual arrangement to use a portion of the capacity of an ocean outfall operated by another publicly owned treatment works which has applied for or received modification under subsection (h), may apply for a modification of subsection (h) in its own right not later than 30 days after the date of the enactment of the Water Quality Act of 1987;

[Sec. 301(j)(1)(A) amended by PL 100-4]

[Sec. 301(j)(1)(A) revised by PL 97-117]

[*Editor's note:* Section 22(e) of PL 97-117 provides: "(e) The amendments made by this section shall take effect on the date of enactment of this Act, except that no applicant, other than the city of Avalon, California,

who applies after the date of enactment of this Act for a permit pursuant to subsection (h) of section 301 of the Federal Water Pollution Control Act which modifies the requirements of subsection (b)(1)(B) of section 301 of such Act shall receive such permit during the one-year period which begins on the date of enactment of this Act."]

(B) subsection (b) (2) (A) as it applies to pollutants identified in subsection (b) (2) (F) shall be filed not later than 270 days after the date of promulgation of an applicable effluent guideline under section 304 or not later than 270 days after the date of enactment of the Clean Water Act of 1977, whichever is later.

(2) Subject to paragraph (3) of this section, any application for a modification filed under subsection (g) of this section shall not operate to stay any requirement under this Act, unless in the judgment of the Administrator such a stay or the modification sought will not result in the discharge of pollutants in quantities which may reasonably be anticipated to pose an unacceptable risk to human health or the environment because of bioaccumulation, persistency in the environment, acute toxicity, chronic toxicity (including carcinogenicity, mutagenicity or teratogenicity), or synergistic propensities, and that there is a substantial likelihood that the applicant will succeed on the merits of such application. In the case of an application filed under subsection (g) of this section, the Administrator may condition any stay granted under this paragraph on requiring the filing of a bond or other appropriate security to assure timely compliance with the requirements from which a modification is sought.

(3) Compliance Requirements Under Subsection (g).—

(A) Effect of Filing. — An application for a modification under subsection (g) and a petition for listing of a pollutant as a pollutant for which modifications are authorized under such subsection shall not stay the requirement that the person seeking such modification or listing comply with effluent limitations under this Act for all pollutants not the subject of such application or petition.

(B) Effect of Disapproval. — Disapproval of an application for a modification under subsection (g) shall not stay the requirement that the person seeking such modification comply with all applicable effluent limitations under this Act.

[Sec. 301(j)(3) and (4) added by PL 100-4]

(4) Deadline for Subsection (g) Decision. — An application for a modification with respect to a pollutant filed under subsection (g) must be approved or disapproved not later than 365 days after the date of such filing; except that in any case in which a petition for listing such pollutant as a pollutant for which modifications are authorized under such subsection is approved, such application must be approved or disapproved not later than 365 days after the date of approval of such petition.

(k) In the case of any facility subject to a permit under section 402 which proposes to comply with the requirements of subsection (b)(2)(A) or (b)(2)(E) of this section by replacing existing production capacity with an innovative production process which will result in an effluent reduction significantly greater than that required by the limitation otherwise applicable to such facility and moves toward the national goal of eliminating the discharge of all pollutants, or with the installation of an innovative control technique that has a substantial likelihood for enabling the facility to comply with the applicable effluent limitation by achieving a significantly greater effluent reduction than that required by the applicable effluent limitation and moves toward the national goal of eliminating the discharge of all pollutants, or by achieving the required reduction with an innovative system that has the potential for significantly lower costs than the systems which have been determined by the Administrator to be economically achievable, the Administrator (or the State with an approved program under section 402, in consultation with the Administrator) may establish a date for compliance under subsection (b)(2)(A) or (b)(2)(E) of this section no later than two years after the date for compliance with such effluent limitation which would otherwise be applicable under such subsection, if it is also determined that such innovative system has the potential for industrywide application.

[Sec. 301(k) amended by PL 100-4]

(l) Other than as provided in subsection (n) of this section, the Administrator may not modify any requirement of this section as it applies to any specific pollutant which is on the toxic pollutant list under section 307(a)(1) of this Act.

[Sec. 301(l) amended by PL 100-4]

(m)(1) The Administrator, with the concurrence of the State, may issue a permit under section 402 which modifies the requirements of subsections (b)(1)(A) and (b)(2)(E) of this section, and of section 403, with respect to effluent limitations to the extent such limitations relate to biochemical oxygen demand and pH from discharges by an industrial discharger in such State into deep waters of the territorial seas, if the applicant demonstrates and the Administrator finds that—

[Sec. 301(m) added by PL 97-440]

(A) the facility for with modification is sought is covered at the time of the enactment of this subsection by National Pollutant Discharge Elimination System permit number CA0005894 or CA0005282;

(B) the energy and environmental costs of meeting such requirements of subsections (b)(1)(A) and (b)(2)(E) and section 403 exceed by an unreasonable

amount the benefits to be obtained, including the objectives of this Act;

(C) the applicant has established a system for monitoring the impact of such discharges on a representative sample of aquatic biota;

(D) such modified requirements will not result in any additional requirements on any other point or nonpoint source;

(E) there will be no new or substantially increased discharges from the point source of the pollutant to which the modification applies above that volume of discharge specified in the permit;

(F) the discharge is into waters where there is strong tidal movement and other hydrological and geological characteristics which are necessary to allow compliance with this subsection and section 101(a)(2) of this Act;

(G) the applicant accepts as a condition to the permit a contractural obligation to use funds in the amount required (but not less than $250,000 per year for ten years) for research and development of water pollution control technology, including but not limited to closed cycle technology;

(H) the facts and circumstances present a unique situation which, if relief is granted, will not establish a precedent or the relaxation of the requirements of this Act applicable to similarly situated discharges; and

(I) no owner or operator of a facility comparable to that of the applicant situated in the United States has demonstrated that it would be put at a competitive disadvantage to the applicant (or the parent company or any subsidiary thereof) as a result of the issuance of a permit under this subsection.

(2) The effluent limitations established under a permit issued under paragraph (1) shall be sufficient to implement the applicable State water quality standards, to assure the protection of public water supplies and protection and propagation of a balanced, indigenous population of shellfish, fish, fauna, wildlife, and other aquatic organisms, and to allow recreational activities in and on the water. In setting such limitations, the Administrator shall take into accout any seasonal variations and the need for an adequate margin of safety, considering the lack of essential knowledge concerning the relationship between effluent limitations and water quality and the lack of essential knowledge of the effects of discharges on beneficial uses of the receiving waters.

(3) A permit under this subsection may be issued for a period not to exceed five years, and such a permit may be renewed for one additional period not to exceed five years upon a demonstration by the applicant and a finding by the Administrator at the time of application for any such renewal that the provisions of this subsection are met.

(4) The Administrator may terminate a permit issued under this subsection if the Administrator determines that there has been a decline in ambient water quality of the receiving waters during the period of the permit even if a direct cause and effect relationship cannot be shown: *Provided*, That if the effluent from a source with a permit issued under this subsection is contributing to a decline in ambient water quality of the receiving waters, the Administrator shall terminate such permit.

(n) Fundamentally Different Factors.—

[Sec. 301(n) added by PL 100-4]

(1) General Rule. — The Administrator, with the concurrence of the State, may establish an alternative requirement under subsection (b)(2) or section 307(b) for a facility that modifies the requirements of national effluent limitation guidelines or categorical pretreatment standards that would otherwise be applicable to such facility, if the owner or operator of such facility demonstrates to the satisfaction of the Administrator that—

(A) the facility is fundamentally different with respect to the factors (other than cost) specified in section 304(b) or 304(g) and considered by the Administrator in establishing such national effluent limitation guidelines or categorical pretreatment standards;

(B) the application—

(i) is based solely on information and supporting data submitted to the Administrator during the rulemaking for establishment of the applicable national effluent limitation guidelines or categorical pretreatment standard specifically raising the factors that are fundamentally different for such facility; or

(ii) is based on information and supporting data referred to in clause (i) and information and supporting data the applicant did not have a reasonable opportunity to submit during such rulemaking;

(C) the alternative requirement is no less stringent than justified by the fundamental difference; and

(D) the alternative requirement will not result in a non-water quality environmental impact which is markedly more adverse than the impact considered by the Administrator in establishing such national effluent limitation guideline or categorical pretreatment standard.

(2) Time Limit for Applications. — An application for an alternative requirement which modifies the requirements of an effluent limitation or pretreatment standard under this subsection must be submitted to the Administrator within 180 days after the date on which such limitation or standard is established or revised, as the case may be.

(3) Time Limit for Decision. — The Administrator shall approve or deny by final agency action an application submitted under this subsection within 180 days after the date such application is filed with the Administrator.

(4) Submission of Information. — The Administrator may allow an applicant under this subsection to submit information and supporting data until the earlier of the date the application is approved or denied or the last day that the Administrator has to approve or deny such application.

(5) Treatment of Pending Applications. — For the purposes of this subsection, an application for an alternative requirement based on fundamentally different factors which is pending on the date of the enactment of this subsection shall be treated as having been submitted to the Administrator on the 180th day following such date of enactment. The applicant may amend the application to take into account the provisions of this subsection.

(6) Effect of Submission of Application. — An application for an alternative requirement under this subsection shall not stay the applicant's obligation to comply with the effluent limitation guideline or categorical pretreatment standard which is the subject of the application.

(7) Effect of Denial. — If an application for an alternative requirement which modifies the requirements of an effluent limitation or pretreatment standard under this subsection is denied by the Administrator, the applicant must comply with such limitation or standard as established or revised, as the case may be.

(8) Reports. — Every 6 months after the date of the enactment of this subsection, the Administrator shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Public Works and Transportation of the House of Representatives a report on the status of applications for alternative requirements which modify the requirements of effluent limitations under section 301 or 304 of this Act or any national categorical pretreatment standard under section 307(b) of this Act filed before, on, or after such date of enactment.

(o) Application Fees. — The Administrator shall prescribe and collect from each applicant fees reflecting the reasonable administrative costs incurred in reviewing and processing applications for modifications submitted to the Administrator pursuant to subsections (c), (g), (i), (k), (m), and (n) of section 301, section 304(d)(4), and section 316(a) of this Act. All amounts collected by the Administrator under this subsection shall be deposited into a special fund of the Treasury entitled "Water Permits and Related Services" which shall thereafter be available for appropriation to carry out activities of the Environmental Protection Agency for which such fees were collected.

[Sec. 301(o) added by PL 100-4]

(p) Modified Permit for Coal Remining Operations.—
[Sec. 301(p) added by PL 100-4]

(1) In General. — Subject to paragraphs (2) through (4) of this subsection, the Administrator, or the State in any case which the State has an approved permit program under section 402(b), may issue a permit under section 402 which modifies the requirements of subsection (b)(2)(A) of section with respect to the pH level of any pre-existing discharge, and with respect to pre-existing discharges iron and manganese from the remined area of any coal remining operation or with respect to the pH level or level of iron or manganese in any pre-existing discharge affected by the remining operation. Such modified requirements shall apply the best available technology economically achievable on a case-by-case basis, using best professional judgment, to set specific numerical effluent limitations in each permit.

(2) Limitations. — The Administrator or the State may only issue a permit pursuant to paragraph (1) if the applicant demonstrates to the satisfaction of the Administrator or the State, as the case may be, that the coal remining operation will result in the potential for improved water quality from the remining operation but in no event shall such a permit allow the pH level of any discharge, and in no event shall such a permit allow the discharges of iron and manganese, to exceed the levels being discharged from the remined area before the coal remining operation begins. No discharge from, or affected by, the remining operation shall exceed State water quality standards established under section 303 of this Act.

(3) Definitions. — For purposes of this subsection—

(A) Coal Remining Operation. — The term "coal remining operation" means a coal mining operation which begins after the date of the enactment of this subsection at a site on which coal mining was conducted before the effective date of the Surface Mining Control and Reclamation Act of 1977.

(B) Remined Area. — The term "remined area" means only that area of any coal remining operation on which coal mining was conducted before the effective date of the Surface Mining Control and Reclamation Act of 1977.

(C) Pre-existing Discharge. — The term "pre-existing discharge" means any discharge at the time of permit application under this subsection.

(4) Applicability of Strip Mining Laws. — Nothing in this subsection shall affect the application of the Surface Mining Control and Reclamation Act of 1977 to any coal remining operation, including the application of such Act to suspended solids.

WATER QUALITY RELATED EFFLUENT LIMITATIONS

Sec. 302. (a) Whenever, in the judgment of the Administrator or as identified under section 304(l) discharges of pollutants from a point source or group of point sources, with the application of effluent limitations required under section 301(b)(2) of this Act, would interfere with the attainment or maintenance of that water quality in a specific portion of the navigable waters which shall assure protection of public health, public water supplies, agricultural and industrial uses, and the protection and propagation of a balanced population of shellfish, fish and wildlife, and allow recreational activities in and on the water, effluent limitations (including alternative effluent control strategies) for

such point source or sources shall be established which can reasonably be expected to contribute to the attainment or maintenance of such water quality.

[Sec. 302(a) amended by PL 100-4]

(b) Modifications of Effluent Limitations.—

(1) Notice and Hearing. — Prior to establishment of any effluent limitation pursuant to subsection (a) of this section, the Administrator shall publish such proposed limitation and within 90 days of such publication hold a public hearing.

(2) Permits.—

(A) No Reasonable Relationship. — The Administrator, with the concurrence of the State, may issue a permit which modifies the effluent limitations required by subsection (a) of this section for pollutants other than toxic pollutants if the applicant demonstrates at such hearing that (whether or not technology or other alternative control strategies are available) there is no reasonable relationship between the economic and social costs and the benefits to be obtained (including attainment of the objective of this Act) from achieving such limitation.

(B) Reasonable Progress. — The Administrator, with the concurrence of the State, may issue a permit which modifies the effluent limitations required by subsection (a) of this section for toxic pollutants for a single period not to exceed 5 years if the applicant demonstrates to the satisfaction of the Administrator that such modified requirements (i) will represent the maximum degree of control within the economic capability of the owner and operator of the source, and (ii) will result in reasonable further progress beyond the requirements of section 301(b)(2) toward the requirements of subsection (a) of this section.

[Sec. 302(b) revised by PL 100-4]

(c) The establishment of effluent limitations under this section shall not operate to delay the application of any effluent limitation established under section 301 of this Act.

WATER QUALITY STANDARDS AND IMPLEMENTATION PLANS

Sec. 303. (a) (1) In order to carry out the purpose of this Act, any water quality standard applicable to interstate waters which was adopted by any State and submitted to, and approved by, or is awaiting approval by, the Administrator pursuant to this Act as in effect immediately prior to the date of enactment of the Federal Water Pollution Control Act Amendments of 1972, shall remain in effect unless the Administrator determined that such standard is not consistent with the applicable requirements of this Act as in effect immediately prior to the date of enactment of the Federal Water Pollution Control Act Amendments of 1972. If the Administrator makes such a determination he shall, within three months after the date of enactment of the Federal Water Pollution Control Act Amendments of 1972, notify the State and specify the changes needed to meet such requirements. If such changes are not adopted by the State within ninety days after the date of such notification, the Administrator shall promulgate such changes in accordance with subsection (b) of this section.

(2) Any State which, before the date of enactment of the Federal Water Pollution Control Act Amendment of 1972, has adopted pursuant to its own law, water quality standards applicable to intrastate waters shall submit such standards to the Administrator within thirty days after the date of enactment of the Federal Water Pollution Control Act Amendments of 1972. Each such standard shall remain in effect, in the same manner and to the same extent as any other water quality standard established under this Act unless the Administrator determines that such standard is inconsistent with the applicable requirements of this Act as in effect immediately prior to the date of enactment of the Federal Water Pollution Control Act Amendments of 1972. If the Administrator makes such a determination he shall not later than the one hundred and twentieth day after the date of submission of such standards, notify the State and specify the changes needed to meet such requirements. If such changes are not adopted by the State within ninety days after such notification, the Administrator shall promulgate such changes in accordance with subsection (b) of this section.

(3) (A) Any State which prior to the date of enactment of the Federal Water Pollution Control Act Amendments of 1972 has not adopted pursuant to its own laws water quality standards applicable to intrastate waters shall, not later than one hundred and eighty days after the date of enactment of the Federal Water Pollution Control Act Amendments of 1972, adopt and submit such standards to the Administrator.

(B) If the Administrator determines that any such standards are consistent with the applicable requirements of this Act as in effect immediately prior to the date of enactment of the Federal Water Pollution Control Act Amendments of 1972, he shall approve such standards.

(C) If the Administrator determines that any such standards are not consistent with the applicable requirements of this Act as in effect immediately prior to the date of enactment of the Federal Water Pollution Control Act Amendments of 1972, he shall, not later than the ninetieth day after the date of submission of such standards, notify the State and specify the changes to meet such requirements. If such changes are not adopted by the State within ninety days after the date of notification, the Administrator shall promulgate such standards pursuant to subsection (b) of this section.

(b) (1) The Administrator shall promptly prepar

and publish proposed regulations setting forth water quality standards for a State in accordance with the applicable requirements of this Act as in effect immediately prior to the date of enactment of the Federal Water Pollution Control Act Amendments of 1972, if—

(A) the State fails to submit water quality standards within the times prescribed in subsection (a) of this section,

(B) a water quality standard submitted by such State under subsection (a) of this section is determined by the Administrator not to be consistent with the applicable requirements of subsection (a) of this section.

(2) The Administrator shall promulgate any water quality standard published in a proposed regulation not later than one hundred and ninety days after the date he publishes any such proposed standard, unless prior to such promulgation, such State has adopted a water quality standard which the Administrator determines to be in accordance with subsection (a) of this section.

(c) (1) The Governor of a State or the State water pollution control agency of such State shall from time to time (but at least once each three year period beginning with the date of enactment of the Federal Water Pollution Control Act Amendments of 1972) hold public hearings for the purpose of reviewing applicable water quality standards and, as appropriate, modifying and adopting standards. Results of such review shall be made available to the Administrator.

(2)(A) Whenever the State revises or adopts a new standard, such revised or new standard shall be submitted to the Administrator. Such revised or new water quality standard shall consist of the designated uses of the navigable waters involved and the water quality criteria for such waters based upon such uses. Such standards shall be such as to protect the public health or welfare, enhance the quality of water and serve the purposes of this Act. Such standards shall be established taking into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other purposes, and also taking into consideration their use and value for navigation.

[Sec. 303(c)(2)(A) designated by PL 100-4]

(B) Whenever a State reviews water quality standards pursuant to paragraph (1) of this subsection, or revises or adopts new standards pursuant to this paragraph, such State shall adopt criteria for all toxic pollutants listed pursuant to section 307(a)(1) of this Act for which criteria have been published under section 304(a), the discharge or presence of which in the affected waters could reasonably be expected to interfere with those designated uses adopted by the State, as necessary to support such designated uses. Such criteria shall be specific numerical criteria for such toxic pollutants. Where such numerical criteria are not available, whenever a State reviews water quality standards pursuant to paragraph (1), or revises or adopts new standards pursuant to this paragraph, such State shall adopt criteria based on biological monitoring or assessment methods consistent with information published pursuant to section 304(a)(8). Nothing in this section shall be construed to limit or delay the use of effluent limitations or other permit conditions based on or involving biological monitoring or assessment methods or previously adopted numerical criteria.

[Sec. 303(c)(2)(B) added by PL 100-4]

(3) If the Administrator, within sixty days after the date of submission of the revised or new standard, determines that such standard meets the requirements of this Act, such standard shall thereafter be the water quality standard for the applicable waters of that State. If the Administrator determines that any such revised or new standard is not consistent with the applicable requirements of this Act, he shall not later than the ninetieth day after the date of submission of such standard notify the State and specify the changes to meet such requirements. If such changes are not adopted by the State within ninety days after the date of notification, the Administrator shall promulgate such standard pursuant to paragraph (4) of this subsection.

(4) The Administrator shall promptly prepare and publish proposed regulations setting forth a revised or new water quality standard for the navigable waters involved—

(A) if a revised or new water quality standard submitted by such State under paragraph (3) of this subsection for such waters is determined by the Administrator not to be consistent with the applicable requirements of this Act, or

(B) in any case where the Administrator determines that a revised or new standard is necessary to meet the requirements of this Act.

The Administrator shall promulgate any revised or new standard under this paragraph not later than ninety days after he publishes such proposed standards, unless prior to such promulgation, such State has adopted a revised or new water quality standard which the Administrator determines to be in accordance with this Act.

[*Editor's note:* Section 24 of PL 97-117 provides:

"REVISED WATER QUALITY STANDARDS

Sec. 24. The review, revision, and adoption or promulgation of revised or new water quality standards pursuant to section 303(c) of the Federal Water Pollution Control Act shall be completed by the date three years after the enactment of the Municipal Wastewater Treatment Construction Grant Amendments of 1981. No grant shall be made under title II of the Federal Water Pollution Control Act after such date until water quality standards are reviewed and revised pursuant to section 303(c), except where the State has in good faith submitted such revised water quality standards and the Admin-

istrator has not acted to approve or disapprove such submission within one hundred and twenty days of receipt."]

[*Editor's note:* Section 404(c) of PL 100-4 provides: "(c) Study. — The Administrator shall study—

(1) the extent to which States have reviewed, revised, and adopted water quality standards in accordance with section 24 of the Municipal Wastewater Treatment Construction Grant Amendments of 1981; and

(2) the extent to which modifications of permits issued under section 402(a)(1)(B) of the Federal Water Pollution Control Act for the purpose of reflecting any revisions to water quality standards should be encouraged or discouraged.

The Administrator shall submit a report on such study, together with recommendations, to Congress not later than 2 years after the date of the enactment of this Act."]

(d) (1) (A) Each state shall identify those waters within its boundaries for which the effluent limitations required by section 301(b) (1) (A) and section 301(b) (1) (B) are not stringent enough to implement any water quality standard applicable to such waters. The State shall establish a priority ranking for such waters, taking into account the severity of the pollution and the uses to be made of such waters.

(B) Each State shall identify those waters or parts thereof within its boundaries for which controls on thermal discharges under section 301 are not stringent enough to assure protection and propagation of a balanced indigenous population of shellfish, fish, and wildlife.

(C) Each State shall establish for the waters identified in paragraph (1) (A) of this subsection, and in accordance with the priority ranking, the total maximum daily load, for those pollutants which the Administrator identifies under section 304(a) (2) as suitable for such calculation. Such load shall be established at a level necessary to implement the applicable water quality standards with seasonal variations and a margin of safety which takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality.

(D) Each State shall estimate for the waters identified in paragraph (1) (D) of this subsection the total maximum daily thermal load required to assure protection and propagation of a balanced, indigenous population of shellfish, fish and wildlife. Such estimates shall take into account the normal water temperatures, flow rates, seasonal variations, existing sources of heat input, and the dissipative capacity of the identified waters or parts thereof. Such estimates shall include a calculation of the maximum heat input that can be made into each such part and shall include a margin of safety which takes into account any lack of knowledge concerning the development of thermal water quality criteria for such protection and propagation in the identified waters or parts thereof.

(2) Each State shall submit to the Administrator from time to time, with the first such submission not later than one hundred and eighty days after the date of publication of the first identification of pollutants under section 304(a) (2) (D), for his approval the waters identified and the loads established under paragraphs (1) (A), (1) (B), (1) (C), and (1) (D) of this subsection. The Administrator shall either approve or disapprove such identification and load not later than thirty days after the date of submission. If the Administrator approves such identification and load, such State shall incorporate them into its current plan under subsection (e) of this section. If the Administrator disapproves such identification and load, he shall not later than thirty days after the date of such disapproval identify such waters in such State and establish such loads for such waters as he determines necessary to implement the water quality standards applicable to such waters and upon such identification and establishment the State shall incorporate them into its current plan under subsection (e) of this section.

(3) For the specific purpose of developing information, each State shall identify all waters within its boundaries which it has not identified under paragraph (1) (A) and (1) (B) of this subsection and estimate for such waters the total maximum daily load with seasonal variations and margins of safety, for those pollutants which the Administrator identifies under section 304(a) (2) as suitable for such calculation and for thermal discharges, at a level that would assure protection and propagation of a balanced indigenous population of fish, shellfish and wildlife.

(4) Limitations on Revision of Certain Effluent Limitations.—

[Sec. 303(d)(4) added by PL 100-4]

(A) Standard Not Attained. — For waters identified under paragraph (1)(A) where the applicable water quality standard has not yet been attained, any effluent limitation based on a total maximum daily load or other waste load allocation established under this section may be revised only if (i) the cumulative effect of all such revised effluent limitations based on such total maximum daily load or waste load allocation will assure the attainment of such water quality standard, or (ii) the designated use which is not being attained is removed in accordance with regulations established under this section.

(B) Standard Attained. — For waters identified under paragraph (1)(A) where the quality of such waters equals or exceeds levels necessary to protect the designated use for such waters or otherwise required by applicable water quality standards, any effluent limitation based on a total maximum daily load or other waste load allocation established under this section, or any

water quality standard established under this section, or any other permitting standard may be revised only if such revision is subject to and consistent with the antidegradation policy established under this section.

(e) (1) Each State shall have a continuing planning process approved under paragraph (2) of this subsection which is consistent with this Act.

(2) Each State shall submit not later than 120 days after the date of the enactment of the Water Pollution Control Amendments of 1972 to the Administrator for his approval a proposed continuing planning process which is consistent with this Act. Not later than thirty days after the date of submission of such a process the Administrator shall either approve or disapprove such process. The Administrator shall from time to time review each State's approved planning process for the purpose of insuring that such planning process is at all times consistent with this Act. The Administrator shall not approve any State permit program under title IV of this Act for any State which does not have an approved continuing planning process under this section.

(3) The Administrator shall approve any continuing planning process submitted to him under this section which will result in plans for all navigable waters within such State, which include, but are not limited to, the following:

(A) effluent limitations and schedules of compliance at least as stringent as those required by section 301(b)(1), section 301(b)(2), section 306, and section 307, and at least as stringent as any requirements contained in any applicable water quality standard in effect under authority of this section;

(B) the incorporation of all elements of any applicable areawide waste management plans under section 208, and applicable basin plans under section 209 of this Act;

(C) total maximum daily load for pollutants in accordance with subsection (d) of this section;

(D) procedures for revision;

(E) adequate authority for intergovernmental cooperation;

(F) adequate implementation, including schedules of compliance, for revised or new water quality standards, under subsection (c) of this section;

(G) controls over the disposition of all residual waste from any water treatment processing;

(H) an inventory and ranking, in order of priority, of needs for construction of waste treatment works required to meet the applicable requirements of sections 301 and 302.

(f) Nothing in this section shall be construed to affect any effluent limitation, or schedule of compliance required by any State to be implemented prior to the dates set forth in sections 301(b)(1) and 301(b)(2) nor to preclude any State from requiring compliance with any effluent limitation or schedule of compliance at dates earlier than such dates.

(g) Water quality standards relating to heat shall be consistent with the requirements of section 316 of this Act.

(h) For the purposes of this Act the term "water quality standards" includes thermal water quality standards.

INFORMATION AND GUIDELINES

Sec. 304. (a) (1) The Administrator, after consultation with appropriate Federal and State agencies and other interested persons, shall develop and publish, within one year after the date of enactment of this title (and from time to time thereafter revise) criteria for water quality accurately reflecting the latest scientific knowledge (A) on the kind and extent of all identifiable effects on health and welfare including, but not limited to, plankton, fish, shellfish, wildlife, plant life, shorelines, beaches, esthetics, and recreation which may be expected from the presence of pollutants in any body of water, including ground water; (B) on the concentration and dispersal of pollutants, or their byproducts, through biological, physical, and chemical processes; and (C) on the effects of pollutants on biological community diversity, productivity, and stability, including information on the factors affecting rates of eutrophication and rates of organic and inorganic sedimentation for varying types of receiving waters.

(2) The Administrator, after consultation with appropriate Federal and State agencies and other interested persons, shall develop and publish, within one year after the date of enactment of this title (and from time to time thereafter revise) information (A) on the factors necessary to restore and maintain the chemical, physical, and biological integrity of all navigable waters, ground waters, waters of the contiguous zone, and the oceans; (B) on the factors necessary for the protection and propagation of shellfish, fish, and wildlife for classes and categories of receiving waters and to allow recreational activities in and on the water; and (C) on the measurement and classification of water quality; and (D) for the purpose of section 303, on and the identification of pollutants suitable for maximum daily load measurement correlated with the achievement of water quality objectives.

(3) Such criteria and information and revisions thereof shall be issued to the States and shall be published in the Federal Register and otherwise made available to the public.

(4) The Administrator shall, within 90 days after the date of enactment of the Clean Water Act of 1977 and from time to time thereafter, publish and revise as appropriate information identifying conventional pollutants, including but not limited to, pollutants classified as biological oxygen demanding, suspended solids, fecal coliform, and pH. The thermal component of any discharge shall not be identified as a conventional pollutant under this paragraph.

(5) (A) The Administrator, to the extent practicable before consideration of any request under section 301(g) of this Act and within six months after the date of enactment of the Clean Water Act of 1977, shall develop and publish information on the factors necessary for the protection of public water supplies, and the protection and propagation of a balanced population of shellfish, fish and wildlife, and to allow recreational activities, in and on the water.

(B) The Administrator, to the extent practicable before consideration of any application under section 301(h) of this Act and within six months after the date of enactment of the Clean Water Act of 1977, shall develop and publish information on the factors necessary for the protection of public water supplies, and the protection and propagation of a balanced indigenous population of shellfish, fish and wildlife, and to allow recreational activities, in and on the water.

(6) The Administrator shall, within three months after enactment of the Clean Water Act of 1977 and annually thereafter, for purposes of section 301(h) of this Act publish and revise as appropriate information identifying each water quality standard in effect under this Act of State law, the specific pollutants associated with such water quality standard, and the particular waters to which such water quality standard applies.

(7) Guidance to States. — The Administrator, after consultation with appropriate State agencies and on the basis of criteria and information published under paragraphs (1) and (2) of this subsection, shall develop and publish, within 9 months after the date of the enactment of the Water Quality Act of 1987, guidance to the States on performing the identification required by section 304(l)(1) of this Act.

[Sec. 304(a)(7) added by PL 100-4]

(8) Information on Water Quality Criteria. — The Administrator, after consultation with appropriate State agencies and within 2 years after the date of the enactment of the Water Quality Act of 1987, shall develop and publish information on methods for establishing and measuring water quality criteria for toxic pollutants on other bases than pollutant-by-pollutant criteria, including biological monitoring and assessment methods.

[Sec. 304(a)(8) added by PL 100-4]

(b) For the purpose of adopting or revising effluent limitations under this Act the Administrator shall, after consultation with appropriate Federal and State agencies and other interested persons, publish within one year of enactment of this title, regulations, providing guidelines for effluent limitations, and, at least annually thereafter, revise, if appropriate, such regulations. Such regulations shall—

(1) (A) identify, in terms of amounts of constituents and chemical, physical, and biological characteristics of pollutants, the degree of effluent reduction attainable through the application of the best practicable control technology currently available for classes and categories of point sources (other than publicly owned treatment works); and

(B) specify factors to be taken into account in determining the control measures and practices to be applicable to point sources (other than publicly owned treatment works) within such categories or classes. Factors relating to the assessment of best practicable control technology currently available to comply with subsection (b) (1) of section 301 of this Act shall include consideration of the total cost of application of technology in relation to the effluent reduction benefits to be achieved from such application, and shall also take into account the age of equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, non-water quality environmental impact (including energy requirements), and such other factors as the Administrator deems appropriate;

(2) (A) identify, in terms of amounts of constituents and chemical, physical, and biological characteristics of pollutants, the degree of effluent reduction attainable through the application of the best control measures and practices achievable including treatment techniques, process and procedure innovations, operating methods, and other alternatives for classes and categories of point sources (other than publicly owned treatment works); and

(B) specify factors to be taken into account in determining the best measures and practices available to comply with subsection (b) (2) of section 301 of this Act to be applicable to any point source (other than publicly owned treatment works) within such categories or classes. Factors relating to the assessment of best available technology shall take into account the age of equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, the cost of achieving such effluent reduction, non-water quality environmental impact (including energy requirements), and such other factors as the Administrator deems appropriate;

(3) identify control measures and practices available to eliminate the discharge of pollutants from categories and classes of point sources, taking into account the cost of achieving such elimination of the discharge of pollutants; and

(4) (A) identify, in terms of amounts of constituents and chemical, physical, and biological characteristics of pollutants, the degree of effluent reduction attainable through the application of the best conventional pollutant control technology (including measures and practices) for classes and categories of point sources (other than publicly owned treatment works); and

(B) specify factors to be taken into account in determining the best conventional pollutant control technology measures and practices to comply with section 301(b) (2) (E) of this Act to be applicable to any point source (other than publicly owned treatment works) within such categories or classes. Factors relating to the assessment of best conventional pollutant control technology (including measures and practices) shall include consideration of the reasonableness of the relationship between the costs of attaining a reduction in effluents and the effluent reduction benefits derived, and the comparison of the cost and level of reduction of such pollutants from the discharge from publicly owned treatment works to the cost and level of reduction of such pollutants from a class or category of industrial sources, and shall take into account the age of equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, non-water quality environmental impact (including energy requirements), and such other factors as the Administrator deems appropriate.

(c) The Administrator, after consultation, with appropriate Federal and State agencies and other interested persons, shall issue to the States and appropriate water pollution control agencies within 270 days after enactment of this title (and from time to time thereafter) information on the processes, procedures, or operating methods which result in the elimination or reduction of the discharge of pollutants to implement standards of performance under section 306 of this Act. Such information shall include technical and other data, including costs, as are available on alternative methods of elimination or reduction of the discharge of pollutants. Such information, and revisions thereof, shall be published in the Federal Register and otherwise shall be made available to the public.

(d) (1) The Administrator, after consultation with appropriate Federal and State agencies and other interested persons, shall publish within sixty days after enactment of this title (and from time to time thereafter) information, in terms of amounts of constituents and chemical, physical, and biological characteristics of pollutants, on the degree of effluent reduction attainable through the application of secondary treatment.

(2) The Administrator, after consultation with appropriate Federal and State agencies and other interested persons, shall publish within nine months after the date of enactment of this title (and from time to time thereafter) information on alternative waste treatment management techniques and systems available to implement section 201 of this Act.

(3) The Administrator, after consultation with appropriate Federal and State agencies and other interested persons, shall promulgate within one hundred and eighty days after the date of enactment of this subsection guidelines for identifying and evaluating innovative and alternative wastewater treatment processes and techniques referred to in section 201(g) (5) of this Act.

(4) For the purposes of this subsection, such biological treatment facilities as oxidation ponds, lagoons, and ditches and trickling filters shall be deemed the equivalent of secondary treatment. The Administrator shall provide guidance under paragraph (1) of this subsection on design criteria for such facilities, taking into account pollutant removal efficiencies and, consistent with the objective of the Act, assuring that water quality will not be adversely affected by deeming such facilities as the equivalent of secondary treatment.

[Sec. 304(d)(4) added by PL 97-117]

(e) The Administrator, after consultation with appropriate Federal and State agencies and other interested persons, may publish regulations, supplemental to any effluent limitations specified under subsections (b) and (c) of this section for a class or category of point sources, for any specific pollutant which the Administrator is charged with a duty to regulate as a toxic or hazardous pollutant under section 307(a) (1) or 311 of this Act, to control plant site runoff, spillage or leaks, sludge or waste disposal, and drainage from raw material storage which the Administrator determines are associated with or ancillary to the industrial manufacturing or treatment process within such class or category of point sources and may contribute significant amounts of such pollutants to navigable waters. Any applicable controls established under this subsection shall be included as a requirement for the purposes of section 301, 302, 306, 307, or 403, as the case may be, in any permit issued to a point source pursuant to section 402 of this Act.

(f) The Administrator, after consultation with appropriate Federal and State agencies and other interested persons, shall issue to appropriate Federal agencies, the States, water pollution control agencies, and agencies designated under section 208 of this Act, within one year after the effective date of this subsection (and from time to time thereafter) information including (1) guidelines for identifying and evaluating the nature and extent of nonpoint sources of pollutants, and (2) processes, procedures, and methods to control pollution resulting from—

(A) agricultural and silvicultural activities, including runoff from fields and crop and forest lands;

(B) mining activities, including runoff and siltation from new, currently operating, and abandoned surface and underground mines;

(C) all construction activity, including runoff from the facilities resulting from such construction;

(D) the disposal of pollutants in wells or in subsurface excavations;

(E) salt water intrusion resulting from reductions of fresh water flow from any cause, including extraction of ground water, irrigation, obstruction, and diversion; and

(F) changes in the movement, flow, or circulation of any navigable waters or ground waters, including changes caused by the construction of dams, levees, channels, causeways, or flow diversion facilities.

Such information and revisions thereof shall be published in the Federal Register and otherwise made available to the public.

(g) (1) For the purpose of assisting States in carrying out programs under section 402 of this Act, the Administrator shall publish, within one hundred and twenty days after the date of enactment of this title, and review at least annually thereafter and, if appropriate, revise guidelines for pretreatment of pollutants which he determines are not susceptible to treatment by publicly owned treatment works. Guidelines under this subsection shall be established to control and prevent the discharge into the navigable waters, the contiguous zone, or the ocean (either directly or through publicly owned treatment works) of any pollutant which interferes with, passes through, or otherwise is incompatible with such works.

(2) When publishing guidelines under this subsection, the Administrator shall designate the category or categories of treatment works to which the guidelines shall apply.

(h) The Administrator shall, within one hundred and eighty days from the date of enactment of this title, promulgate guidelines establishing test procedures for the analysis of pollutants that shall include the factors which must be provided in any certification pursuant to section 401 of this Act or permit application pursuant to section 402 of this Act.

[*Editor's note*: Section 518 of PL 100-4 provides:

"Sec. 518. Study of Testing Procedures.

(a) Study. — The Administrator shall study the testing procedures for analysis of pollutants established under section 304(h) of the Federal Water Pollution Control Act. Such study shall include, but not be limited to, an analysis of the adequacy and standardization of such procedures. In conducting the analysis of the standardization of such procedures, the Administrator shall consider the extent to which such procedures are consistent with comparable procedures established under other Federal laws.

(b) Report. — Not later than 1 year after the date of the enactment of this Act, the Administrator shall submit a report on the results of the study conducted under this subsection, together with recommendations for modifying the test procedures referred to in subsection (a) to improve their effectiveness, to the Committee on Public Works and Transportation of the House of Representatives and the Committee on Environment and Public Works of the Senate."

[See also the provisions of Section 519 of PL 100-4 published at the end of this Act.]]

(i) The Administrator shall (1) within sixty days after the enactment of this title promulgate guidelines for the purpose of establishing uniform application forms and other minimum requirements for the acquisition of information from owners and operators of point sources of discharge subject to any State program under section 402 of this Act, and (2) within sixty days from the date of enactment of this title promulgate guidelines establishing the minimum procedural and other elements of any State program under section 402 of this Act which shall include:

(A) monitoring requirements;

(B) reporting requirements (including procedures to make information available to the public);

(C) enforcement provisions; and

(D) funding, personnel qualifications, and manpower requirements (including a requirement that no board or body which approves permit applications or portions thereof shall include, as a member, any person who receives, or has during the previous two years received, a significant portion of his income directly or indirectly from permit holders or applicants for a permit).

(j) Lake Restoration Guidance Manual — The Administrator shall, within 1 year after the date of the enactment of the Water Quality Act of 1987 and biennially thereafter, publish and disseminate a lake restoration guidance manual describing methods, procedures and processes to guide State and local efforts to improve restore, and enhance water quality in the Nation's publicly owned lakes.

[304(j) revised by PL 100-4]

(k) (1) The Administrator shall enter into agreements with the Secretary of Agriculture, the Secretary of the Army, and the Secretary of the Interior, and the heads of such other departments, agencies, and instrumentalities of the United States as the Administrator determines, to provide for the maximum utilization of other Federal laws and programs for the purpose of achieving and maintaining water quality through appropriate implementation of plans approved under section 208 of this Act and nonpoint source pollution management programs approved under section 319 of this Act.

[Sec. 304(k)(1) amended by PL 100-4]

(2) The Administrator is authorized to transfer to the Secretary of Agriculture, the Secretary of the Army, and the Secretary of the Interior and the heads of such other departments, agencies, and instrumentalities of the United States as the Administrator determines, any funds appropriated under paragraph (3) of this subsection to supplement funds otherwise appropriated to programs authorized pursuant to any agreement under

paragraph (1).

(3) There is authorized to be appropriated to carry out the provisions of this subsection, $100,000,000 per fiscal year for the fiscal years 1979 through 1983 and such sums as may be necessary for fiscal years 1984 through 1990.

[Sec. 304(k)(3) amended by PL 100-4]

(l) Individual Control Strategies for Toxic Pollutants.—

[Sec. 304(l) added by PL 100-4]

(1) State List of Navigable Waters and Development of Strategies. — Not later than 2 years after the date of the enactment of this subsection, each State shall submit to the Administrator for review, approval, and implementation under this subsection—

(A) a list of those waters within the State which after the application of effluent limitations required under section 301(b)(2) of this Act cannot reasonably be anticipated to attain or maintain (i) water quality standards for such waters reviewed, revised, or adopted in accordance with section 303(c)(2)(B) of this Act, due to toxic pollutants, or (ii) that water quality which shall assure protection of public health, public water supplies, agricultural and industrial uses, and the protection and propagation of a balanced population of shellfish, fish and wildlife, and allow recreational activities in and on the water;

(B) a list of all navigable waters in such State for which the State does not expect the applicable standard under section 303 of this Act will be achieved after the requirements of sections 301(b), 306, and 307(b) are met, due entirely or substantially to discharges from point sources of any toxic pollutants listed pursuant to section 307(a);

(C) for each segment of the navigable waters included on such lists, a determination of the specific point sources discharging any such toxic pollutant which is believed to be preventing or impairing such water quality and the amount of each such toxic pollutant discharged by each such source; and

(D) for each such segment, an individual control strategy which the State determines will produce a reduction in the discharge of toxic pollutants from point sources identified by the State under this paragraph through the establishment of effluent limitations under section 402 of this Act and water quality standards under section 303(c)(2)(B) of this Act, which reduction is sufficient, in combination with existing controls on point and nonpoint sources of pollution, to achieve the applicable water quality standard as soon as possible, but not later than 3 years after the date of the establishment of such strategy.

(2) Approval or Disapproval. — Not later than 120 days after the last day of the 2-year period referred to in paragraph (1), the Administrator shall approve or disapprove the control strategies submitted under paragraph (1) by any State.

(3) Administrator's Action. — If a State fails to submit control strategies in accordance with paragraph (1) or the Administrator does not approve the control strategies submitted by such State in accordance with paragraph (1), then, not later than 1 year after the last day of the period referred to in paragraph (2), the Administrator, in cooperation with such State and after notice and opportunity for public comment, shall implement the requirements of paragraph (1) in such State. In the implementation of such requirements, the Administrator shall, at a minimum, consider for listing under this subsection any navigable waters for which any person submits a petition to the Administrator for listing not later than 120 days after such last day.

[*Editor's note:* Section 308(g) of PL 100-4 requires:

"(g) Water Quality Improvement Study. —

(1) Study. — The Administrator shall study the water quality improvements which have been achieved by application of best available technology economically achievable pursuant to section 301(b)(2) of the Federal Water Pollution Control Act. Such study shall include, but not be limited to, an analysis of the effectiveness of the application of best available technology economically achievable pursuant to such section in attaining applicable water quality standards (including the standard specified in section 302(a) of such Act) and an analysis of the effectiveness of the water quality program under such Act and methods of improving such program, including site specific levels of treatment which will achieve the water quality goals of such Act.

(2) Report. — Not later than 2 years after the date of the enactment of this Act, the Administrator shall submit a report on the results of the study conducted under

subsection (a) together with recommendations for improving the water quality program and its effectiveness to the Committee on Pubic Works and Transportation of the House of Representatives and the Committee on Environment and Public Works of the Senate."]

(m) Schedule for Review of Guidelines.—

[Sec. 304(m) added by PL 100-4]

(1) Publication. — Within 12 months after the date of the enactment of the Water Quality Act of 1987, and biennially thereafter, the Administrator shall publish in the Federal Register a plan which shall—

(A) establish a schedule for the annual review and revision of promulgated effluent guidelines, in accordance with subsection (b) of this section;

(B) identify categories of sources discharging toxic or nonconventional pollutants for which guidelines under subsection (b)(2) of this section and section 306 have not previously been published; and

(C) establish a schedule for promulgation of effluent guidelines for categories identified in subparagraph (B), under which promulgation of such guidelines shall be no later than 4 years after such date of enactment for categories identified in the first published plan or 3 years after the publication of the plan for categories identified in later published plans.

(2) Public Review. — The Administrator shall provide for public review and comment on the plan prior to final publication.

WATER QUALITY INVENTORY

Sec. 305. (a) The Administrator, in cooperation with the States and with the assistance of appropriate Federal agencies shall prepare a report to be submitted to the Congress on or before January 1, 1974, which shall—

(1) describe the specific quality, during 1973, with appropriate supplemental descriptions as shall be required to take into account seasonal, tidal, and other variations, of all navigable waters and the waters of the contiguous zone;

(2) include an inventory of all point sources of discharge (based on a qualitative and quantitative analysis of discharges) of pollutants, into all navigable waters and the waters of the contiguous zone; and

(3) identify specifically those navigable waters, the quality of which—

(A) is adequate to provide for the protection and propagation of a balanced population of shellfish, fish, and wildlife and allow recreational activities in and on the water;

(B) can reasonably be expected to attain such level by 1977 or 1983; and

(C) can reasonably be expected to attain such level by any later date.

(b) (1) Each State shall prepare and submit to the Administrator by April 1, 1975, and shall bring up to date by April 1, 1976, and biennially thereafter, a report which shall include—

(A) a description of the water quality of all navigable waters in such State during the preceding year, with appropriate supplemental descriptions as shall be required to take into account seasonal, tidal, and other variations, correlated with the quality of water required by the objective of this Act (as identified by the Administrator pursuant to criteria published under section 304(a) of this Act) and the water quality described in subparagraph (B) of this paragraph;

(B) an analysis of the extent to which all navigable waters of such State provide for the protection and propagation of a balanced population of shellfish, fish, and wildlife, and allow recreational activities in and on the water;

(C) an analysis of the extent to which the elimination of the discharge of pollutants and a level of water quality which provides for the protection and propagation of a balanced population of shellfish, fish, and wildlife and allows recreational activities in and on the water, have been or will be achieved by the requirements of this Act, together with recommendations as to additional action necessary to achieve such objectives and for what waters such additional action is necessary;

(D) an estimate of (i) the environmental impact, (ii) the economic and social costs necessary to achieve the objective of this Act in such State, (iii) the economic and social benefits of such achievement, and (iv) an estimate of the date of such achievement; and

(E) a description of the nature and extent of nonpoint sources of pollutants, and recommendations as to the programs which must be undertaken to control each category of such sources, including an estimate of the costs of implementing such programs.

(2) The Administrator shall transmit such State reports, together with an analysis thereof, to Congress on or before October 1, 1975, and October 1, 1976, and biennially thereafter.

NATIONAL STANDARDS OF PERFORMANCE

Sec. 306. (a) For purposes of this section:

(1) The term "standard of performance" means a standard for the control of the discharge of pollutants which reflects the greatest degree of effluent reduction which the Administrator determines to be achievable through application of the best available demonstrated control technology, processes, operating methods, or other alternatives, including, where practicable, a standard permitting no discharge of pollutants.

(2) The term "new source" means any source, the construction of which is commenced after the publication of proposed regulations prescribing a standard of performance under this section which will be applicable

to such source, if such standard is thereafter promulgated in accordance with this section.

(3) The term "source" means any building, structure, facility, or installation from which there is or may be the discharge of pollutants.

(4) The term "owner or operator" means any person who owns, leases, operates, controls, or supervises a source.

(5) The term "construction" means any placement, assembly, or installation of facilities or equipment (including contractual obligations to purchase such facilities or equipment) at the premises where such equipment will be used, including preparation work at such premises.

(b) (1) (A) The Administrator shall, within ninety days after the date of enactment of this title publish (and from time to time thereafter shall revise) a list of categories of sources, which shall, at the minimum, include:

pulp and paper mills;
paperboard, builders paper and board mills;
meat product and rendering processing;
dairy product processing;
grain mills;
canned and preserved fruits and vegetables processing;
canned and preserved seafood processing;
sugar processing;
textile mills;
cement manufacturing;
feedlots;
electroplating;
organic chemicals manufacturing;
inorganic chemicals manufacturing;
plastic and synthetic materials manufacturing;
soap and detergent manufacturing;
fertilizer manufacturing;
petroleum refining;
iron and steel manufacturing;
nonferrous metals manufacturing;
phosphate manufacturing;
steam electric powerplants;
ferroalloy manufacturing;
leather tanning and finishing;
glass and asbestos manufacturing;
rubber processing; and
timber products processing.

(B) As soon as practicable, but in no case more than one year, after a category of sources is included in a list under subparagraph (A) of this paragraph, the Administrator shall propose and publish regulations establishing Federal standards of performance for new sources within such category. The Administrator shall afford interested persons an opportunity for written comment on such proposed regulations. After considering such comments, he shall promulgate, within one hundred and twenty days after publication of such proposed regulations, such standards with such adjustments as he deems appropriate. The Administrator shall, from time to time, as technology and alternatives change, revise such standards following the procedure required by this subsection for promulgation of such standards. Standards of performance, or revisions thereof, shall become effective upon promulgation. In establishing or revising Federal standards of performance for new sources under this section, the Administrator shall take into consideration the cost of achieving such effluent reduction, and any non-water quality environmental impact and energy requirements.

(2) The Administrator may distinguish among classes, types, and sizes within categories of new sources for the purpose of establishing such standards and shall consider the type of process employed (including whether batch or continuous).

(3) The provisions of this section shall apply to any new source owned or operated by the United States.

(c) Each State may develop and submit to the Administrator a procedure under State law for applying and enforcing standards of performance for new sources located in such State. If the Administrator finds that the procedure and the law of any State require the application and enforcement of standards of performance to at least the same extent as required by this section, such State is authorized to apply and enforce such standards of performance (except with respect to new sources owned or operated by the United States).

(d) Notwithstanding any other provision of this Act, any point source the construction of which is commenced after the date of enactment of the Federal Water Pollution Control Act Amendments of 1972 and which is so constructed as to meet all applicable standards of performance shall not be subject to any more stringent standard of performance during a ten-year period beginning on the date of completion of such construction or during the period of depreciation or amortization of such facility for the purposes of section 167 or 169 (or both) of the Internal Revenue Code of 1954, whichever period ends first.

(e) After the effective date of standards of performance promulgated under this section, it shall be unlawful for any owner or operator of any new source to operate such source in violation of any standard of performance applicable to such source.

TOXIC AND PRETREATMENT EFFLUENT STANDARDS

Sec. 307. (a)(1) On and after the date of enactment of the Clean Water Act of 1977, the list of toxic pollutants or combination of pollutants subject to this Act shall

consist of those toxic pollutants listed in table 1 of Committee Print Numbered 95-30 of the Committee on Public Works and Transportation of the House of Representatives, and the Administrator shall publish, not later than the thirtieth day after date of enactment of the Clean Water Act of 1977, that list. From time to time thereafter, the Administrator may revise such list and the Administrator is authorized to add to or remove from such list any pollutant. The Administrator in publishing any revised list, including the addition or removal of any pollutant from such list, shall take into account the toxicity of the pollutant, its persistence, degradability, the usual or potential presence of the affected organisms in any waters, the importance of the affected organisms, and the nature and extent of the effect of the toxic pollutant on such organisms. A determination of the Administrator under this paragraph shall be final except that if, on judicial review, such determination was based on arbitrary and capricious action of the Administrator, the Administrator shall make a redetermination.

[*Editor's note:* Table 1 is published at the end of the Act. See also §301(b)(2)(C) editor's note and the provisions of §519 of PL 100-4 published at the end of this Act.]

(2) Each toxic pollutant listed in accordance with paragraph (1) of this subsection shall be subject to effluent limitations resulting from the application of the best available technology economically achievable for the applicable category or class of point sources established in accordance with section 301(b) (2) (A) and 304(b) (2) of this Act. The Administrator, in his discretion, may publish in the Federal Register a proposed effluent standard (which may include a prohibition) establishing requirements for a toxic pollutant which, if an effluent limitation is applicable to a class or category of point sources, shall be applicable to such category or class only if such standard imposes more stringent requirements. Such published effluent standard (or prohibition) shall take into account the toxicity of the pollutant, its persistence, degradability, the usual or potential presence of the affected organisms in any waters, the importance of the affected organisms and the nature and extent of the effect of the toxic pollutant on such organisms, and the extent to which effective control is being or may be achieved under other regulatory authority. The Administrator shall allow a period of not less than sixty days following publication of any such proposed effluent standard (or prohibition) for written comment by interested persons on such proposed standard. In addition, if within thirty days of publication of any such proposed effluent standard (or prohibition) any interested person so requests, the Administrator shall hold a public hearing in connection therewith. Such a public hearing shall provide an opportunity for oral and written presentations, such cross-examination as the Administrator determines is appropriate on disputed issues of material fact, and the transcription of a verbatim record which shall be available to the public. After consideration of such comments and any information and material presented at any public hearing held on such proposed standard or prohibition, the Administrator shall promulgate such standards (or prohibition) with such modifications as the Administrator finds are justified. Such promulgation by the Administrator shall be made within two hundred and seventy days after publication of proposed standard (or prohibition). Such standard (or prohibition) shall be final except that if, on judicial review, such standard was not based on substantial evidence, the Administrator shall promulgate a revised standard. Effluent limitations shall be established in accordance with sections 301(b) (2) (A) and 304(b) (2) for every toxic pollutant referred to in table 1 of Committee Print Numbered 95-30 of the Committee on Public Works and Transportation of the House of Representatives as soon as practicable after the date of enactment of the Clean Water Act of 197-, but no later than July 1, 1980. Such effluent limitations or effluent standards (or prohibitions) shall be established for every other toxic pollutant listed under paragraph (1) of this subsection as soon as practicable after it is so listed.

(3) Each such effluent standard (or prohibition) shall be reviewed and, if appropriate, revised at least every three years.

(4) Any effluent standard promulgated under this section shall be at that level which the Administrator determines provides an ample margin of safety.

(5) When proposing or promulgating any effluent standard (or prohibition) under this section, the Administrator shall designate the category or categories of sources to which the effluent standard (or prohibition) shall apply. Any disposal of dredged material may be included in such a category of sources after consultation with the Secretary of the Army.

(6) Any effluent standard (or prohibition) established pursuant to this section shall take effect on such date or dates as specified in the order promulgating such standard, but in no case, more than one year from the date of such promulgation. If the Administrator determines that compliance within one year from the date of promulgation is technologically infeasible for a category of sources, the Administrator may establish the effective date of the effluent standard (or prohibition) for such category at the earliest date upon which compliance can be feasibly attained by sources within such category, but in no event more than three years after the date of such promulgation.

(7) Prior to publishing any regulations pursuant to this section the Administrator shall, to the maximum extent practicable within the time provided, consult with appropriate advisory committees, States, independent

experts, and Federal departments and agencies.

(b) (1) The Administrator shall, within one hundred and eighty days after the date of enactment of this title and from time to time thereafter, publish proposed regulations establishing pretreatment standards for introduction of pollutants into treatment works (as defined in section 212 of this Act) which are publicly owned for those pollutants which are determined not to be susceptible to treatment by such treatment works or which would interfere with the operation of such treatment works. Not later than ninety days after such publication, and after opportunity for public hearing, the Administrator shall promulgate such pretreatment standards. Pretreatment standards under this subsection shall specify a time for compliance not to exceed three years from the date of promulgation and shall be established to prevent the discharge of any pollutant through treatment works (as defined in section 212 of this Act) which are publicly owned, which pollutant interferes with, passes through, or otherwise is incompatible with such works. If, in the case of any toxic pollutant under subsection (a) of this section introduced by a source into a publicly owned treatment works, the treatment by such works removes all or any part of such toxic pollutant and the discharge from such works does not violate that effluent limitation or standard which would be applicable to such toxic pollutant if it were discharged by such source other than through a publicly owned treatment works, and does not prevent sludge use or disposal by such works in accordance with section 405 of this Act, then the pretreatment requirements for the sources actually discharging such toxic pollutant into such publicly owned treatment works may be revised by the owner or operator of such works to reflect the removal of such toxic pollutant by such works."

(2) The Administrator shall, from time to time, as control technology, processes, operating methods, or other alternative change, revise such standards following the procedure established by this subsection for promulgation of such standards.

(3) When proposing or promulgating any pretreatment standard under this section, the Administrator shall designate the category or categories of sources to which such standard shall apply.

(4) Nothing in this subsection shall affect any pretreatment requirement established by any State or local law not in conflict with any pretreatment standard established under this subsection.

(c) In order to insure that any source introducing pollutants into a publicly owned treatment works, which source would be a new source subject to section 306 if it were to discharge pollutants, will not cause a violation of the effluent limitations established for any such treatment works, the Administrator shall promulgate pretreatment standards for the category of such sources simultaneously with the promulgation of standards of performance under section 306 for the equivalent category of new sources. Such pretreatment standards shall prevent the discharge of any pollutant into such treatment works, which pollutant may interfere with, pass through, or otherwise be incompatible with such works.

(d) After the effective date of any effluent standard or prohibition or pretreatment standard promulgated under this section, it shall be unlawful for any owner or operator of any source to operate any source in violation of any such effluent standard or prohibition or pretreatment standard.

(e) Compliance Date Extension for Innovative Pretreatment Systems. — In the case of any existing facility that proposes to comply with the pretreatment standards of subsection (b) of this section by applying an innovative system that meets the requirements of section 301(k) of this Act, the owner or operator of the publicly owned treatment works receiving the treated effluent from such facility may extend the date for compliance with the applicable pretreatment standard established under this section for a period not to exceed 2 years—

(1) if the Administrator determines that the innovative system has the potential for industrywide application, and

(2) if the Administrator (or the State in consultation with the Administrator, in any case in which the State has a pretreatment program approved by the Administrator)—

(A) determines that the proposed extension will not cause the publicly owned treatment works to be in violation of its permit under section 402 or of section 405 or to contribute to such a violation, and

(B concurs with the proposed extension.

[307(e) added by PL 100-4]

[*Editor's note:* Section 309(b) of PL 100-4 provides:

"(b) Increase in EPA Employees. — The Administrator shall take such actions as may be necessary to increase the number of employees of the Environmental Protection Agency in order to effectively implement pretreatment requirements under section 307 of the Federal Water Pollution Control Act."]

INSPECTIONS, MONITORING AND ENTRY

Sec. 308. (a) Whenever required to carry out the objective of this Act, including but not limited to (1) developing or assisting in the development of any effluent limitation, or other limitation, prohibition, or effluent standard, pretreatment standard, or standard of performance under this Act; (2) determining whether any person is in violation of any such effluent limitation, or other limitation, prohibition or effluent standard, pretreatment standard, or standard of performance; (3) any requirement established under this section; or (4) carrying out sections 305, 311, 402, 404 (relating to State permit programs), 405, and 504 of this Act—

[Sec. 308(a)(4) amended by PL 100-4]

(A) the Administrator shall require the owner or operator of any point source to (i) establish and maintain such records, (ii) make such reports, (iii) install, use, and maintain such monitoring equipment or methods (including where appropriate, biological monitoring methods), (iv) sample such effluents (in accordance with such methods, at such locations, at such intervals, and in such manner as the Administrator shall prescribe), and (v) provide such other information as he may reasonably require; and

(B) the Administrator or his authorized representative (including an authorized contractor acting as a representative of the Administrator), upon presentation of his credentials—

(i) shall have a right of entry to, upon, or through any premises in which an effluent source is located or in which any records required to be maintained under clause (A) of this subsection are located, and

(ii) may at reasonable times have access to and copy any records, inspect any monitoring equipment or method required under clause (A), and sample any effluents which the owner or operator of such source is required to sample under such clause.

[Sec. 308(a)(B) amended by PL 100-4]

(b) Any records, reports, or information obtained under this section (1) shall, in the case of effluent data, be related to any applicable effluent limitations, toxic, pretreatment, or new source performance standards, and (2) shall be available to the public, except that upon a showing satisfactory to the Administrator by any person that records, reports, or information, or particular part thereof (other than effluent data), to which the Administrator has access under this section, if made public would divulge methods or processes entitled to protection as trade secrets of such person, the Administrator shall consider such record, report, or information, or particular portion thereof confidential in accordance with the purposes of section 1905 of title 18 of the United States Code. Any authorized representative of the Administrator (including an authorized contractor acting as a representative of the Administrator) who knowingly or willfully publishes, divulges, discloses, or makes known in any manner or to any extent not authorized by law any information which is required to be considered confidential under this subsection shall be fined not more than $1,000 or imprisoned not more than 1 year, or both. Nothing in this subsection shall prohibit the Administrator or an authorized representative of the Administrator (including any authorized contractor acting as a representative of the Administrator) from disclosing records, reports, or information to other officers, employees, or authorized representatives of the United States concerned with carrying out this Act or when relevant in any proceeding under this Act.

[308(b) amended by PL 100-4]

(c) Each State may develop and submit to the Administrator procedures under State law for inspection, monitoring, and entry with respect to point sources located in such State. If the Administrator finds that the procedures and the law of any State relating to inspection, monitoring, and entry are applicable to at least the same extent as those required by this section, such State is authorized to apply and enforce its procedures for inspection, monitoring, and entry with respect to point sources located in such State (except with respect to point sources owned or operated by the United States).

(d) Access by Congress. — Notwithstanding any limitation contained in this section or any other provision of law, all information reported to or otherwise obtained by the Administrator (or any representative of the Administrator) under this Act shall be made available, upon written request of any duly authorized committee of Congress, to such committee.

[308(d) added by PL 100-4]

FEDERAL ENFORCEMENT

[*Editor's note:* See also Section 318 of PL 100-4, published at the end of this Act, for applicability of this Section to the Unconsolidated Quarternary Aquifer, Rockaway River Basin, New Jersey.]

Sec. 309. (a) (1) Whenever, on the basis of any information available to him, the Administrator finds that any person is in violation of any condition or limitation which implements section 301, 302, 306, 307, 308, 318, or 405 of this Act in a permit issued by a State under an approved permit program under section 402 or 404 of this Act, he shall proceed under his authority in paragraph (3) of this subsection or he shall notify the person in alleged violation and such State of such finding. If beyond the thirtieth day after the Administrator's notification the State has not commenced appropriate enforcement action, the Administrator shall issue an order requiring such person to comply with such condition or limitation or shall bring a civil action in accordance with subsection (b) of this section.

(2) Whenever, on the the basis of information available to him, the Administrator finds that violations of permit conditions or limitations as set forth in paragraph (1) of this subsection are so widespread that such violations appear to result from a failure of the State to enforce such permit conditions or limitations effectively, he shall so notify the State. If the Administrator finds such failure extends beyond the thirtieth day after such notice, he shall give public notice of such finding. During the period beginning with such public notice and ending when such State satisfies the Administrator that

it will enforce such conditions and limitations (hereafter referred to in this section as the period of "federally assumed enforcement"), except where an extension has been granted under paragraph (5) (B) of this subsection, the Administrator shall enforce any permit condition or limitation with respect to any person—

(A) by issuing an order to comply with such condition or limitation, or

(B) by bringing a civil action under subsection (b) of this section.

(3) Whenever on the basis of any information available to him the Administrator finds that any person is in violation of section 301, 302, 306, 307, 308, 318, or 405 of this Act, or is in violation of any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act by him or by a State or in a permit issued under section 404 of this Act by a State, he shall issue an order requiring such person to comply with such section or requirement, or he shall bring a civil action in accordance with subsection (b) of this section.

(4) A copy of any order issued under this subsection shall be sent immediately by the Administrator to the State in which the violation occurs and other affected States. In any case in which an order under this subsection (or notice to a violator under paragraph (1) of this subsection) is issued to a corporation, a copy of such order (or notice) shall be served on any appropriate corporate officers. An order issued under this subsection relating to a violation of section 308 of this Act shall not take effect until the person to whom it is issued has had an opportunity to confer with the Administrator concerning the alleged violation.

(5) (A) Any order issued under this subsection shall be by personal service, shall state with reasonable specificity the nature of the violation, and shall specify a time for compliance not to exceed thirty days in the case of a violation of an interim compliance schedule or operation and maintenance requirement and not to exceed a time the Administrator determines to be reasonable in the case of a violation of a final deadline, taking into account the seriousness of the violation and any good faith efforts to comply with applicable requirements.

(B) The Administrator may, if he determines (i) that any person who is a violator of, or any person who is otherwise not in compliance with, the time requirements under this Act or in any permit issued under this Act, has acted in good faith, and has made a commitment (in the form of contracts or other securities) of necessary resources to achieve compliance by the earliest possible date after July 1, 1977, but not later than April 1, 1979; (ii) that any extension under this provision will not result in the imposition of any additional controls on any other point or nonpoint source; (iii) that an application for a permit under section 402 of this Act was filed for such person prior to December 31, 1974; and (iv) that the facilities necessary for compliance with such requirements are under construction, grant an extension of the date referred to in section 301(b) (1) (A) to a date which will achieve compliance at the earliest time possible but not later than April 1, 1979.

(6) Whenever, on the basis of information available to him, the Administrator finds (A) that any person is in violation of section 301(b) (1) (A) or (C) of this Act, (B) that such person cannot meet the requirements for a time extension under section 301(i) (2) of this Act, and (C) that the most expeditious and appropriate means of compliance with this Act by such person is to discharge into a publicly owned treatment works, then, upon request of such person, the Administrator may issue an order requiring such person to comply with this Act at the earliest date practicable, but not later than July 1, 1983, by discharging into a publicly owned treatment works if such works concur with such order. Such order shall include a schedule of compliance.

(b) The Administrator is authorized to commence a civil action for appropriate relief, including a permanent or temporary injunction, for any violation for which he is authorized to issue a compliance order under subsection (a) of this section. Any action under this subsection may be brought in the district court of the United States for the district in which the defendant is located or resides or is doing business, and such court shall have jurisdiction to restrain such violation and to require compliance. Notice of the commencement of such action shall be given immediately to the appropriate State.

(c) Criminal Penalties.—

[309(c) revised by PL 100-4]

(1) Negligent Violations. — Any person who—

(A) negligently violates section 301, 302, 306, 307, 308, 318, or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act by the Administrator or by a State, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of this Act or in a permit issued under section 404 of this Act by the Secretary of the Army or by a State; or

(B) negligently introduces into a sewer system or into a publicly owned treatment works any pollutant or hazardous substance which such person knew or reasonably should have known could cause personal injury or property damage or, other than in compliance with all applicable Federal, State, or local requirements or permits, which causes such treatment works to violate any effluent limitation or condition in any permit issued to the treatment works under section 402 of this Act by the Administrator or a State;

shall be punished by a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than 1 year, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment shall be by a fine of not more than $50,000 per day of violation, or by imprisonment of not more than 2 years, or by both.

(2) Knowing Violations. — Any person who—

(A) knowingly violates section 301, 302, 306, 307, 308, 318, or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act by the Administrator or by a State, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of this Act or in a permit issued under section 404 of this Act by the Secretary of the Army or by a State; or

(B) knowingly introduces into a sewer system or into a publicly owned treatment works any pollutant or hazardous substance which such person knew or reasonably should have known could cause personal injury or property damage or, other than in compliance with all applicable Federal, State, or local requirements or permits, which causes such treatment work to violate any effluent limitation or condition in a permit issued to the treatment works under section 402 of this Act by the Administrator or a State;

shall be punished by a fine of not less than $5,000 nor more than $50,000 per day of violation, or by imprisonment for not more than 3 years, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment shall be a fine of not more than $100,000 per day of violation, or by imprisonment of not more than 6 years, or by both.

(3) Knowing Endangerment.—

(A) General Rule. — Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318, or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act by the Administrator or by a State, or in a permit issued under section 404 of this Act by the Secretary of the Army or by a State, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000 or imprisonment of not more than 15 years, or both. A person which is an organization shall, upon conviction of violating this subparagraph, be subject to a fine of not more than $1,000,000. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, the maximum punishment shall be doubled with respect to both fine and imprisonment.

(B) Additional Provisions. — For the purpose o subparagraph (A) of this paragraph—

(i) in determining whether a defendant who is a individual knew that his conduct placed another perso in imminent danger of death or serious bodily injury—

(I) the person is responsible only for actual awarenes or actual belief that he possessed; and

(II) knowledge possessed by a person other than th defendant but not by the defendant himself may not b attributed to the defendant;

except that in proving the defendant's possession o actual knowledge, circumstantial evidence may be used including evidence that the defendant took affirmativ steps to shield himself from relevant information;

(ii) it is an affirmative defense to prosecution that th conduct charged was consented to by the person endan gered and that the danger and conduct charged wer reasonably foreseeable hazards of—

(I) an occupation, a business, or a profession; or

(II) medical treatment or medical or scientific experi mentation conducted by professionally approved meth ods and such other person had been made aware of th risks involved prior to giving consent;

and such defense may be established under this subpara graph by a preponderance of the evidence;

(iii) the term "organization" means a legal entity other than a government, established or organized fo any purpose, and such term includes a corporation company, association, firm, partnership, joint stock com pany, foundation, institution, trust, society, union, or an other association of persons; and

(iv) the term "serious bodily injury" means bodil injury which involves a substantial risk of death, uncon sciousness, extreme physical pain, protracted and obvi ous disfigurement, or protracted loss or impairment o the function of a bodily member, organ, or menta faculty.

(4) False Statements. — Any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under this Act or who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or metho required to be maintained under this Act, shall upo conviction, be punished by a fine of not more tha $10,000, or by imprisonment for not more than 2 years or by both. If a conviction of a person is for a violatio committed after a first conviction of such person unde this paragraph, punishment shall be by a fine of nc more than $20,000 per day of violation, or by imprisor ment of not more than 4 years, or by both.

(5) Treatment of Single Operational Upset. — Fo purposes of this subsection, a single operational upse which leads to simultaneous violations of more than on pollutant parameter shall be treated as a single violatior

(6) Responsible Corporate Officer as "Person". — For the purpose of this subsection, the term "person" means, in addition to the definition contained in section 502(5) of this Act, any responsible corporate officer.

(7) Hazardous Substance Defined. — For the purpose of this subsection, the term "hazardous substance" means (A) any substance designated pursuant to section 311(b)(2)(A) of this Act, (B) any element, compound, mixture, solution, or substance designated pursuant to section 102 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, (C) any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act (but not including any waste the regulation of which under the Solid Waste Disposal Act has been suspended by Act of Congress), (D) any toxic pollutant listed under section 307(a) of this Act, and (E) any imminently hazardous chemical substance or mixture with respect to which the Administrator has taken action pursuant to section 7 of the Toxic Substances Control Act.

(d) Any person who violates section 301, 302, 306, 307, 308, 318, or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act by the Administrator, or by a State, or in a permit issued under section 404 of this Act by a State, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402 (b)(8) of this Act, and any person who violates any order issued by the Administrator under subsection (a) of this section, shall be subject to a civil penalty not to exceed $25,000 per day for each violation. In determining the amount of a civil penalty the court shall consider the seriousness of the violation or violations, the economic benefit (if any) resulting from the violation, any history of such violations, any good-faith efforts to comply with the applicable requirements, the economic impact of the penalty on the violator, and such other matters as justice may require. For purposes of this subsection, a single operational upset which leads to simultaneous violations of more than one pollutant parameter shall be treated as a single violation.

[Sec. 309(d) amended by PL 100-4]

[*Editor's note:* Section 313(a)(2) and (b)(2) of PL 100-4 state the following concerning the amendments to 309(d):

"[a](2) Savings Provision. — No State shall be required before July 1, 1988, to modify a permit program approved or submitted under section 402 of the Federal Water Pollution Control Act as a result of the amendment made by paragraph [a](1)." [Note: §313(a)(1) amended 309(d).]

"[b](2) Increased Penalties Not Required Under State Programs. — The Federal Water Pollution Control Act shall not be construed as requiring a State to have a civil penalty for violations described in section 309(d) of such Act which has the same monetary amount as the civil penalty established by such section, as amended by paragraph [b](1). Nothing in this paragraph shall affect the Administrator's authority to establish or adjust by regulation a minimum acceptable State civil penalty."]

(e) Whenever a municipality is a party to a civil action brought by the United States under this section, the State in which such municipality is located shall be joined as a party. Such State shall be liable for payment of any judgment, or any expenses incurred as a result of complying with any judgment, entered against the municipality in such action to the extent that the laws of that State prevent the municipality from raising revenues needed to comply with such judgment.

(f) Whenever, on the basis of an information available to him, the Administrator finds that an owner or operator of any source is introducing a pollutant into a treatment works in violation of subsection (d) of section 307, the Administrator may notify the owner or operator of such treatment works and the State of such violation. If the owner or operator of the treatment works does not commence appropriate enforcement action within 30 days of the date of such notification, the Administrator may commence a civil action for appropriate relief, including but not limited to, a permanent or temporary injunction, against the owner or operator of such treatment works. In any such civil action the Administrator shall join the owner or operator of such source as a party to the action. Such action shall be brought in the district court of the United States in the district in which the treatment works is located. Such court shall have jurisdiction to restrain such violation and to require the owner or operator of the treatment works and the owner or operator of the source to take such action as may be necessary to come into compliance with this Act. Notice of commencement of any such action shall be given to the State. Nothing in this subsection shall be construed to limit or prohibit any other authority the Administrator may have under this Act.

(g) Administrative Penalties.—

[Sec. 309(g) added by PL 100-4]

(1) Violations. — Whenever on the basis of any information available—

(A) the Administrator finds that any person has violated section 301, 302, 306, 307, 308, 318, or 405 of this Act, or has violated any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act by the Administrator or by a State, or in a permit issued under section 404 by a State, or

(B) the Secretary of the Army (hereinafter in this subsection referred to as the "Secretary") finds that any person has violated any permit condition or limitation in a permit issued under section 404 of this Act by the Secretary.

the Administrator or Secretary, as the case may be, may, after consultation with the State in which the violation occurs, assess a class I civil penalty or a class II civil penalty under this subsection.

(2) Classes of Penalties.—

(A) Class I. — The amount of a class I civil penalty under paragraph (1) may not exceed $10,000 per violation, except that the maximum amount of any class I civil penalty under this subparagraph shall not exceed $25,000. Before issuing an order assessing a civil penalty under this subparagraph, the Administrator or the Secretary, as the case may be, shall give to the person to be assessed such penalty written notice of the Administrator's or Secretary's proposal to issue such order and the opportunity to request, within 30 days of the date the notice is received by such person, a hearing on the proposed order. Such hearing shall not be subject to section 554 or 556 of title 5, United States Code, but shall provide a reasonable opportunity to be heard and to present evidence.

(B) Class II. — The amount of a class II civil penalty under paragraph (1) may not exceed $10,000 per day for each day during which the violation continues; except that the maximum amount of any class II civil penalty under this subparagraph shall not exceed $125,000. Except as otherwise provided in this subsection, a class II civil penalty shall be assessed and collected in the same manner, and subject to the same provisions, as in the case of civil penalties assessed and collected after notice and opportunity for a hearing on the record in accordance with section 554 of title 5, United States Code. The Administrator and the Secretary may issue rules for discovery procedures for hearings under this subparagraph.

(3) Determining Amount. — In determining the amount of any penalty assessed under this subsection, the Administrator or the Secretary, as the case may be, shall take into account the nature, circumstances, extent and gravity of the violation, or violations, and, with respect to the violator, ability to pay, any prior history of such violations, the degree of culpability, economic benefit or savings (if any) resulting from the violation, and such other matters as justice may require. For purposes of this subsection, a single operational upset which leads to simultaneous violations of more than one pollutant parameter shall be treated as a single violation.

(4) Rights of Interested Persons.—

(A) Public Notice. — Before issuing an order assessing a civil penalty under this subsection the Administrator or Secretary, as the case may be, shall provide public notice of and reasonable opportunity to comment on the proposed issuance of such order.

(B) Presentation of Evidence. — Any person who comments on a proposed assessment of a penalty under this subsection shall be given notice of any hearing held under this subsection and of the order assessing such penalty. In any hearing held under this subsection, such person shall have a reasonable opportunity to be heard and to present evidence.

(C) Rights of Interested Persons to a Hearing. — If no hearing is held under paragraph (2) before issuance of an order assessing a penalty under this subsection, any person who commented on the proposed assessment may petition, within 30 days after the issuance of such order, the Administrator or Secretary, as the case may be, to set aside such order and to provide a hearing on the penalty. If the evidence presented by the petitioner in support of the petition is material and was not considered in the issuance of the order, the Administrator or Secretary shall immediately set aside such order and provide a hearing in accordance with paragraph (2)(A) in the case of a class I civil penalty and paragraph (2)(B) in the case of a class II civil penalty. If the Administrator or Secretary denies a hearing under this subparagraph, the Administrator or Secretary shall provide to the petitioner, and publish in the Federal Register, notice of and the reasons for such denial.

(5) Finality of Order. — An order issued under this subsection shall become final 30 days after its issuance unless a petition for judicial review is filed under paragraph (8) or a hearing is requested under paragraph (4)(C). If such a hearing is denied, such order shall become final 30 days after such denial.

(6) Effect of Order.—

(A) Limitation on Actions Under Other Sections. — Action taken by the Administrator or the Secretary, as the case may be, under this subsection shall not affect or limit the Administrator's or Secretary's authority to enforce any provision of this Act; except that any violation—

(i) with respect to which the Administrator or the Secretary has commenced and is diligently prosecuting an action under this subsection,

(ii) with respect to which a State has commenced and is diligently prosecuting an action under a State law comparable to this subsection, or

(iii) for which the Administrator, the Secretary, or the State has issued a final order not subject to further judicial review and the violator has paid a penalty assessed under this subsection, or such comparable State law, as the case may be,

shall not be the subject of a civil penalty action under subsection (d) of this section or section 311(b) or section 505 of this Act.

(B) Applicability of Limitation With Respect to Citi-

zen Suits. — The limitations contained in subparagraph (A) on civil penalty actions under section 505 of this Act shall not apply with respect to any violation for which—

(i) a civil action under section 505(a)(1) of this Act has been filed prior to commencement of an action under this subsection, or

(ii) notice of an alleged violation of section 505(a)(1) of this Act has been given in accordance with section 505(b)(1)(A) prior to commencement of an action under this subsection and an action under section 505(a)(1) with respect to such alleged violation is filed before the 120th day after the date on which such notice is given.

(7) Effect of Action on Compliance. — No action by the Administrator or the Secretary under this subsection shall affect any person's obligation to comply with any section of this Act or with the terms and conditions of any permit issued pursuant to section 402 or 404 of this Act.

(8) Judicial Review. — Any person against whom a civil penalty is assessed under this subsection or who commented on the proposed assessment of such penalty in accordance with paragraph (4) may obtain review of such assessment—

(A) in the case of assessment of a class I civil penalty, in the United States District Court for the District of Columbia or in the district in which the violation is alleged to have occurred, or

(B) in the case of assessment of a class II civil penalty, in United States Court of Appeals for the District of Columbia Circuit or for any other circuit in which such person resides or transacts business,

by filing a notice of appeal in such court within the 30-day period beginning on the date the civil penalty order is issued and by simultaneously sending a copy of such notice by certified mail to the Administrator or the Secretary, as the case may be, and the Attorney General. The Administrator or the Secretary shall promptly file in such court a certified copy of the record on which the order was issued. Such court shall not set aside or remand such order unless there is not substantial evidence in the record, taken as a whole, to support the finding of a violation or unless the Administrator's or Secretary's assessment of the penalty constitutes an abuse of discretion and shall not impose additional civil penalties for the same violation unless the Administrator's or Secretary's assessment of the penalty constitutes an abuse of discretion.

(9) Collection. — If any person fails to pay an assessment of a civil penalty—

(A) after the order making the assessment has become final, or

(B) after a court in an action brought under paragraph (8) has entered a final judgment in favor of the Administrator or the Secretary, as the case may be,

the Administrator or the Secretary shall request the Attorney General to bring a civil action in an appropriate district court to recover the amount assessed (plus interest at currently prevailing rates from the date of the final order or the date of the final judgment, as the case may be). In such an action, the validity, amount, and appropriateness of such penalty shall not be subject to review. Any person who fails to pay on a timely basis the amount of an assessment of a civil penalty as described in the first sentence of this paragraph shall be required to pay, in addition to such amount and interest, attorneys fees and costs for collection proceedings and a quarterly nonpayment penalty for each quarter during which such failure to pay persists. Such nonpayment penalty shall be in an amount equal to 20 percent of the aggregate amount of such person's penalties and nonpayment penalties which are unpaid as of the beginning of such quarter.

(10) Subpoenas. — The Administrator or Secretary, as the case may be, may issue subpoenas for the attendance and testimony of witnesses and the production of relevant papers, books, or documents in connection with hearings under this subsection. In case of contumacy or refusal to obey a subpoena issued pursuant to this paragraph and served upon any person, the district court of the United States for any district in which such person is found, resides, or transacts business, upon application by the United States and after notice to such person, shall have jurisdiction to issue an other requiring such person to appear and give testimony before the administrative law judge or to appear and produce documents before the administrative law judge or both, and any failure to obey such order of the court may be punished by such court as a contempt thereof.

(11) Protection of Existing Procedures. — Nothing in this subsection shall change the procedures existing on the day before the date of the enactment of the Water Quality Act of 1987 under other subsections of this section for issuance and enforcement of orders by the Administrator.

[*Editor's note:* Section 314(b) of PL 100-4 provides:

"(b) Reports on Enforcement Mechanisms. — The Secretary of the Army and the Administrator shall each prepare and submit a report to the Congress, not later than December 1, 1988, which shall examine and analyze various enforcement mechanisms for use by the Secretary or Administrator, as the case may be, including an administrative civil penalty mechanism. Each of such reports shall also include an examination, prepared in consultation with the Comptroller General, of the efficacy of the Secretary's or the Administrator's existing enforcement authorities and shall include recommendations for improvements in their operation."]

INTERNATIONAL POLLUTION ABATEMENT

Sec. 310. (a) Whenever the Administrator, upon receipts of reports, surveys, or studies from any duly constituted international agency, has reason to believe

that pollution is occurring which endangers the health or welfare of persons in a foreign country, and the Secretary of State requests him to abate such pollution, he shall give formal notification thereof to the State water pollution control agency of the State or States in which such discharge or discharges originate and to the appropriate interstate agency, if any. He shall also promptly call such a hearing, if he believes that such pollution is occurring in sufficient quantity to warrant such action, and if such foreign country has given the United States essentially the same rights with respect to the prevention and control of pollution occurring in that country as is given that country by this subsection. The Administrator, through the Secretary of State, shall invite the foreign country which may be adversely affected by the pollution to attend and participate in the hearing, and the representative of such country shall, for the purpose of the hearing and any further proceeding resulting from such hearing, have all the rights of a State water pollution control agency. Nothing in this subsection shall be construed to modify, amend, repeal, or otherwise affect the provisions of the 1909 Boundary Waters Treaty between Canada and the United States or the Water Utilization Treaty of 1944 between Mexico and the United States (59 Stat. 1219), relative to the control and abatement of pollution in waters covered by those treaties.

(b) The calling of a hearing under this section shall not be construed by the courts, the Administrator, or any person as limiting, modifying, or otherwise affecting the functions and responsibilities of the Administrator under this section to establish and enforce water quality requirements under this Act.

(c) The Administrator shall publish in the Federal Register a notice of a public hearing before a hearing board of five or more persons appointed by the Administrator. A majority of the members of the board and the chairman who shall be designated by the Administrator shall not be officers or employees of Federal, State, or local governments. On the basis of the evidence presented at such hearing, the board shall within sixty days after completion of the hearing make findings of fact as to whether or not such pollution is occurring and shall thereupon by decision, incorporating its findings therein, make such recommendations to abate the pollution as may be appropriate and shall transmit such decision and the record of the hearings to the Administrator. All such decisions shall be public. Upon receipt of such decision, the Administrator shall promptly implement the board's decision in accordance with the provisions of this Act.

(d) In connection with any hearing called under this subsection, the board is authorized to require any person whose alleged activities result in discharges causing or contributing to pollution to file with it in such forms as it may prescribe, a report based on existing data, furnishing such information as may reasonably be required as to the character, kind, and quantity of such discharges and the use of facilities or other means to prevent or reduce such discharges by the person filing such a report. Such report shall be made under oath or otherwise, as the board may prescribe, and shall be filed with the board within such reasonable period as it may prescribe, unless additional time is granted by it. Upon a showing satisfactory to the board by the person filing such report that such report or portion thereof (other than effluent data), to which the Administrator has access under this section, if made public would divulge trade secrets or secret processes of such person, the board shall consider such report or portion thereof confidential for the purposes of section 1905 of title 18 of the United States Code. If any person required to file any report under this paragraph shall fail to do so within the time fixed by the board for filing the same, and such failure shall continue for thirty days after notice of such default, such person shall forfeit to the United States the sum of $1,000 for each and every day of the continuance of such failure, which forfeiture shall be payable into the Treasury of the United States, and shall be recoverable in a civil suit in the name of the United States in the district court of the United States where such person has his principal office or in any district in which he does business. The Administrator may upon application therefor remit or mitigate any forfeiture provided for under this subsection.

(e) Board members, other than officers or employees of Federal, State, or local governments, shall be for each day (including travel-time) during which they are performing board business, entitled to receive compensation at a rate fixed by the Administrator but not in excess of the maximum rate of pay for grade GS-18, as provided in the General Schedule under section 5332 of title 5 of the United States Code, and shall, notwithstanding the limitations of sections 5703 and 5704 of title 5 of the United States Code, be fully reimbursed for travel, subsistence, and related expenses.

(f) When any such recommendation adopted by the Administrator involves the institution of enforcement proceedings against any person to obtain the abatement of pollution subject to such recommendation, the Administrator shall institute such proceedings if he believes that the evidence warrants such proceedings. The district court of the United States shall consider and determine de novo all relevant issues, but shall receive in evidence the record of the proceedings before the conference or hearing board. The court shall have jurisdiction to enter such judgment and orders enforcing such judgment as it deems appropriate or to remand such proceedings to the Administrator for such further action as it may direct.

OIL AND HAZARDOUS SUBSTANCE LIABILITY

Sec. 311. (a) For the purpose of this section, the term—

(1) "oil" means oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil;

(2) "discharge" includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying or dumping, but excludes (A) discharges in compliance with a permit under section 402 of this Act, (B) discharges resulting from circumstances identified and reviewed and made a part of the public record with respect to a permit issued or modified under section 402 of this Act, and subject to a condition in such permit, and (C) continuous or anticipated intermittent discharges from a point source, identified in a permit or permit application under section 402 of this Act, which are caused by events occurring within the scope of relevant operating or treatment systems.

[311(a)(2) amended by PL 95-576]

(3) "vessel" means every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water other than a public vessel;

(4) "public vessel" means a vessel owned or bareboat-chartered and operated by the United States, or by a State or political subdivision thereof, or by a foreign nation, except when such vessel is engaged in commerce;

(5) "United States" means the States, the District of Columbia, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, Guam, American Samoa, the Virgin Islands and the Trust Territory of the Pacific Islands;

[Sec. 311(a)(5) amended by PL 100-4].

(6) "owner or operator" means (A) in the case of a vessel, any person owning, operating, or chartering by demise, such vessel, and (B) in the case of an onshore facility, and an offshore facility, any person owning or operating such onshore facility or offshore facility, and (C) in the case of any abandoned offshore facility, the person who owned or operated such facility immediately prior to such abandonment;

(7) "person" includes an individual, firm, corporation, association, and a partnership;

(8) "remove" or "removal" refers to removal of the oil or hazardous substances from the water and shorelines or the taking of such other actions as may be necessary to minimize or mitigate damage to the public health or welfare, including, but not limited to, fish, shellfish, wildlife, and public and private property, shorelines, and beaches;

(9) "contiguous zone" means the entire zone established or to be established by the United States under article 24 of the Convention on the Territorial Sea and the Contiguous Zone;

(10) "onshore facility" means any facility (including, but not limited to, motor vehicles and rolling stock) of any kind located in, on, or under, any land within the United States other than submerged land;

(11) "offshore facility" means any facility of any kind located in, on, or under, any of the navigable waters of the United States, and any facility of any kind which is subject to the jurisdiction of the United States and is located in, on, or under any other waters, other than a vessel or a public vessel;

(12) "act of God" means an act occasioned by an unanticipated grave natural disaster;

(13) "barrel" means 42 United States gallons at 60 degrees Fahrenheit;

(14) "hazardous substance" means any substance designated pursuant to subsection (b) (2) of this section;

(15) "inland oil barge" means a non-self-propelled vessel carrying oil in bulk as cargo and certificated to operate only in the inland waters of the United States, while operating in such waters;

(16) "inland waters of the United States" means those waters of the United States lying inside the baseline from which the territorial sea is measured and those waters outside such baseline which are a part of the Gulf Intracoastal Waterway.

(17) "Otherwise subject to the jurisdiction of the United States" means subject to the jurisdiction of the United States by virtue of United States citizenship, United States vessel documentation or numbering, or as provided for by international agreement to which the United States is a party.

[311(a)(17) added by PL 95-576]

(b) (1) The Congress hereby declares that it is the policy of the United States that there should be no discharges of oil or hazardous substances into or upon the navigable waters of the United States, adjoining shorelines, or into or upon the waters of the contiguous zone, or in connection with activities under the Outer Continental Shelf Lands Act or the Deepwater Port Act of 1977, or which may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States (including resources under the Magnuson Fishery Conservation and Management Act of 1976).

[311(b)(1) amended by PL 96-561]

(2) (A) The Administrator shall develop, promulgate, and revise as may be appropriate, regulations designating as hazardous substances, other than oil as defined in this section, such elements and compounds which, when discharged in any quantity into or upon the navigable waters of the United States or adjoining shorelines or the waters of the contiguous zone or in connection with activities under the Outer Continental

Shelf Lands Act or the Deepwater Port Act of 1974, or which may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States (including resources under the Magnuson Fishery Conservation and Management Act of 1976), present an imminent and substantial danger to the public health or welfare, including, but not limited to, fish, shellfish, wildlife, shorelines, and beaches.

[311(b)(2)(A) amended by PL 96-561]

(B) The Administrator shall within 18 months after the date of enactment of this paragraph, conduct a study and report to the Congress on methods, mechanisms, and procedures to create incentives to achieve a higher standard of care in all aspects of the management and movement of hazardous substances on the part of owners, operators, or persons in charge of onshore facilities, offshore facilities or vessels. The Administrator shall include in such study (1) limits of liability, (2) liability for third party damages, (3) penalties and fees, (4) spill prevention plans, (5) current practices in the insurance and banking industries, and (6) whether the penalty enacted in subclause (bb) of clause (iii) of subparagraph (B) of subsection (b)(2) of section 311 of Public Law 92-500 should be enacted.

[*Editor's note:* 311(b)(2)(B) was revised by PL 95-576. As embodied in PL 92-500 subclause (bb) of 311(b)(2)(B) reads as follows:

"(bb) a penalty determined by the number of units discharged multiplied by the amount established for such unit under clause (iv) of this subparagraph, but such penalty shall not be more than $5,000,000 in the case of a discharge from a vessel and $500,000 in the case of a discharge from an onshore or offshore facility."]

(3) The discharge of oil or hazardous substances (i) into or upon the navigable waters of the United States, adjoining shorelines, or into or upon the waters of the contiguous zone, or (ii) in connection with activities under the Outer Continental Shelf Lands Act or the Deepwater Port Act of 1974, or which may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States (including resources under the Magnuson Fishery Conservation and Management Act of 1976), in such quantities as may be harmful as determined by the President under paragraph (4) of this subsection, is prohibited, except (A) in the case of such discharges into the waters of the contiguous zone or which may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States (including resources under the Magnuson Fishery Conservation and Management Act of 1976), where permitted under the Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships, 1973 and (B) where permitted in quantities and at times and locations or under such circumstances or conditions as the President may, by regulation, determine not to be harmful. Any regulations issued under this subsection shall be consistent with maritime safety and with marine and navigation laws and regulations and applicable water quality standards.

[311(b)(3) revised by PL 95-576; amended by PL 96-478; PL 96-561]

(4) The President shall by regulation determine for the purposes of this section those quantities of oil and any hazardous substances the discharge of which may be harmful to the public health or welfare of the United States, including but not limited to fish, shellfish, wildlife, and public and private property, shorelines, and beaches.

[311(b)(4) amended by PL 95-576]

(5) Any person in charge of a vessel or of an onshore facility or an offshore facility shall, as soon as he has knowledge of any discharge of oil or a hazardous substance from such vessel or facility in violation of paragraph (3) of this subsection, immediately notify the appropriate agency of the United States Government of such discharge. Any such person (A) in charge of a vessel from which oil or a hazardous substance is discharged in violation of paragraph (3) (i) of this subsection, or (B) in charge of a vessel from which oil or a hazardous substance is discharged in violation of paragraph (3)(ii) of this subsection and who is otherwise subject to the jurisdiction of the United States at the time of the discharge, or (C) in charge of an onshore facility or an offshore facility, who fails to notify immediately such agency of such discharge shall, upon conviction, be fined not more than $10,000, or imprisoned for not more than one year or both. Notification received pursuant to this paragraph or information obtained by the exploitation of such notification shall not be used against any such person in any criminal case, except a prosecution for perjury or for giving a false statement.

[311(b)(4) amended by PL 95-576]

(6) (A) Any owner, operator, or person in charge of any onshore facility or offshore facility from which oil or a hazardous substance is discharged in violation of paragraph (3) of this subsection shall be assessed a civil penalty by the Secretary of the department in which the Coast Guard is operating of not more than $5,000 for each offense. Any owner, operator, or person in charge of any vessel from which oil or a hazardous substance is discharged in violation of paragraph (3) (i) of this subsection, and any owner, operator, or person in charge of a vessel from which oil or a hazardous substance is discharged in violation of paragraph (3) (ii) who is otherwise subject to the jurisdiction of the United States at the time of the discharge, shall be as-

sessed a civil penalty by the Secretary of the department in which the Coast Guard is operating of not more than $5,000 for each offense. No penalty shall be assessed unless the owner or operator charged shall have been given notice and opportunity for a hearing on such charge. Each violation is a separate offense. Any such civil penalty may be compromised by such Secretary. In determining the amount of the penalty, or the amount agreed upon in compromise, the appropriateness of such penalty to the size of the business of the owner or operator charged, the effect on the owner or operator's ability to continue in business, and the gravity of the violation, shall be considered by such Secretary. The Secretary of the Treasury shall withhold at the request of such Secretary the clearance required by section 4197 of the Revised Statutes of the United States, as amended (46 U.S.C. 91), of any vessel the owner or operator of which is subject to the foregoing penalty. Clearance may be granted in such cases upon the filing of a bond or other surety satisfactory to such Secretary.

(B) The Administrator, taking into account the gravity of the offense, and the standard of care manifest by the owner, operator or person in charge, may commence a civil action against any such person subject to the penalty under subparagraph (A) of this paragraph to impose a penalty based on consideration of the size of the business of the owner or operator, the effect on the ability of the owner or operator to continue in business, the gravity of the violation, and the nature, extent, and degree of success of any efforts made by the owner, operator, or person in charge to minimize or mitigate the effects of such discharge. The amount of such penalty shall not exceed $50,000, except that where the United States can show that such discharge was the result of willful negligence or willful misconduct within the privity and knowledge of the owner, operator, or person in charge, such penalty shall not exceed $250,000. Each violation is a separate offense.

Any action under this subparagraph may be brought in the district court of the United States for the district in which the defendant is located or resides or is doing business, and such court shall have jurisdiction to assess such penalty. No action may be commenced under this clause where a penalty has been assessed under clause (A) of this paragraph.

(C) In addition to establishing a penalty for the discharge of a hazardous substance, the Administrator may act to mitigate the damage to the public health or welfare caused by such discharge. The cost of such mitigation shall be deemed a cost incurred under subsection (c) of this section for the removal of such substance by the United States Government.

(D) Any cost of removal incurred in connection with a discharge excluded by subsection (a)(2)(C) of this section shall be recoverable from the owner or operator of the source of the discharge in an action brought under section 309(b) of this Act.

(E) Civil penalties shall not be assessed under both this section and section 309 for the same discharge.

[(B)-(E) added by PL 95-576]

(c) (1) Whenever any oil or a hazardous substance is discharged, or there is a substantial threat of such discharge, into or upon the navigable waters of the United States, adjoining shorelines, or into or upon the waters of the contiguous zone, or in connection with activities under the Outer Continental Shelf Lands Act or the Deepwater Port Act of 1974, or which may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States (including resources under the Magnuson Fishery Conservation and Management Act of 1976) the President is authorized to act to remove or arrange for the removal of such oil or substance at any time, unless he determines such removal will be done properly by the owner or operator of the vessel, onshore facility, or offshore facility from which the discharge occurs.

[311(c)(1) amended by PL 96-561]

(2) Within sixty days after the effective date of this section, the President shall prepare and publish a National Contingency Plan for removal of oil and hazardous substances, pursuant to this subsection. Such National Contingency Plan shall provide for efficient, coordinated, and effective action to minimize damage from oil and hazardous substance discharges, including containment, dispersal, and removal of oil and hazardous substances, and shall include, but not be limited to—

(A) assignment of duties and responsibilities among Federal departments and agencies in coordination with State and local agencies, including, but not limited to, water pollution control, conservation, and port authorities;

(B) identification, procurement, maintenance, and storage of equipment and supplies;

(C) establishment or designation of a strike force consisting of personnel who shall be trained, prepared, and available to provide necessary services to carry out the Plan, including the establishment at major ports, to be determined by the President, of emergency task forces of trained personnel, adequate oil and hazardous substance pollution control equipment and material, and a detailed oil and hazardous substance pollution prevention and removal plan;

(D) a system of surveillance and notice designed to insure earliest possible notice of discharges of oil and hazardous substances and imminent threats of such discharges to the appropriate State and Federal agencies;

(E) establishment of a national center to provide coordination and direction for operations in carrying out the Plan;

(F) procedures and techniques to be employed in identifying, containing, dispersing, and removing oil and hazardous substances;

(G) a schedule, prepared in cooperation with the States, identifying (i) dispersants and other chemicals, if any, that may be used in carrying out the Plan, (ii) the waters in which such dispersants and chemicals may be used, and (iii) the quantities of such dispersant or chemical which can be used safely in such waters, which schedule shall provide in the case of any dispersant, chemical, or waters not specifically identified in such schedule that the President, or his delegate, may, on a case-by-case basis, identify the dispersants and other chemicals which may be used, the waters in which they may be used, and the quantities which can be used safely in such waters; and

(H) a system whereby the State or States affected by a discharge of oil or hazardous substance may act where necessary to remove such discharge and such State or States may be reimbursed from the fund established under subsection (k) of this section for the reasonable costs incurred in such removal.

The President may, from time to time, as he deems advisable revise or otherwise amend the National Contingency Plan. After publication of the National Contingency Plan, the removal of oil and hazardous substances and actions to minimize damage from oil and hazardous substance discharges shall, to the greatest extent possible, be in accordance with the National Contingency Plan.

(d) Whenever a marine disaster in or upon the navigable waters of the United States has created a substantial threat of a pollution hazard to the public health or welfare of the United States, including, but not limited to, fish, shellfish, and wildlife and the public and private shorelines and beaches of the United States, because of a discharge, or an imminent discharge, of large quantities of oil, or a hazardous substance from a vessel the United States may (A) coordinate and direct all public and private efforts directed at the removal or elimination of such threat; and (B) summarily remove, and, if necessary, destroy such vessel by whatever means are available without regard to any provisions of law governing the employment of personnel or the expenditure of appropriated funds. Any expense incurred under this subsection or under the Intervention on the High Seas Act (or the convention defined in section 2(3) thereof) shall be a cost incurred by the United States Government for the purposes of subsection (f) in the removal of oil or hazardous substance.

(e) In addition to any other action taken by a State or local government, when the President determines there is an imminent and substantial threat to the public health or welfare of the United States, including, but not limited to, fish, shellfish, and wildlife and public and private property, shorelines, and beaches within the United States, because of an actual or threatened discharge of oil or hazardous substance into or upon the navigable waters of the United States from an onshore or offshore facility, the President may require the United States attorney of the district in which the threat occurs to secure such relief as may be necessary to abate such threat, and the district courts of the United States shall have jurisdiction to grant such relief as the public interest and the equities of the case may require.

(f) (1) Except where an owner or operator can prove that a discharge was caused solely by (A) an act of God, (B) an act of war, (C) negligence on the part of the United States Government, or (D) an act or omission of a third party without regard to whether any such act or omission was or was not negligent, or any combination of the foregoing clauses, such owner or operator of any vessel from which oil or a hazardous substance is discharged in violation of subsection (b) (3) of this section shall, notwithstanding any other provision of law, be liable to the United States Government for the actual costs incurred under subsection (c) for the removal of such oil or substance by the United States Government in an amount not to exceed, in the case of an inland oil barge $125 per gross ton of such barge, or $125,000, whichever is greater, and in the case of any other vessel, $150 per gross ton of such vessel (or, for a vessel carrying oil or hazardous substances as cargo, $250,000), whichever is greater, except that where the United States can show that such discharge was the result of willful negligence or willful misconduct within the privity and knowledge of the owner, such owner or operator shall be liable to the United States Government for the full amount of such costs. Such costs shall constitute a maritime lien on such vessel which may be recovered in an action in rem in the district court of the United States for any district within which any vessel may be found. The United States may also bring an action against the owner or operator of such vessel in any court of competent jurisdiction to recover such costs.

[*Editor's Note:* SEC. 58(d) (2) of the Clean Water Act of 1977 increased liability under Subsection 311(f) (1) of the Act. SEC. 58(j) of the 1977 Act provides:

"(j) No vessel subject to the increased amounts which result from the amendments made by subsections (d) (2), (d) (3), and (d) (4) of this section shall be required to establish any evidence of financial responsibility under section 311(p) of the Federal Water Pollution Control Act for such increased amounts before October 1, 1978."]

(2) Except where an owner or operator of an onshore facility can prove that a discharge was caused solely by (A) an act of God, (B) an act of war, (C) negligence on the part of the United States Government, or (D) an act or omission of a third party without regard to whether any such act or omission was or was not negligent, or any combination of the foregoing clauses, such owner

or operator of any such facility from which oil or a hazardous substance is discharged in violation of subsection (b) (3) of this section shall be liable to the United States Government for the actual costs incurred under subsection (c) for the removal of such oil or substance by the United States Government in an amount not to exceed $50,000,000, except that where the United States can show that such discharge was the result of willful negligence or willful misconduct within the privity and knowledge of the owner, such owner or operator shall be liable to the United States Government for the full amount of such costs. The United States may bring an action against the owner or operator of such facility in any court of competent jurisdiction to recover such costs. The Administrator is authorized, by regulation, after consultation with the Secretary of Commerce and the Small Business Administration, to establish reasonable and equitable classifications of those onshore facilities having a total fixed storage capacity of 1,000 barrels or less which he determines because of size, type, and location do not present a substantial risk of the discharge of oil or a hazardous substance in violation of subsection (b) (3) of this section, and apply with respect to such classifications differing limits of liability which may be less than the amount contained in this paragraph.

(3) Except where an owner or operator of an offshore facility can prove that a discharge was caused solely by (A) an act of God, (B) an act of war, (C) negligence on the part of the United States Government, or (D) an act or omission of a third party without regard to whether any such act or omission was or was not negligent, or any combination of the foregoing clauses, such owner or operator of any such facility from which oil or a hazardous substance is discharged in violation of subsection (b) (3) of this section shall, notwithstanding any other provision of law, be liable to the United States Government for the actual costs incurred under subsection (c) for the removal of such oil or substance by the United States Government in an amount not to exceed $50,000,000, except that where the United States can show that such discharge was the result of willful negligence or willful misconduct within the privity and knowledge of the owner, such owner or operator shall be liable to the United States Government for the full amount of such costs. The United States may bring an action against the owner or operator of such a facility in any court of competent jurisdiction to recover such costs.

[*Editor's Note:* Liability of $50,000 in Section 311(f) (2) and Section 311(f) (3) was established by the Clean Water Act of 1977. Under SEC. 58(h) of the 1977 Act, liability is to be $8,000,000 until June 1978.]

(4) The costs of removal of oil or a hazardous substance for which the owner or operator of a vessel or onshore or offshore facility is liable under subsection (f) of this section shall include any costs or expenses incurred by the Federal Government or any State government in the restoration or replacement of natural resources damaged or destroyed as a result of a discharge of oil or a hazardous substance in violation of subsection (b) of this section.

(5) The President, or the authorized representative of any State, shall act on behalf of the public as trustee of the natural resources to recover for the costs of replacing or restoring such resources. Sums recovered shall be used to restore, rehabilitate, or acquire the equivalent of such natural resources by the appropriate agencies of the Federal Government, or the State government.

(g) Where the owner or operator of a vessel (other than an inland oil barge) carrying oil or hazardous substances as cargo or an onshore or offshore facility which handles or stores oil or hazardous substances in bulk, from which oil or a hazardous substance is discharged in violation of subsection (b) of this section, alleges that such discharge was caused solely by an act or omission of a third party, such owner or operator shall pay to the United States Government the actual costs incurred under subsection (c) for removal of such oil or substance and shall be entitled by subrogation to all rights of the United States Government to recover such costs from such third party under this subsection. In any case where an owner or operator of a vessel, of an onshore facility, or of an offshore facility, from which oil or a hazardous substance is discharged in violation of subsection (b) (3) of this section, proves that such discharge of oil or hazardous substance was caused solely by an act or omission of a third party, or was caused solely by such an act or omission in combination with an act of God, an act of war, or negligence on the part of the United States Government, such third party shall, notwithstanding any other provision of law, be liable to the United States Government for the actual costs incurred under subsection (c) for removal of such oil or substance by the United States Government, except where such third party can prove that such discharge was caused solely by (A) an act of God, (B) an act of war, (C) negligence on the part of the United States Government, or (D) an act or omission of another party without regard to whether such act or omission was or was not negligent, or any combination of the foregoing clauses. If such third party was the owner or operator of a vessel which caused the discharge of oil or a hazardous substance in violation of subsection (b) (3) of this section, the liability of such third party under this subsection shall not exceed, in the case of an inland oil barge, $125 per gross ton of such barge, $125,000, whichever is greater, and in the case of any other vessel, $150 per gross ton of such vessel (or, for a vessel carrying oil or hazardous substances as cargo, $250,000), whichever is

greater. In any other case the liability of such third party shall not exceed the limitation which would have been applicable to the owner or operator of the vessel or the onshore or offshore facility from which the discharge actually occurred if such owner or operator were liable. If the United States can show that the discharge of oil or a hazardous substance in violation of subsection (b) (3) of this section was the result of willful negligence or willful misconduct within the privity and knowledge of such third party, such third party shall be liable to the United States Government for the full amount of such removal costs. The United States may bring an action against the third party in any court of competent jurisdiction to recover such removal costs.

(h) The liabilities established by this section shall in no way affect any rights which (1) the owner or operator of a vessel or of an onshore facility or an offshore facility may have against any third party whose acts may in any way have caused or contributed to such discharge, or (2) The United States Government may have against any third party whose actions may in any way have caused or contributed to the discharge of oil or hazardous substance.

(i) (1) In any case where an owner or operator of a vessel or an onshore facility or an offshore facility from which oil or a hazardous substance is discharged in violation of subsection (b) (3) of this section acts to remove such oil or substance in accordance with regulations promulgated pursuant to this section, such owner or operator shall be entitled to recover the reasonable costs incurred in such removal upon establishing, in a suit which may be brought against the United States Government in the United States Claims Court, that such discharge was caused solely by (A) an act of God, (B) an act of war, (C) negligence on the part of the United States Government or (D) an act or omission of a third party without regard to whether such act or omission was or was not negligent, or of any combination of the foregoing clauses.

(2) The provisions of this subsection shall not apply in any case where liability is established pursuant to the Outer Continental Shelf Lands Act, or the Deepwater Port Act of 1974.

(3) Any amount paid in accordance with a judgment of the United States Claims Court pursuant to this section shall be paid from the funds established pursuant to subsection (k).

[Sec. 311(i)(1) and (3) amended by PL 97-164]

(j) (1) Consistent with the National Contingency Plan required by subsection (c) (2) of this section, as soon as practicable after the effective date of this section, and from time to time thereafter, the President shall issue regulations consistent with maritime safety and with marine and navigation laws (A) establishing methods and procedures for removal of discharged oil and hazardous substances, (B) establishing criteria for the development and implementation of local and regional oil and hazardous substance removal contingency plans, (C) establishing procedures, methods, and equipment and other requirements for equipment to prevent discharges of oil and hazardous substances from vessels and from onshore facilities and offshore facilities, and to contain such discharges, and (D) governing the inspection of vessels carrying cargoes of oil and hazardous substances and the inspection of such cargoes in order to reduce the liklihood of discharges of oil from vessels in violation of this section.

(2) Any owner or operator of a vessel or an onshore facility or an offshore facility and any other person subject to any regulation issued under paragraph (1) of this subsection who fails or refuses to comply with the provisions of any such regulations, shall be liable to a civil penalty of not more than $5,000 for each such violation. This paragraph shall not apply to any owner or operator of any vessel from which oil or a hazardous substance is discharged in violation of paragraph (3) (ii) of subsection (b) unless such owner, operator, or person in charge is otherwise subject to the jurisdiction of the United States. Each violation shall be a separate offense. The President may assess and compromise such penalty. No penalty shall be assessed until the owner, operator, or other person charged shall have been given notice and an opportunity for a hearing on such charge. In determining the amount of the penalty, or the amount agreed upon in compromise, the gravity of the violation, and the demonstrated good faith of the owner, operator, or other person charged in attempting to achieve rapid compliance after notification of a violation, shall be considered by the President.

(k) (1) There is hereby authorized to be appropriated to a revolving fund to be established in the Treasury such sums as may be necessary to maintain such fund at a level of $35,000,000 to carry out the provisions of subsections (c), (d), (i), and (l) of this section. Any other funds received by the United States under this section shall also be deposited in said fund for such purposes. All sums appropriated to or deposited in, said fund shall remain available until expended.

[Sec. 311(k)(1) designated by PL 96-483]

(2) The Secretary of Transportation shall notify the Congress whenever the unobligated balance of the fund is less than $12,000,000, and shall include in such notification a recommendation for a supplemental appropriation relating to the sums that are needed to maintain the fund at the level provided in paragraph (1).

[Sec. 311(k)(2) added by PL 96-483]

[*Editor's note:* Section 304(b) and (c) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (PL 96-510) provides

"(b) One-half of the unobligated balance remaining before the date of the enactment of this Act under subsection (k) of section 311 of the Federal Water Pollution Control Act and all sums appropriated under section 504(b) of the Federal Water Pollution Control Act shall be transferred to the Fund established under title II of this Act.

(c) In any case in which any provision of section 311 of the Federal Water Pollution Control Act is determined to be in conflict with any provisions of this Act, the provisions of this Act shall apply."]

(l) The President is authorized to delegate the administration of this section to the heads of those Federal departments, agencies, and instrumentalities which he determines to be appropriate. Any moneys in the fund established by subsection (k) of this section shall be available to such Federal departments, agencies, and instrumentalities to carry out the provisions of subsections (c) and (i) of this section. Each such department, agency, and instrumentality, in order to avoid duplication of effort, shall, whenever appropriate, utilize the personnel, services, and facilities of other Federal departments, agencies, and instrumentalities.

(m) Anyone authorized by the President to enforce the provisions of this section may, except as to public vessels, (A) board and inspect any vessel upon the navigable waters of the United States or the waters of the contiguous zone, (B) with or without a warrant arrest any person who violates the provisions of this section or any regulation issued thereunder in his presence or view, and (C) execute any warrant or other process issued by an officer or court of competent jurisdiction.

(n) The several district courts of the United States are invested with jurisdiction for any actions, other than actions pursuant to subsection (i) (1), arising under this section. In the case of Guam and the Trust Territory of the Pacific Islands, such actions may be brought in the district court of Guam, and in the case of the Virgin Islands such actions may be brought in the district court of the Virgin Islands. In the case of American Samoa and the Trust Territory of the Pacific Islands, such actions may be brought in the District Court of the United States for the District of Hawaii and such court shall have jurisdiction of such actions. In the case of the Canal Zone, such actions may be brought in the United States District Court for the District of the Canal Zone.

(o) (1) Nothing in this section shall affect or modify in any way the obligations of any owner or operator of any vessel, or of any owner or operator of any onshore facility or offshore facility to any person or agency under any provision of law for damages to any publicly owned or privately owned property resulting from a discharge of any oil or hazardous substance or from the removal of any such oil or hazardous substance.

(2) Nothing in this section shall be construed as preempting any State or political subdivision thereof from imposing any requirement or liability with respect to the discharge of oil or hazardous substance into any waters within such State.

(3) Nothing in this section shall be construed as affecting or modifying any other existing authority of any Federal department, agency, or instrumentality, relative to onshore or offshore facilities under this Act or any other provision of law, or to affect any State or local law not in conflict with this section.

(p) (1) Any vessel over three hundred gross tons, including any barge of equivalent size, but not including any barge that is not self-propelled and that does not carry oil or hazardous substances as cargo or fuel, using any port or place in the United States or the navigable waters of the United States for any purpose shall establish and maintain under regulations to be prescribed from time to time by the President, evidence of financial responsibility of, in the case of an inland oil barge $125 per gross ton of such barge, or $125,000, whichever is greater, and in the case of any other vessel, $150 per gross ton of such vessel (or, for a vessel carrying oil or hazardous substances as cargo, $250,000), whichever is greater, to meet the liability to the United States which such vessel could be subjected under this section. In cases where an owner or operator owns, operates, or charters more than one such vessel, financial responsibility need only be established to meet the maximum liability to which the largest of such vessels could be subjected. Financial responsibility may be established by any one of, or a combination of, the following methods acceptable to the President: (A) evidence of insurance, (B) surety bonds, (C) qualification as a self-insurer, or (D) other evidence of financial responsibility. Any bond filed shall be issued by a bonding company authorized to do business in the United States.

(2) The provisions of paragraph (1) of this subsection shall be effective April 3, 1971, with respect to oil and one year after the date of enactment of this section with respect to hazardous substances. The President shall delegate the responsibility to carry out the provisions of this subsection to the appropriate agency within sixty days after the date of enactment of this section. Regulations necessary to implement this subsection shall be issued within six months after the date of enactment of this section.

(3) Any claim for costs incurred by such vessel may be brought directly against the insurer or any other person providing evidence of financial responsibility as required under this subsection. In the case of any action pursuant to this subsection such insurer or other person shall be entitled to invoke all rights and defenses which would have been available to the owner or operator if an action had been brought against him by the claimant, and which would have been available to him if an action had been brought against him by the owner or operator.

(4) Any owner or operator of a vessel subject to this

subsection, who fails to comply with the provisions of this subsection or any regulation issued thereunder, shall be subject to a fine of not more than $10,000.

(5) The Secretary of the Treasury may refuse the clearance required by section 4197 of the Revised Statutes of the United States, as amended (4 U.S.C. 91), to any vessel subject to this subsection, which does not have evidence furnished by the President that the financial responsibility provisions of paragraph (1) of this subsection have been complied with.

(6) The Secretary of the Department in which the Coast Guard is operated may (A) deny entry to any port or place in the United States or the navigable waters of the United States, to, and (B) detain at the port or place in the United States from which it is about to depart for any other port or place in the United States, any vessel subject to this subsection, which upon request, does not produce evidence furnished by the President that the financial responsibility provisions of paragraph (1) of this subsection have been complied with.

(q) The President is authorized to establish, with respect to any class or category of onshore or offshore facilities, a maximum limit of liability under subsections (f) (2) and (3) of this section of less than $50,000,000, but not less than $8,000,000.

(r) Nothing in this section shall be construed to impose or authorize the imposition of any limitation on liability under the Outer Continental Shelf Lands Act or the Deepwater Port Act of 1974.

MARINE SANITATION DEVICES

Sec. 312. (a) For the purpose of this section, the term—

(1) "new vessel" includes every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on the navigable waters, the construction of which is initiated after promulgation of standards and regulation under this section;

(2) "existing vessel" includes every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on the navigable waters, the construction of which is initiated before promulgation of standards and regulations under this section;

(3) "public vessel" means a vessel owned or bareboat-chartered and operated by the United States, by a State or political subdivision thereof, or by a foreign nation, except when such vessel is engaged in commerce;

(4) "United States" includes the States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Canal Zone, and the Trust Territory of the Pacific Islands;

(5) "marine sanitation device" includes any equipment for installation on board a vessel which is designed to receive, retain, treat, or discharge sewage, and any process to treat such sewage;

(6) "sewage" means human body wastes and the wastes from toilets and other receptacles intended to receive or retain body wastes except that, with respect to commercial vessels on the Great Lakes such term shall include graywater;

(7) "manufacture" means any person engaged in the manufacturing, assembling, or importation of marine sanitation devices or of vessels subject to standards and regulations promulgated under this section;

(8) "person" means an individual, partnership, firm, corporation, or association, but does not include an individual on board a public vessel;

(9) "discharge" includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying or dumping;

(10) "commercial vessels" means those vessels used in the business of transporting property for compensation or hire, or in transporting property in the business of the owner, lessee, or operator of the vessel;

(11) "graywater" means galley, bath, and shower water.

(b) (1) As soon as possible, after the enactment of this section and subject to the provisions of section 101(j) of this Act, the Administrator, after consultation with the Secretary of the department in which the Coast Guard is operating, after giving appropriate consideration to the economic costs involved, and within the limits of available technology, shall promulgate Federal standards of performance for marine sanitation devices (hereafter in this section referred to as "standards") which shall be designed to prevent the discharge of untreated or inadequately treated sewage into or upon the navigable waters from new vessels and existing vessels, except vessels not equipped with installed toilet facilities. Such standards and standards established under subsection (c) (1) (B) of this section shall be consistent with maritime safety and the marine and navigation laws and regulations and shall be coordinated with the regulations issued under this subsection by the Secretary of the department in which the Coast Guard is operating. The Secretary of the department in which the Coast Guard is operating shall promulgate regulations, which are consistent with standards promulgated under this subsection and subsection (c) of this section and with maritime safety and the marine and navigation laws and regulations governing the design, construction, installation, and operation of any marine sanitation device on board such vessels.

(2) Any existing vessel equipped with a marine sanitation device on the date of promulgation of initial standards and regulations under this section, which device is in compliance with such initial standards and regulations, shall be deemed in compliance with this section

until such time as the device is replaced or is found not to be in compliance with such initial standards and regulations.

(c) (1) (A) Initial standards and regulations under this section shall become effective for new vessels two years after promulgation; and for existing vessels five years after promulgation. Revisions of standards and regulations shall be effective upon promulgation, unless another effective date is specified, except that no revision shall take effect before the effective date of the standard or regulation being revised.

(B) The Administrator shall, with respect to commercial vessels on the Great Lakes, establish standards which require at a minimum the equivalent of secondary treatment as defined under section 304(d) of this Act. Such standards and regulations shall take effect for existing vessels after such time as the Administrator determines to be reasonable for the upgrading of marine sanitation devices to attain such standard.

(2) The Secretary of the department in which the Coast Guard is operating with regard to his regulatory authority established by this section, after consultation with the Administrator, may distinguish among classes, types, and sizes of vessels as well as between new and existing vessels, and may waive applicability of standards and regulations as necessary or appropriate for such classes, types, and sizes of vessels (including existing vessels equipped with marine sanitation devices on the date of promulgation of the initial standards required by this section), and, upon application, for individual vessels.

(d) The provisions of this section and the standards and regulations promulgated hereunder apply to vessels owned and operated by the United States unless the Secretary of Defense finds that compliance would not be in the interest of national security. With respect to vessels owned and operated by the Department of Defense, regulations under the last sentence of subsection (b) (1) of this section and certifications under subsection (g) (2) of this section shall be promulgated and issued by the Secretary of Defense.

(e) Before the standards and regulations under this section are promulgated, the Administrator and the Secretary of the department in which the Coast Guard is operating shall consult with the Secretary of State; the Secretary of Health, Education, and Welfare; the Secretary of Defense; the Secretary of the Treasury; the Secretary of Commerce; other interested Federal agencies; and the States and industries interested; and otherwise comply with the requirements of section 553 of title 5 of the United States Code.

(f) (1) (A) Except as provided in subparagraph (B), after the effective date of the initial standards and regulations promulgated under this section, no State or political subdivision thereof shall adopt or enforce any statute or regulation of such State or political subdivision with respect to the design, manufacture, or installation or use of any marine sanitation devise on any vessel subject to the provisions of this section.

[Sec. 312(f)(1)(A) designated and amended by PL 100-4]

(B) A State may adopt and enforce a statute or regulation with respect to the design, manufacture, or installation or use of any marine sanitation device on a houseboat, if such statute or regulation is more stringent than the standards and regulations promulgated under this section. For purposes of this paragraph, the term 'houseboat' means a vessel which, for a period of time determined by the State in which the vessel is located, is used primarily as a residence and is not used primarily as a means of transportation.

[Sec. 312(f)(1)(B) added by PL 100-4]

(2) If after promulgation of the initial standards and regulations and prior to their effective date, a vessel is equipped with a marine sanitation device in compliance with such standards and regulations and the installation and operation of such device is in accordance with such standards and regulations, such standards and regulations shall, for the purposes of paragraph (1) of this subsection, become effective with respect to such vessel on the date of such compliance.

(3) After the effective date of the initial standards and regulations promulgated under this section, if any State determines that the protection and enhancement of the quality of some or all of the waters within such State require greater environmental protection, such State may completely prohibit the discharge from all vessels of any sewage, whether treated or not, into such waters, except that no such prohibition shall apply until the Administrator determines that adequate facilities for the safe and sanitary removal and treatment of sewage from all vessels are reasonably available for such water to which such prohibition would apply. Upon application of the State, the Administrator shall make such determination within 90 days of the date of such application.

(4) (A) If the Administrator determines upon application by a State that the protection and enhancement of the quality of specified waters within such State requires such a prohibition, he shall by regulation completely prohibit the discharge from a vessel of any sewage (whether treated or not) into such waters.

(B) Upon application by a State, the Administrator shall, by regulation, establish a drinking water intake zone in any waters within such State and prohibit the discharge of sewage from vessels within that zone.

(g) (1) No manufacturer of a marine sanitation device shall sell, offer for sale, or introduce or deliver for introduction in interstate commerce, or import into

the United States for sale or resale any marine sanitation device manufactured after the effective date of the standards and regulations promulgated under this section unless such device is in all material respects substantially the same as a test device certified under this subsection.

(2) Upon application of the manufacturer, the Secretary of the department in which the Coast Guard is operating shall so certify a marine sanitation device if he determines, in accordance with the provisions of this paragraph, that it meets the appropriate standards and regulations promulgated under this section. The Secretary of the department in which the Coast Guard is operating shall test or require such testing of the device in accordance with procedures set forth by the Administrator as to standards of performance and for such other purposes as may be appropriate. If the Secretary of the department in which the Coast Guard is operating determines that the device is satisfactory from the standpoint of safety and any other requirements of maritime law or regulation, and after consideration of the design, installation, operation, material, or other appropriate factors, he shall certify the device. Any device manufactured by such manufacturer which is in all material respects substantially the same as the certified test device shall be deemed to be in conformity with the appropriate standards and regulations established under this section.

(3) Every manufacturer shall establish and maintain such records, make such reports, and provide such information as the Administrator or the Secretary of the department in which the Coast Guard is operating may reasonably require to enable him to determine whether such manufacturer has acted or is acting in compliance with this section and regulations issued thereunder and shall, upon request of an officer or employee duly designated by the Administrator or the Secretary of the department in which the Coast Guard is operating, permit such officer or employee at reasonable times to have access to and copy such records. All information reported to or otherwise obtained by the Administrator or the Secretary of the department in which the Coast Guard is operating or their representatives pursuant to this subsection which contains or relates to a trade secret or other matter referred in section 1905 of title 18 of the United States Code shall be considered confidential for the purpose of that section, except that such information may be disclosed to other officers or employees concerned with carrying out this section. This paragraph shall not apply in the case of the construction of a vessel by an individual for his own use.

(h) After the effective date of standards and regulations promulgated under this section, it shall be unlawful—

(1) for the manufacturer of any vessel subject to such standards and regulations to manufacture for sale, to sell or offer for sale, or to distribute for sale or resale any such vessel unless it is equipped with a marine sanitation device which is in all material respects substantially the same as the appropriate test device certified pursuant to this section;

(2) for any person, prior to the sale or delivery of a vessel subject to such standards and regulations to the ultimate purchaser, wrongfully to remove or render inoperative any certified marine sanitation device or element of design of such device installed in such vessel;

(3) for any person to fail or refuse to permit access to or copying of records or to fail to make reports or provide information required under this section; and

(4) for a vessel subject to such standards and regulations to operate on the navigable waters of the United States, if such vessel is not equipped with an operable marine sanitation device certified pursuant to this section.

(i) The district courts of the United States shall have jurisdictions to restrain violations of subsection (g) (1) of this section and subsections (h) (1) through (3) of this section. Actions to restrain such violations shall be brought by, and in, the name of the United States. In case of contumacy or refusal to obey a subpena served upon any person under this subsection, the district court of the United States for any district in which such person is found or resides or transacts business, upon application by the United States and after notice to such person, shall have jurisdiction to issue an order requiring such person to appear and give testimony or to appear and produce documents, and any failure to obey such order of the court may be punished by such court as a contempt thereof.

(j) Any person who violates subsection (g) (1) of this section or clause (1) or (2) of subsection (h) of this section shall be liable to a civil penalty of not more than $5,000 for each violation. Any person who violates clause (4) of subsection (h) of this section or any regulation issued pursuant to this section shall be liable to a civil penalty of not more than $2,000 for each violation. Each violation shall be a separate offense. The Secretary of the department in which the Coast Guard is operating may assess and compromise any such penalty. No penalty shall be assessed until the person charged shall have been given notice and an opportunity for a hearing on such charge. In determining the amount of the penalty, or the amount agreed upon in compromise, the gravity of the violation, and the demonstrated good faith of the person charged in attempting to achieve rapid compliance, after notification of a violation, shall be considered by said Secretary.

(k) The provisions of this section shall be enforced by the Secretary of the department in which the Coast Guard is operating and he may utilize by agreement, with or without reimbursement, law enforcement officers or other personnel and facilities of the Administrator, other Federal agencies, or the States to carry out the

provisions of this section. The provisions of this section may also be enforced by a State.

[Sec. 312(k) amended by PL 100-4]

(l) Anyone authorized by the Secretary of the department in which the Coast Guard is operating to enforce the provisions of this section may, except as to public vessels, (1) board and inspect any vessel upon the navigable waters of the United States and (2) execute any warrant or other process issued by an officer or court of competent jurisdiction.

(m) In the case of Guam and the Trust Territory of the Pacific Islands, actions arising under this section may be brought in the district court of Guam, and in the case of the Virgin Islands such actions may be brought in the district court of the Virgin Islands. In the case of American Samoa and the Trust Territory of the Pacific Islands, such actions may be brought in the District Court of the United States for the District of Hawaii and such court shall have jurisdiction of such actions. In the case of the Canal Zone, such action may be brought in the District Court for the District of the Canal Zone.

FEDERAL FACILITIES POLLUTION CONTROL

Sec. 313. (a) Each department, agency, or instrumentality of the executive, legislative, and judicial branches of the Federal Government (1) having jurisdiction over any property or facility, or (2) engaged in any activity resulting, or which may result, in the discharge or runoff of pollutants, and each officer, agent, or employee thereof in the performance of his official duties, shall be subject to, and comply with, all Federal, State, interstate, and local requirements, administrative authority, and process and sanctions respecting the control and abatement of water pollution in the same manner, and to the same extent as any nongovernmental entity including the payment of reasonable service charges. The preceding sentence shall apply (A) to any requirement whether substantive or procedural (including any recordkeeping or reporting requirement, any requirement respecting permits and any other requirement, whatsoever), (B) to the exercise of any Federal, State, or local administrative authority, and (C) to any process and sanction, whether enforced in Federal, State, or local courts or in any other manner. This subsection shall apply notwithstanding any immunity of such agencies, officers, agents, or employees under any law or rule of law. Nothing in this section shall be construed to prevent any department, agency, or instrumentality of the Federal Government, or any officer, agent, or employee thereof in the performance of his official duties, from reporting to the appropriate Federal district court any proceeding to which the department, agency, or instrumentality or officer, agent, or employee thereof is subject pursuant to this section, and any such proceeding may be removed in accordance with 28 U.S.C. 1441 et seq. No officer, agent, or employee of the United States shall be personally liable for any civil penalty arising from the performance of his official duties, for which he is not otherwise liable, and the United States shall be liable only for those civil penalties arising under Federal law or imposed by a State or local court to enforce an order or the process of such court. The President may exempt any effluent source of any department, agency, or instrumentality in the executive branch from compliance with any such a requirement if he determines it to be in the paramount interest of the United States to do so; except that no exemption may be granted from the requirements of section 306 or 307 of this Act. No such exemptions shall be granted due to lack of appropriation unless the President shall have specifically requested such appropriation as a part of the budgetary process and the Congress shall have failed to make available such requested appropriation. Any exemption shall be for a period not in excess of one year, but additional exemptions may be granted for periods of not to exceed one year upon the President's making a new determination. The President shall report each January to the Congress all exemptions from the requirements of this section granted during the preceding calendar year, together with his reason for granting such exemption. In addition to any such exemption of a particular effluent source, the President may, if he determines it to be in the paramount interest of the United States to do so, issue regulations exempting from compliance with the requirements of this section any weaponry, equipment, aircraft, vessels, vehicles, or other classes or categories of property, and access to such property, which are owned or operated by the Armed Forces of the United States (including the Coast Guard) or by the National Guard of any State and which are uniquely military in nature. The President shall reconsider the need for such regulations at three-year intervals.

(b) (1) The Administrator shall coordinate with the head of each department, agency, or instrumentality of the Federal Government having jurisdiction over any property or facility utilizing federally owned wastewater facilities to develop a program of cooperation for utilizing wastewater control systems utilizing those innovative treatment processes and techniques for which guidelines have been promulgated under section 304(d) (3). Such program shall include an inventory of property and facilities which could utilize such processes and techniques.

(2) Construction shall not be initiated for facilities for treatment of wastewater at any Federal property or facility after September 30, 1979, if alternative methods for wastewater treatment at such property or facility utilizing innovative treatment processes and techniques.

including but not limited to methods utilizing recycle and reuse techniques and land treatment are not utilized, unless the life cycle cost of the alternative treatment works exceeds the life cycle cost of the most cost effective alternative by more than 15 per centum. The Administrator may waive the application of this paragraph in any case where the Administrator determines it to be in the public interest, or that compliance with this paragraph would interfere with the orderly compliance with conditions of a permit issued pursuant to section 402 of this Act.

CLEAN LAKES

Sec. 314. (a) Establishment and Scope of Program. —

[Sec. 314(a) revised by PL 100-4]

(1) State program requirements. — Each State on a biennial basis shall prepare and submit to the Administrator for his approval —

(A) an identification and classification according to eutrophic condition of all publicly owned lakes in such State;

(B) a description of procedures, processes, and methods (including land use requirements), to control sources of pollution of such lakes;

(C) a description of methods and procedures, in conjunction with appropriate Federal agencies, to restore the quality of such lakes;

(D) methods and procedures to mitigate the harmful effects of high acidity, including innovative methods of neutralizing and restoring buffering capacity of lakes and methods of removing from lakes toxic metals and other toxic substances mobilized by high acidity;

(E) a list and description of those publicly owned lakes in such State for which uses are known to be impaired, including those lakes which are known not to meet applicable water quality standards or which require implementation of control programs to maintain compliance with applicable standards and those lakes in which water quality has deteriorated as a result of high acidity that may reasonably be due to acid deposition; and

(F) an assessment of the status and trends of water quality in lakes in such State, including but not limited to, the nature and extent of pollution loading from point and nonpoint sources and the extent to which the use of lakes is impaired as a result of such pollution, particularly with respect to toxic pollution.

(2) Submission as Part of 305(b)(1) Report. — The information required under paragraph (1) shall be included in the report required under section 305(b)(1) of this Act, beginning with the report required under such section by April 1, 1988.

(3) Report of Administrator. — Not later than 180 days after receipt from the States of the biennial information required under paragraph (1), the Administrator shall submit to the Committee on Public Works and Transportation of the House of Representatives and the Committee on Environment and Public Works of the Senate a report on the status of water quality in lakes in the United States, including the effectiveness of the methods and procedures described in paragraph (1)(D).

(4) Eligibility Requirement. — Beginning after April 1, 1988, a State must have submitted the information required under paragraph (1) in order to receive grant assistance under this section.

(b) The Administrator shall provide financial assistance to States in order to carry out methods and procedures approved by him under subsection (a) of this section. The Administrator shall provide financial assistance to States to prepare the identification and classification surveys required in subsection (a)(1) of this section.

[Sec. 314(b) amended by PL 100-4]

(c) (1) The amount granted to any State for any fiscal year under subsection (b) of this section shall not exceed 70 per centum of the funds expended by such State in such year for carrying out approved methods and procedures under subsection (a) of this Section.

[Sec. 314(c)(1) and (2) amended by PL 100-4]

(2) There is authorized to be appropriated $50,000,000 for the fiscal year ending June 30, 1973; $100,000,000 for the fiscal year 1974; $150,000,000 for the fiscal year 1975, $50,000,000 for fiscal year 1977, $60,000,000 for fiscal year 1978, $60,000,000 for fiscal year 1979, $60,000,000 for fiscal year 1980, $30,000,000 for fiscal year 1981, $30,000,00 for fiscal year 1982, such sums as may be necessary for fiscal years 1983 through 1985, and $30,000,000 per fiscal year for each of the fiscal years 1986 through 1990 for grants to States under subsection (b) of this section which sums shall remain available until expended. The Administrator shall provide for an equitable distribution of such sums to the States with approved methods and procedures under subsection (a) of this section.

(d) Demonstration Program.—

[Sec. 314(d) added by PL 100-4]

(1) General Requirements. — The Administrator is authorized and directed to establish and conduct at locations throughout the Nation a lake water quality demonstration program. The program shall, at a minimum—

(A) develop cost effective technologies for the control of pollutants to preserve or enhance lake water quality while optimizing multiple lakes uses;

(B) control nonpoint sources of pollution which are contributing to the degradation of water quality in lakes;

(C) evaluate the feasibility of implementing regional consolidated pollution control strategies;

(D) demonstrate environmentally preferred tech-

niques for the removal and disposal of contaminated lake sediments;

(E) develop improved methods for the removal of silt, stumps, aquatic growth, and other obstructions which impair the quality of lakes;

(F) construct and evaluate silt traps and other devices or equipment to prevent or abate the deposit of sediment in lakes; and

(G) demonstrate the costs and benefits of utilizing dredged material from lakes in the reclamation of despoiled land.

(2) Geographical Requirements. — Demonstration projects authorized by this subsection shall be undertaken to reflect a variety of geographical and environmental conditions. As a priority, the Administrator shall undertake demonstration projects at Lake Houston, Texas; Beaver Lake, Arkansas; Greenwood Lake and Belcher Creek, New Jersey; Deal Lake, New Jersey; Alcyon Lake, New Jersey; Gorton's Pond, Rhode Island; Lake Washington, Rhode Island; Lake Bomoseen, Vermont; Sauk Lake, Minnesota; and Lake Worth, Texas.

(3) Reports. — The Administrator shall report annually to the Committee on Public Works and Transportation of the House of Representatives and the Committee on Environment and Public Works of the Senate on work undertaken pursuant to this subsection. Upon completion of the program authorized by this subsection, the Administrator shall submit to such committees a final report on the results of such program, along with recommendations for further measures to improve the water quality of the Nation's lakes.

(4) Authorization of Appropriations.—

(A) In General. — There is authorized to be appropriated to carry out this subsection not to exceed $40,000,000 for fiscal years beginning after September 30, 1986, to remain available until expended.

(B) Special Authorizations.—

(i) Amount. — There is authorized to be appropriated to carry out subsection (b) with respect to subsection (a)(1)(D) not to exceed $15,000,000 for fiscal years beginning after September 30, 1986, to remain available until expended.

(ii) Distribution of Funds. — The Administrator shall provide for an equitable distribution of sums appropriated pursuant to this subparagraph among States carrying out approved methods and procedures. Such distribution shall be based on the relative needs of each such State for the mitigation of the harmful effects on lakes and other surface waters of high acidity that may reasonably be due to acid deposition or acid mine drainage.

(iii) Grants as Additional Assistance. — The amount of any grant to a State under this subparagraph shall be in addition to, and not in lieu of, any other Federal financial assistance.

NATIONAL STUDY COMMISSION

Sec. 315. (a) There is established a National Study Commission, which shall make a full and complete investigation and study of all of the technological aspects of achieving, and all aspects of the total economic, social, and environmental effects of achieving or not achieving, the effluent limitations and goals set forth for 1983 in section 301(b)(2) of this Act.

(b) Such Commission shall be composed of fifteen members, including five members of the Senate, who are members of the Public Works committee, appointed by the President of the Senate, five members of the House, who are members of the Public Works committee, appointed by the Speaker of the House, and five members of the public appointed by the President. The Chairman of such Commission shall be elected from among its members.

(c) In the conduct of such study, the Commission is authorized to contract with the National Academy of Sciences and the National Academy of Engineering (acting through the National Research Council), the National Institute of Ecology, Brookings Institution, and other nongovernmental entities, for the investigation of matters within their competence.

(d) The heads of the departments, agencies and instrumentalities of the executive branch of the Federal Government shall cooperate with the Commission in carrying out the requirements of this section, and shall furnish to the Commission such information as the Commission deems necessary to carry out this section.

(e) A report shall be submitted to the Congress of the results of such investigation and study, together with recommendations, not later than three years after the date of enactment of this title.

(f) The members of the Commission who are not officers or employees of the United States, while attending conferences or meetings of the Commission or while otherwise serving at the request of the Chairman shall be entitled to receive compensation at a rate not in excess of the maximum rate of pay for grade GS-18, as provided in the General Schedule under section 5332 of title V of the United States Code, including traveltime and while away from their homes or regular places of business they may be allowed travel expenses, including per diem in lieu of subsistence as authorized by law (5 U.S.C. 73b-2) for persons in the Government service employed intermittently.

(g) In addition to authority to appoint personnel subject to the provisions of title 5, United States Code, governing appointments in the competitive service, and to pay such personnel in accordance with the provisions of chapter 51 and subchapter III of chapter 53 of such title relating to classification and General Schedule pay rates, the Commission shall have authority to enter into

contracts with private or public organizations who shall furnish the Commission with such administrative and technical personnel as may be necessary to carry out the purpose of this section. Personnel furnished by such organizations under this subsection are not, and shall not be considered to be, Federal employees for any purposes, but in the performance of their duties shall be guided by the standards which apply to employees of the legislative branches under rules 41 and 43 of the Senate and House of Representatives, respectively.

(h) There is authorized to be appropriated, for use in carrying out this section, not to exceed $17,250,000.

THERMAL DISCHARGES

Sec. 316. (a) With respect to any point source otherwise subject to the provisions of section 301 or section 306 of this Act, whenever the owner or operator of any such source, after opportunity for public hearing, can demonstrate to the satisfaction of the Administrator (or, if appropriate, the State) that any effluent limitation proposed for the control of the thermal component of any discharge from such source will require effluent limitations more stringent than necessary to assure the projection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife in and on the body of water into which the discharge is to be made, the Administrator (or, if appropriate, the State) may impose an effluent limitation under such sections for such plant, with respect to the thermal component of such discharge (taking into account the interaction of such thermal component with other pollutants), that will assure the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife in and on that body of water.

(b) Any standard established pursuant to section 301 or section 306 of this Act and applicable to a point source shall require that the location, design, construction, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impact.

(c) Notwithstanding any other provision of this Act, any point source of a discharge having a thermal component, the modification of which point source is commenced after the date of enactment of the Federal Water Pollution Control Act Amendments of 1972 and which, as modified, meets effluent limitations established under section 301, or, if more stringent, effluent limitations established under section 303 and which effluent limitations will assure protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife in or on the water into which the discharge is made, shall not be subject to any more stringent effluent limitation with respect to the thermal component of its discharge during a ten year period beginning on the date of completion of such modification or during the period of depreciation or amortization of such facility for the purpose of section 167 or 169 (or both) of the Internal Revenue Code of 1954, whichever period ends first.

FINANCING STUDY

Sec. 317. (a) The Administrator shall continue to investigate and study the feasibility of alternate methods of financing the cost of preventing, controlling and abating pollution as directed in the Water Quality Improvement Act of 1970 (Public Law 91-224), including, but not limited to, the feasibility of establishing a pollution abatement trust fund. The results of such investigation and study shall be reported to the Congress not later than two years after enactment of this title, together with recommendations of the Administrator for financing the programs for preventing, controlling and abating pollution for the fiscal years beginning after fiscal year 1976, including any necessary legislation.

(b) There is authorized to be appropriated for use in carrying out this section, not to exceed $1,000,000.

AQUACULTURE

Sec. 318. (a) The Administrator is authorized, after public hearings, to permit the discharge of a specific pollutant or pollutants under controlled conditions associated with an approved aquaculture project under Federal or State supervision pursuant to section 402 of this Act.

(b) The Administrator shall by regulation establish any procedures and guidelines which the Administrator deems necessary to carry out this section. Such regulations shall require the application to such discharge of each criterion, factor, procedure, and requirement applicable to a permit issued under section 402 of this title, as the Administrator determines necessary to carry out the objective of this Act.

(c) Each State desiring to administer its own permit program within its jurisdiction for discharge of a specific pollutant or pollutants under controlled conditions associated with an approved aquaculture project may do so if upon submission of such program the Administrator determines such program is adequate to carry out the objective of this Act.

Sec. 319. Nonpoint Source Management Programs.

[Sec. 319 added by PL 100-4]

(a) State Assessment Reports.—

(1) Contents. — The Governor of each State shall, after notice and opportunity for public comment, prepare and submit to the Administrator for approval, a report which—

(A) identifies those navigable waters within the State which, without additional action to control nonpoint sources of pollution, cannot reasonably be expected to attain or maintain applicable water quality standards or the goals and requirements of this Act;

(B) identifies those categories and subcategories of nonpoint sources or, where appropriate, particular nonpoint sources which add significant pollution to each portion of the navigable waters identified under subparagraph (A) in amounts which contribute to such portion not meeting such water quality standards or such goals and requirements;

(C) describes the process, including intergovernmental coordination and public participation, for identifying best management practices and measures to control each category and subcategory of nonpoint sources and, where appropriate, particular nonpoint sources identified under subparagraph (B) and to reduce, to the maximum extent practicable, the level of pollution resulting from such category, subcategory, or source; and

(D) identifies and describes State and local programs for controlling pollution added from nonpoint sources to, and improving the quality of, each such portion of the navigable waters, including but not limited to those programs which are receiving Federal assistance under subsections (h) and (i).

(2) Information Used in Preparation. — In developing the report required by this section, the State (A) may rely upon information developed pursuant to sections 208, 303(e), 304(f), 305(b), and 314, and other information as appropriate, and (B) may utilize appropriate elements of the waste treatment management plans developed pursuant to sections 208(b) and 303, to the extent such elements are consistent with and fulfill the requirements of this section.

(b) State Management Programs.—

(1) In General. — The Governor of each State, for that State or in combination with adjacent States, shall, after notice and opportunity for public comment, prepare and submit to the Administrator for approval a management program which such State proposes to implement in the first four fiscal years beginning after the date of submission of such management program for controlling pollution added from nonpoint sources to the navigable waters within the State and improving the quality of such waters.

(2) Specific Contents. — Each management program proposed for implementation under this subsection shall include each of the following:

(A) An identification of the best management practices and measures which will be undertaken to reduce pollutant loadings resulting from each category, subcategory, or particular nonpoint source designated under paragraph (1)(B), taking into account the impact of the practice on ground water quality.

(B) An identification of programs (including, as appropriate, nonregulatory or regulatory programs for enforcement, technical assistance, financial assistance, education, training, technology transfer, and demonstration projects) to achieve implementation of the best management practices by the categories, subcategories, and particular nonpoint sources designated under subparagraph (A).

(C) A schedule containing annual milestones for (i) utilization of the program implementation methods identified in subparagraph (B), and (ii) implementation of the best management practices identified in subparagraph (A) by the categories, subcategories, or particular nonpoint sources designated under paragraph (1)(B). Such schedule shall provide for utilization of the best management practices at the earliest practicable date.

(D) A certification of the attorney general of the State or States (or the chief attorney of any State water pollution control agency which has independent legal counsel) that the laws of the State or States, as the case may be, provide adequate authority to implement such management program or, if there is not such adequate authority, a list of such additional authorities as will be necessary to implement such management program. A schedule and commitment by the State or States to seek such additional authorities as expeditiously as practicable.

(E) Sources of Federal and other assistance and funding (other than assistance provided under subsections (h) and (i) which will be available in each of such fiscal years for supporting implementation of such practices and measures and the purposes for which such assistance will be used in each of such fiscal years.

(F) An identification of Federal financial assistance programs and Federal development projects for which the State will review individual assistance applications or development projects for their effect on water quality pursuant to the procedures set forth in Executive Order 12372 as in effect on September 17, 1983, to determine whether such assistance applications or development projects would be consistent with the program prepared under this subsection; for the purposes of this subparagraph, identification shall not be limited to the assistance programs or development projects subject to Executive Order 12372 but may include any programs listed in the most recent Catalog of Federal Domestic Assistance which may have an effect on the purposes and objectives of the State's nonpoint source pollution management program.

(3) Utilization of Local and Private Experts. — In developing and implementing a management program under this subsection, a State shall, to the maximum extent practicable, involve local public and private agencies and organizations which have expertise in control of nonpoint sources of pollution.

(4) Development on Watershed Basis. — A State shall, to the maximum extent practicable, develop and implement a management program under this subsection on a watershed-by-watershed basis within such State.

(c) Administrative Provisions.—

(1) Cooperation Requirement. — Any report required by subsection (a) and any management program and

report required by subsection (b) shall be developed in cooperation with local, substate regional, and interstate entities which are actively planning for the implementation of nonpoint source pollution controls and have either been certified by the Administrator in accordance with section 208, have worked jointly with the State on water quality management planning under section 205(j), or have been designated by the State legislative body or Governor as water quality management planning agencies for their geographic areas.

(2) Time Period for Submission of Reports and Management Programs. — Each report and management program shall be submitted to the Administrator during the 18-month period beginning on the date of the enactment of this section.

(d) Approval or Disapproval of Reports and Management Programs.—

(1) Deadline. — Subject to paragraph (2), not later than 180 days after the date of submission to the Administrator of any report or management program under this section (other than subsections (h), (i), and (k)), the Administrator shall either approve or disapprove such report or management program, as the case may be. The Administrator may approve a portion of a management program under this subsection. If the Administrator does not disapprove a report, management program, or portion of a management program in such 180-day period, such report, management program, or portion shall be deemed approved for purposes of this section.

(2) Procedure for Disapproval. — If, after notice and opportunity for public comment and consultation with appropriate Federal and State agencies and other interested persons, the Administrator determines that—

(A) the proposed management program or any portion thereof does not meet the requirements of subsection (b)(2) of this section or is not likely to satisfy, in whole or in part, the goals and requirements of this Act;

(B) adequate authority does not exist, or adequate resources are not available, to implement such program or portion;

(C) the schedule for implementing such program or portion is not sufficiently expeditious; or

(D) the practices and measures proposed in such program or portion are not adequate to reduce the level of pollution in navigable waters in the State resulting from nonpoint sources and to improve the quality of navigable waters in the State;

the Administrator shall within 6 months of the receipt of the proposed program notify the State of any revisions or modifications necessary to obtain approval. The State shall thereupon have an additional 3 months to submit its revised management program and the Administrator shall approve or disapprove such revised program within three months of receipt.

(3) Failure of State to Submit Report. — If a Governor of State does not submit the report required by subsection (a) within the period specified by subsection (c)(2), the Administrator shall, within 30 months after the date of the enactment of this section, prepare a report for such State which makes the identifications required by paragraphs (1)(A) and (1)(B) of subsection (a). Upon completion of the requirement of the preceding sentence and after notice and opportunity for comment, the Administrator shall report to Congress on his actions pursuant to this section.

(e) Local Management Programs; Technical Assistance. — If a State fails to submit a management program under subsection (b) or the Administrator does not approve such a management program, a local public agency or organization which has expertise in, and authority to, control water pollution, resulting from nonpoint sources in any area of such State which the Administrator determines is of sufficient geographic size may, with approval of such State, request the Administrator to provide, and the Administrator shall provide, technical assistance to such agency or organization in developing for such area a management program which is described in subsection (b) and can be approved pursuant to subsection (d). After development of such management program, such agency or organization shall submit such management program to the Administrator for approval. If the Administrator approves such management program, such agency or organization shall be eligible to receive financial assistance under subsection (h) for implementation of such management program as if such agency or organization were a State for which a report submitted under subsection (a) and a management program submitted under subsection (b) were approved under this section. Such financial assistance shall be subject to the same terms and conditions as assistance provided to a State under subsection (h).

(f) Technical Assistance for States. — Upon request of a State, the Administrator may provide technical assistance to such State in developing a management program approved under subsection (b) for those portions of the navigable waters requested by such State.

(g) Interstate Management Conference.—

(1) Convening of Conference; Notification; Purpose. — If any portion of the navigable waters in any State which is implementing a management program approved under this section is not meeting applicable water quality standards or the goals and requirements of this Act as a result, in whole or in part, of pollution from nonpoint sources in another State, such State may petition the Administrator to convene, and the Administrator shall convene, a management conference of all States which contribute significant pollution resulting from nonpoint sources to such portion. If, on the basis of information available, the Administrator determines

that a State is not meeting applicable water quality standards or the goals and requirements of this Act as a result, in whole or in part, of significant pollution from nonpoint sources in another State, the Administrator shall notify such States. The Administrator may convene a management conference under this paragraph not later than 180 days after giving such notification, whether or not the State which is not meeting such standards requests such conference. The purpose of such conference shall be to develop an agreement among such States to reduce the level of pollution in such portion resulting from nonpoint sources and to improve the water quality of such portion. Nothing in such agreement shall supersede or abrogate rights to quantities of water which have been established by interstate water compacts, Supreme Court decrees, or State water laws. This subsection shall not apply to any pollution which is subject to the Colorado River Basin Salinity Control Act. The requirement that the Administrator convene a management conference shall not be subject to the provisions of section 505 of this Act.

(2) State Management Program Requirement. — To the extent that the States reach agreement through such conference, the management programs of the States which are parties to such agreements and which contribute significant pollution to the navigable waters or portions thereof not meeting applicable water quality standards or goals and requirements of this Act will be revised to reflect such agreement. Such a management programs shall be consistent with Federal and State law.

(h) Grant Program.—

(1) Grants for Implementation of Management Programs. — Upon application of a State for which a report submitted under subsection (a) and a management program submitted under subsection (b) is approved under this section, the Administrator shall make grants, subject to such terms and conditions as the Administrator considers appropriate, under this subsection to such State for the purpose of assisting the State in implementing such management program. Funds reserved pursuant to section 205(j)(5) of this Act may be used to develop and implement such management program.

(2) Applications. — An application for a grant under this subsection in any fiscal year shall be in such form and shall contain such other information as the Administrator may require, including an identification and description of the best management practices and measures which the State proposes to assist, encourage, or require in such year with the Federal assistance to be provided under the grant.

(3) Federal Share. — The Federal share of the cost of each management program implemented with Federal assistance under this subsection in any fiscal year shall not exceed 60 percent of the cost incurred by the State in implementing such management program and shall be made on condition that the non-Federal share is provided from non-Federal sources.

(4) Limitation on Grant Amounts. — Notwithstanding any other provision of this subsection, not more than 15 percent of the amount appropriated to carry out this subsection may be used to make grants to any one State, including any grants to any local public agency or organization with authority to control pollution from nonpoint sources in any area of such State.

(5) Priority for Effective Mechanisms. — For each fiscal year beginning after September 30, 1987, the Administrator may give priority in making grants under this subsection, and shall give consideration in determining the Federal share of any such grant, to States which have implemented or are proposing to implement management programs which will—

(A) control particularly difficult or serious nonpoint source pollution problems, including, but not limited to, problems resulting from mining activities;

(B) implement innovative methods or practices for controlling nonpoint sources of pollution, including regulatory programs where the Administrator deems appropriate;

(C) control interstate nonpoint source pollution problems; or

(D) carry out ground water quality protection activities which the Administrator determines are part of a comprehensive nonpoint source pollution control program, including research, planning, ground water assessments, demonstration programs, enforcement, technical assistance, education, and training to protect ground water quality from nonpoint sources of pollution.

(6) Availability for Obligation. — The funds granted to each State pursuant to this subsection in a fiscal year shall remain available for obligation by such State for the fiscal year for which appropriated. The amount of any such funds not obligated by the end of such fiscal year shall be available to the Administrator for granting to other States under this subsection in the next fiscal year.

(7) Limitation on Use of Funds. — States may use funds from grants made pursuant to this section for financial assistance to persons only to the extent that such assistance is related to the costs of demonstration projects.

(8) Satisfactory Progress. — No grant may be made under this subsection in any fiscal year to a State which in the preceding fiscal year received a grant under this subsection unless the Administrator determines that such State made satisfactory progress in such preceding fiscal year in meeting the schedule specified by such State under subsection (b)(2).

(9) Maintenance of Effort. — No grant may be made to a State under this subsection in any fiscal year unless such State enters into such agreements with the Admin-

istrator as the Administrator may require to ensure that such State will maintain its aggregate expenditures from all other sources for programs for controlling pollution added to the navigable waters in such State from nonpoint sources and improving the quality of such waters at or above the average level of such expenditures in its two fiscal years preceding the date of enactment of this subsection.

(10) Request for Information. — The Administrator may request such information, data, and reports as he considers necessary to make the determination of continuing eligibility for grants under this section.

(11) Reporting and Other Requirements. — Each State shall report to the Administrator on an annual basis concerning (A) its progress in meeting the schedule of milestones submitted pursuant to subsection (b)(2)(C) of this section, and (B) to the extent that appropriate information is available, reductions in nonpoint source pollutant loading and improvements in water quality for those navigable waters or watersheds within the State which were identified pursuant to subsection (a)(1)(A) of this section resulting from implementation of the management program.

(12) Limitation on Administrative Costs. — For purposes of this subsection, administrative costs in the form of salaries, overhead, or indirect costs for services provided and charged against activities and programs carried out with a grant under this subsection shall not exceed in any fiscal year 10 percent of the amount of the grant in such year, except that costs of implementing enforcement and regulatory activities, education, training, technical assistance, demonstration projects, and technology transfer programs shall not be subject to this limitation.

(i) Grants for Protecting Groundwater Quality.—

(1) Eligible Applicants and Activities. — Upon application of a State for which a report submitted under subsection (a) and a plan submitted under subsection (b) is approved under this section, the Administrator shall make grants under this subsection to such State for the purpose of assisting such State in carrying out groundwater quality protection activities which the Administrator determines will advance the State toward implementation of a comprehensive nonpoint source pollution control program. Such activities shall include, but not be limited to, research planning, groundwater assessments, demonstration programs, enforcement, technical assistance, education and training to protect the quality of groundwater and to prevent contamination of groundwater from nonpoint sources of pollution.

(2) Applications. — An application for a grant under this subsection shall be in such form and shall contain such information as the Administrator may require.

(3) Federal Share; Maximum Amount. — The Federal share of the cost of assisting a State in carrying out groundwater protection activities in any fiscal year under this subsection shall be 50 percent of the costs incurred by the State in carrying out such activities, except that the maximum amount of Federal assistance which any State may receive under this subsection in any fiscal year shall not exceed $150,000.

(4) Report. — The Administrator shall include in each report transmitted under subsection (m) a report on the activities and programs implemented under this subsection during the preceding fiscal year.

(j) Authorization of Appropriations. — There is authorized to be appropriated to carry out subsections (h) and (i) not to exceed $70,000,000 for fiscal year 1988, $100,000,000 per fiscal year for each of fiscal years 1989 and 1990, and $130,000,000 for fiscal year 1991; except that for each of such fiscal years not to exceed $7,500,000 may be made available to carry out subsection (i). Sums appropriated pursuant to this subsection shall remain available until expended.

(k) Consistency of Other Programs and Projects With Management Programs. — The Administrator shall transmit to the Office of Management and Budget and the appropriate Federal departments and agencies a list of those assistance programs and development projects identified by each State under subsection (b)(2)(F) for which individual assistance applications and projects will be reviewed pursuant to the procedures set forth in Executive Order 12372 as in effect on September 17, 1983. Beginning not later than sixty days after receiving notification by the Administrator, each Federal department and agency shall modify existing regulations to allow States to review individual development projects and assistance applications under the identified Federal assistance programs and shall accommodate, according to the requirements and definitions of Executive Order 12372, as in effect on September 17, 1983, the concerns of the State regarding the consistency of such applications or projects with the State nonpoint source pollution management program.

(l) Collection of Information. — The Administrator shall collect and make available, through publications and other appropriate means, information pertaining to management practices and implementation methods, including, but not limited to, (1) information concerning the costs and relative efficiencies of best management practices for reducing nonpoint source pollution; and (2) available data concerning the relationship between water quality and implementation of various management practices to control nonpoint sources of pollution.

(m) Reports of Administrator.—

(1) Annual Reports. — Not later than January 1, 1988, and each January 1 thereafter, the Administrator shall transmit to the Committee on Public Works and Transportation of the House of Representatives and the Committee on Environment and Public Works of the Senate, a report for the preceding fiscal year on the activities and programs implemented under this section and the progress made in reducing pollution in the

navigable waters resulting from nonpoint sources and improving the quality of such waters.

(2) Final Report. — Not later than January 1, 1990, the Administrator shall transmit to Congress a final report on the activities carried out under this section. Such report, at a minimum, shall—

(A) describe the management programs being implemented by the States by types and amount of affected navigable waters, categories and subcategories of nonpoint sources, and types of best management practices being implemented;

(B) describe the experiences of the States in adhering to schedules and implementing best management practices;

(C) describe the amount and purpose of grants awarded pursuant to subsections (h) and (i) of this section;

(D) identify, to the extent that information is available, the progress made in reducing pollutant loads and improving water quality in the navigable waters;

(E) indicate what further actions need to be taken to attain and maintain in those navigable waters (i) applicable water quality standards, and (ii) the goals and requirements of this Act;

(F) include recommendations of the Administrator concerning future programs (including enforcement programs) for controlling pollution from nonpoint sources; and

(G) identify the activities and programs of departments, agencies, and instrumentalities of the United States which are inconsistent with the management programs submitted by the States and recommend modifications so that such activities and programs are consistent with and assist the States in implementation of such management programs.

(n) Set Aside for Administrative Personnel. — Not less than 5 percent of the funds appropriated pursuant to subsection (j) for any fiscal year shall be available to the Administrator to maintain personnel levels at the Environmental Protection Agency at levels which are adequate to carry out this section in such year.

Sec. 320. National Estuary Program.

[Sec. 320 added by PL 100-4]

(a) Management Conference.—

(1) Nomination of Estuaries. — The Governor of any State may nominate to the Administrator an estuary lying in whole or in part within the State as an estuary of national significance and request a management conference to develop a comprehensive management plan for the estuary. The nomination shall document the need for the conference, the likelihood of success, and information relating to the factors in paragraph (2).

(2) Convening of Conference.—

(A) In General. — In any case where the Administrator determines, on his own initiative or upon nomination of a State under paragraph (1), that the attainment or maintenance of that water quality in an estuary which assures protection of public water supplies and the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife, and allows recreational activities, in and on the water, requires the control of point and nonpoint sources of pollution to supplement existing controls of pollution in more than one State, the Administrator shall select such estuary and convene a management conference.

(B) Priority consideration — The Administrator shall give priority consideration under this section to Long Island Sound, New York and Connecticut; Narragansett Bay, Rhode Island; Buzzards Bay, Massachusetts; Puget Sound, Washington; New York-New Jersey Harbor, New York and New Jersey; Delaware Bay, Delaware and New Jersey; Delaware Inland Bays, Delaware; Albemarle Sound, North Carolina; Sarasota Bay, Florida; San Francisco Bay, California; and Galveston Bay, Texas.

(3) Boundary Dispute Exception. — In any case in which a boundary between two States passes through an estuary and such boundary is disputed and is the subject of an action in any court, the Administrator shall not convene a management conference with respect to such estuary before a final adjudication has been made of such dispute.

(b) Purposes of Conference. — The purposes of any management conference convened with respect to an estuary under this subsection shall be to—

(1) assess trends in water quality, natural resources, and uses of the estuary;

(2) collect, characterize, and assess data on toxics, nutrients, and natural resources within the estuarine zone to identify the causes of environmental problems;

(3) develop the relationship between the inplace loads and point and nonpoint loadings of pollutants to the estuarine zone and the potential uses of the zone, water quality, and natural resources;

(4) develop a comprehensive conservation and management plan that recommends priority corrective actions and compliance schedules addressing point and nonpoint sources of pollution to restore and maintain the chemical, physical, and biological integrity of the estuary, including restoration and maintenance of water quality, a balanced indigenous population of shellfish, fish and wildlife, and recreational activities in the estuary, and assure that the designated uses of the estuary are protected;

(5) develop plans for the coordinated implementation of the plan by the States as well as Federal and local agencies participating in the conference;

(6) monitor the effectiveness of actions taken pursuant to the plan; and

(7) review all Federal financial assistance programs and Federal development projects in accordance with the requirements of Executive Order 12372, as in effect on September 17, 1983, to determine whether such assistance program or project would be consistent with and further the purposes and objectives of the plan prepared under this section.

For purposes of paragraph (7), such programs and projects shall not be limited to the assistance programs and development projects subject to Executive Order 12372, but may include any programs listed in the most recent Catalog of Federal Domestic Assistance which may have an effect on the purposes and objectives of the plan developed under this section.

(c) Members of Conference. — The members of a management conference convened under this section shall include, at a minimum, the Administrator and representatives of—

(1) each State and foreign nation located in whole or in part in the estuarine zone of the estuary for which the conference is convened;

(2) international, interstate, or regional agencies or entities having jurisdiction over all or a significant part of the estuary;

(3) each interested Federal agency, as determined appropriate by the Administrator;

(4) local governments having jurisdiction over any land or water within the estuarine zone, as determined appropriate by the Administrator; and

(5) affected industries, public and private educational institutions, and the general public, as determined appropriate by the Administrator.

(d) Utilization of Existing Data. — In developing a conservation and management plan under this section, the management conference shall survey and utilize existing reports, data, and studies relating to the estuary that have been developed by or made available to Federal, interstate, State, and local agencies.

(e) Period of Conference. — A management conference convened under this section shall be convened for a period not to exceed 5 years. Such conference may be extended by the Administrator, and if terminated after the initial period, may be reconvened by the Administrator at any time thereafter, as may be necessary to meet the requirements of this section.

(f) Approval and Implementation of Plans.—

(1) Approval. — Not later than 120 days after the completion of a conservation and management plan and after providing for public review and comment, the Administrator shall approve such plan if the plan meets the requirements of this section and the affected Governor or Governors concur.

(2) Implementation. — Upon approval of a conservation and management plan under this section, such plan shall be implemented. Funds authorized to be appropriated under titles II and VI and section 319 of this Act may be used in accordance with the applicable requirements of this Act to assist States with the implementation of such plan.

(g) Grants.—

(1) Recipients. — The Administrator is authorized to make grants to State, interstate, and regional water pollution control agencies and entities, State coastal zone management agencies, interstate agencies, other public or nonprofit private agencies, institutions, organizations, and individuals.

(2) Purposes. — Grants under this subsection shall be made to pay for assisting research, surveys, studies, and modeling and other technical work necessary for the development of a conservation and management plan under this section.

(3) Federal Share. — The amount of grants to any person (including a State, interstate, or regional agency or entity) under this subsection for a fiscal year shall not exceed 75 percent of the costs of such research, survey, studies, and work and shall be made on condition that the non-Federal share of such costs are provided from non-Federal sources.

(h) Grant Reporting. — Any person (including a State, interstate, or regional agency or entity) that receives a grant under subsection (g) shall report to the Administrator not later than 18 months after receipt of such grant and biennially thereafter on the progress being made under this section.

(i) Authorization of Appropriations. — There are authorized to be appropriated to the Administrator not to exceed $12,000,000 per fiscal year for each of fiscal years 1987, 1988, 1989, 1990, and 1991 for—

(1) expenses related to the administration of management conferences under this section, not to exceed 10 percent of the amount appropriated under this subsection;

(2) making grants under subsection (g); and

(3) monitoring the implementation of a conservation and management plan by the management conference or by the Administrator, in any case in which the conference has been terminated.

The Administrator shall provide up to $5,000,000 per fiscal year of the sums authorized to be appropriated under this subsection to the Administrator of the National Oceanic and Atmospheric Administration to carry out subsection (j).

(j) Research. —

(1) Programs. — In order to determine the need to convene a management conference under this section or at the request of such a management conference, the Administrator shall coordinate and implement through the National Marine Pollution Program Office and the National Marine Fisheries Service of the National Oceanic and Atmospheric Administration, as appropriate, for one or more estuarine zones—

(A) a long-term program of trend assessment monitor-

ing measuring variations in pollutant concentrations, marine ecology, and other physical or biological environmental parameters which may affect estuarine zones, to provide the Administrator the capacity to determine the potential and actual effects of alternative management strategies and measures;

(B) a program of ecosystem assessment assisting in the development of (i) baseline studies which determine the state of estuarine zones and the effects of natural and anthropogenic changes, and (ii) predictive models capable of translating information on specific discharges or general pollutant loadings within estuarine zones into a set of probable effects on such zones;

(C) a comprehensive water quality sampling program for the continuous monitoring of nutrients, chlorine acid precipitation dissolved oxygen, and potentially toxic pollutants (including organic chemicals and metals) in estuarine zones, after consultation with interested State, local, interstate, or international agencies and review and analysis of all environmental sampling data presently collected from estuarine zones; and

(D) a program of research to identify the movements of nutrients, sediments and pollutants through estuarine zones and the impact of nutrients, sediments, and pollutants on water quality, the ecosystem, and designated or potential uses of the estuarine zones.

(2) Reports. — The Administrator, in cooperation with the Administrator of the National Oceanic and Atmospheric Administration, shall submit to the Congress no less often than biennially a comprehensive report on the activities authorized under this subsection including—

(A) a listing of priority monitoring and research needs;

(B) an assessment of the state and health of the Nation's estuarine zones, to the extent evaluated under this subsection;

(C) a discussion of pollution problems and trends in pollutant concentrations with a direct or indirect effect on water quality, the ecosystem, and designated or potential uses of each estuarine zone, to the extent evaluated under this subsection; and

(D) an evaluation of pollution abatement activities and management measures so far implemented to determine the degree of improvement toward the objectives expressed in subsection (b)(2) of this section.

(k) Definitions. — For purposes of this section, the terms 'estuary' and 'estuarine zone' have the meanings such terms have in section 104(n)(4) of this Act, except that the term 'estuarine zone' shall also include associated aquatic ecosystems and those portions of tributaries draining into the estuary up to the historic height of migration of anadromous fish or the historic head of tidal influence, whichever is higher.

TITLE IV—PERMITS AND LICENSES

CERTIFICATION

Sec. 401. (a) (1) Any applicant for a Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification from the State in which the discharge originates or will originate, or, if appropriate, from the interstate water pollution control agency having jurisdiction over the navigable waters at the point where the discharge originates or will originate, that any such discharge will comply with the applicable provisions of sections 301, 302, 303, 306, and 307 of this Act. In the case of any such activity for which there is not an applicable effluent limitation or other limitation under sections 301 (b) and 302, and there is not an applicable standard under sections 306 and 307, the State shall so certify, except that any such certification shall not be deemed to satisfy section 511(c) of this Act. Such State or interstate agency shall establish procedures for public notice in the case of all applications for certification by it and, to the extent it deems appropriate, procedures for public hearings in connection with specific applications. In any case where a State or interstate agency has no authority to give such a certification, such certification shall be from the Administrator. If the State, interstate agency, or Administrator, as the case may be, fails or refuses to act on a request for certification, within a reasonable period of time (which shall not exceed one year) after receipt of such request, the certification requirements of this subsection shall be waived with respect to such Federal application. No license or permit shall be granted until the certification required by this section has been obtained or has been waived as provided in the preceding sentence. No license or permit shall be granted if certification has been denied by the State, interstate agency, or the Administrator, as the case may be.

(2) Upon receipt of such application and certification the licensing or permitting agency shall immediately notify the Administrator of such application and certification. Whenever such a discharge may affect, as determined by the Administrator, the quality of the waters of any other State, the Administrator within thirty days of the date of notice of application for such Federal license or permit shall so notify such other State, the licensing or permitting agency, and the applicant. If, within sixty days after receipt of such notification, such other State determines that such discharge will affect the quality of its waters so as to violate any water quality requirement in such State, and within such sixty-day period notifies the Administrator and the licensing or permitting agency in writing of its objection to the issuance of such

license or permit and requests a public hearing on such objection, the licensing or permitting agency shall hold such a hearing. The Administrator shall at such hearing submit his evaluation and recommendations with respect to any such objection to the licensing or permitting agency. Such agency, based upon the recommendations of such State, the Administrator, and upon any additional evidence, if any, presented to the agency at the hearing, shall condition such license or permit in such manner as may be necessary to insure compliance with applicable water quality requirements. If the imposition of conditions cannot insure such compliance such agency shall not issue such license or permit.

(3) The certification obtained pursuant to paragraph (1) of this subsection with respect to the construction of any facility shall fulfill the requirements of this subsection with respect to certification in connection with any other Federal license or permit required for the operation of such facility unless, after notice to the certifying State, agency, or Administrator, as the case may be, which shall be given by the Federal agency to whom application is made for such operating license or permit, the State, or if appropriate, the interstate agency or the Administrator, notifies such agency within sixty days after receipt of such notice that there is no longer reasonable assurance that there will be compliance with the applicable provisions of sections 301, 302, 303, 306, and 307 of this Act because of changes since the construction license or permit certification was issued in (A) the construction or operation of the facility, (B) the characteristics of the waters into which such discharge is made, (C) the water quality criteria applicable to such waters or (D) applicable effluent limitations or other requirements. This paragraph shall be inapplicable in any case where the applicant for such operating license or permit has failed to provide the certifying State, or, if appropriate, the interstate agency or the Administrator, with notice of any proposed changes in the construction or operation of the facility with respect to which a construction license or permit has been granted, which changes may result in violation of section 301, 302, 303, 306, or 307 of this Act.

(4) Prior to the initial operation of any federally licensed or permitted facility or activity which may result in any discharge into the navigable waters and with respect to which a certification has been obtained pursuant to paragraph (1) of this subsection, which facility or activity is not subject to a Federal operating license or permit, the licensee or permittee shall provide an opportunity for such certifying State, or, if appropriate, the interstate agency or the Administrator to review the manner in which the facility or activity shall be operated or conducted for the purposes of assuring that applicable effluent limitations or other limitations or other applicable water quality requirements will not be violated. Upon notification by the certifying State, or if appropriate, the interstate agency or the Administrator that the operation of any such federally licensed or permitted facility or activity will violate applicable effluent limitations or other limitations or other water quality requirements such Federal agency may, after public hearing, suspend such license or permit. If such license or permit is suspended, it shall remain suspended until notification is received from the certifying State, agency, or Administrator, as the case may be, that there is reasonable assurance that such facility or activity will not violate the applicable provisions of section 301, 302, 303, 306, or 307 of this Act.

(5) Any Federal license or permit with respect to which a certification has been obtained under paragraph (1) of this subsection may be suspended or revoked by the Federal agency issuing such license or permit upon the entering of a judgment under this Act that such facility or activity has been operated in violation of the applicable provisions of section 301, 302, 303, 306, or 307 of this Act.

(6) Except with respect to a permit issued under section 402 of this Act, in any case where actual construction of a facility has been lawfully commenced prior to April 3, 1970, no certification shall be required under this subsection for a license or permit issued after April 3, 1970, to operate such facility, except that any such license or permit issued without certification shall terminate April 3, 1973, unless prior to such termination date the person having such license or permit submits to the Federal agency which issued such license or permit a certification and otherwise meets the requirements of this section.

(b) Nothing in this section shall be construed to limit the authority of any department or agency pursuant to any other provision of law to require compliance with any applicable water quality requirements. The Administrator shall, upon the request of any Federal department or agency, or State or interstate agency, or applicant, provide, for the purpose of this section, any relevant information on applicable effluent limitations, or other limitations, standards, regulations or requirements, or water quality criteria, and shall, when requested by any such department or agency or State or interstate agency, or applicant, comment on any methods to comply with such limitations, standards, regulations, requirements, or criteria.

(c) In order to implement the provisions of this section, the Secretary of the Army, acting through the Chief of Engineers, is authorized, if he deems it to be in the public interest, to permit the use of spoil disposal areas under his jurisdiction by Federal licensees or permittees, and to make an appropriate charge for such use. Moneys received from such licensees or permittees shall be deposited in the Treasury as miscellaneous receipts.

(d) Any certification provided under this section shall set forth any effluent limitations and other limitations, and monitoring requirements necessary to assure that any applicant for a Federal license or permit will comply with any applicable effluent limitations and other limitations, under section 301 or 302 of this Act, standard of performance under section 306 of this Act, or prohibition, effluent standard, or pretreatment standard under section 307 of this Act, and with any other appropriate requirement of State law set forth in such certification, and shall become a condition on any Federal license or permit subject to the provisions of this section.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Sec. 402. (a) (1) Except as provided in sections 318 and 404 of this Act, the Administrator may, after opportunity for public hearing, issue a permit for the discharge of any pollutant, or combination of pollutants, notwithstanding section 301 (a), upon condition that such discharge will meet either (A) all applicable requirements under sections 301, 302, 306, 307, 308 and 403 of this Act, or (B) prior to the taking of necessary implementing actions relating to all such requirements, such conditions as the Administrator determines are necessary to carry out the provisions of this Act.

[Sec. 402(a)(1)(A) and (B) designated by PL 100-4]

[*Editor's note*: Section 306(c) of PL 100-4 provides:

"(c) Phosphate Fertilizer Effluent Limitation. —

(1) Issuance of Permit. — As soon as possible after the date of the enactment of this Act, but not later than 180 days after such date of enactment, the Administrator shall issue permits under section 402(a)(1)(B) of the Federal Water Pollution Control Act with respect to facilities —

(A) which were under construction on or before April 8, 1974, and

(B) for which the Administrator is proposing to revise the applicability of the effluent limitation established under section 301(b) of such Act for phosphate subcategory of the fertilizer manufacturing point source category to exclude such facilities.

(2) Limitations on Statutory Construction. — Nothing in this section shall be construed —

(A) to require the Administrator to permit the discharge of gypsum or gypsum waste into the navigable waters,

(B) to affect the procedures and standards applicable to the Administrator in issuing permits under section 402(a)(1)(B) of the Federal Water Pollution Control Act, and

(C) to affect the authority of any State to deny or condition certification under section 401 of such Act with respect to the issuance of permits under section 402(a)(1)(B) of such Act."]

(2) The Administrator shall prescribe conditions for such permits to assure compliance with the requirements of paragraph (1) of this subsection, including conditions on data and information collection, reporting, and such other requirements as he deems appropriate.

(3) The permit program of the Administrator under paragraph (1) of this subsection, and permits issued thereunder, shall be subject to the same terms, conditions, and requirements as apply to a State permit program and permits issued thereunder under subsection (b) of this section.

(4) All permits for discharges into the navigable waters issued pursuant to section 13 of the Act of March 3, 1899, shall be deemed to be permits issued under this title, and permits issued under this title shall be deemed to be permits issued under section 13 of the Act of March 3, 1899, and shall continue in force and effect for their term unless revoked, modified, or suspended in accordance with the provisions of this Act.

(5) No permit for a discharge into the navigable waters shall be issued under section 13 of the Act of March 3, 1899, after the date of enactment of this title. Each application for a permit under section 13 of the Act of March 3, 1899, pending on the date of enactment of this Act shall be deemed to be an application for a permit under this section. The Administrator shall authorize a State, which he determines has the capability of administering a permit program which will carry out the objective of this Act, to issue permits for discharges into the navigable waters within the jurisdiction of such State. The Administrator may exercise the authority granted him by the preceding sentence only during the period which begins on the date of enactment of this Act and ends either on the ninetieth day after the date of the first promulgation of guidelines required by section 304 (h) (2) of this Act, or the date of approval by the Administrator of a permit program for such State under subsection (b) of this section, whichever date first occurs, and no such authorization to a State shall extend beyond the last day of such period. Each such permit shall be subject to such conditions as the Administrator determines are necessary to carry out the provisions of this Act. No such permit shall issue if the Administrator objects to such issuance.

(b) At any time after the promulgation of the guidelines required by subsection (h) (2) of section 304 of this Act, the Governor of each State desiring to administer its own permit program for discharges into navigable waters within its jurisdiction may submit to the Administrator a full and complete description of the program it proposes to establish and administer under State law or under an interstate compact. In addition, such State

shall submit a statement from the attorney general (or the attorney for those State water pollution control agencies which have independent legal counsel), or from the chief legal officer in the case of an interstate agency, that the laws of such State, or the interstate compact, as the case may be, provide adequate authority to carry out the described program. The Administrator shall approve each such submitted program unless he determines that adequate authority does not exist:

(1) To issue permits which—

(A) apply, and insure compliance with, any applicable requirements of sections 301, 302, 306, 307, and 403;

(B) are for fixed terms not exceeding five years; and

(C) can be terminated or modified for cause including, but not limited to, the following:

(i) violation of any condition of the permit;

(ii) obtaining a permit by misrepresentation, or failure to disclose fully all relevant facts;

(iii) change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge;

(D) control the disposal of pollutants into wells;

(2) (A) To issue permits which apply, and insure compliance with, all applicable requirements of section 308 of this Act, or

(B) To inspect, monitor, enter, and require reports to at least the same extent as required in section 308 of this Act;

(3) To insure that the public, and any other State the waters of which may be affected, receive notice of each application for a permit and to provide an opportunity for public hearing before a ruling on each such application;

(4) To insure that the Administrator receives notice of each application (including a copy thereof) for a permit;

(5) To insure that any State (other than the permitting State), whose waters may be affected by the issuance of a permit may submit written recommendations to the permitting State (and the Administrator) with respect to any permit application and, if any part of such written recommendations are not accepted by the permitting State, that the permitting State will notify such affected State (and the Administrator) in writing of its failure to so accept such recommendations together with its reasons for so doing;

(6) To insure that no permit will be issued if, in the judgment of the Secretary of the Army acting through the Chief of Engineers, after consultation with the Secretary of the department in which the Coast Guard is operating, anchorage and navigation of any of the navigable waters would be substantially impaired thereby;

(7) To abate violations of the permit or the permit program, including civil and criminal penalties and other ways and means of enforcement.

(8) To insure that any permit for a discharge from a publicly owned treatment works includes conditions to require the identification in terms of character and volume of pollutants of any significant source introducing pollutants subject to pretreatment standards under section 307 (b) of this Act into such works and a program to assure compliance with such pretreatment standards by each such source, in addition to adequate notice to the permitting agency of (A) new introductions into such works of pollutants from any source which would be a new source as defined in section 306 if such source were discharging pollutants, (B) new introductions of pollutants into such works from a source which would be subject to section 301 if it were discharging such pollutants, or (C) a substantial change in volume or character of pollutants being introduced into such works by a source introducing pollutants into such works at the time of issuance of the permit. Such notice shall include information on the quality and quantity of effluent to be introduced into such treatment works and any anticipated impact of such change in the quantity or quality of effluent to be discharged from such publicly owned treatment works; and

(9) To insure that any industrial user of any publicly owned treatment works will comply with sections 204 (b), 307, and 308.

(c) (1) Not later than ninety days after the date on which a State has submitted a program (or revision thereof) pursuant to subsection (b) of this section, the Administrator shall suspend the issuance of permits under subsection (a) of this section as to those discharges subject to such program unless he determines that the State permit program does not meet the requirements of subsection (b) of this section or does not conform to the guidelines issued under section 304(i)(2) of this Act. If the Administrator so determines, he shall notify the State of any revisions or modifications necessary to conform to such requirements or guidelines.

[Sec. 402(c)(1) amended by PL 100-4]

(2) Any State permit program under this section shall at all times be in accordance with this section and guidelines promulgated pursuant to section 304 (h) (2) of this Act.

(3) Whenever the Administrator determines after public hearing that a State is not administering a program approved under this section in accordance with requirements of this section, he shall so notify the State and, if appropriate corrective action is not taken within a reasonable time, not to exceed ninety days, the Administrator shall withdraw approval of such program. The Administrator shall not withdraw approval of any such program unless he shall first have notified the State, and made public, in writing, the reasons for such withdrawal.

(4) Limitations on Partial Permit Program Returns

and Withdrawals. — A State may return to the Administrator administration, and the Administrator may withdraw under paragraph (3) of this subsection approval, of—

(A) a State partial permit program approved under subsection (n)(3) only if the entire permit program being administered by the State department or agency at the time is returned or withdrawn; and

(B) a State partial permit program approved under subsection (n)(4) only if an entire phased component of the permit program being administered by the State at the time is returned or withdrawn.

[Sec. 402(c)(4) added by PL 100-4]

(d) (1) Each State shall transmit to the Administrator a copy of each permit application received by such State and provide notice to the Administrator of every action related to the consideration of such permit application, including each permit proposed to be issued by such State.

(2) No permit shall issue (A) if the Administrator within ninety days of the date of his notification under subsection (b) (5) of this section objects in writing to the issuance of such permit, or (B) if the Administrator within ninety days of the date of transmittal of the proposed permit by the State objects in writing to the issuance of such permit as being outside the guidelines and requirements of this Act. Whenever the Administrator objects to the issuance of a permit under this paragraph such written objection shall contain a statement of the reasons for such objection and the effluent limitations and conditions which such permit would include if it were issued by the Administrator.

(3) The Administrator may, as to any permit application, waive paragraph (2) of this subsection.

(4) In any case where, after the date of enactment of this paragraph, the Administrator, pursuant to paragraph (2) of this subsection, objects to the issuance of a permit, or request of the State, a public hearing shall be held by the Administrator on such objection. If the State does not resubmit such permit revised to meet such objection within 30 days after completion of the hearing, or, if no hearing is requested within 90 days after the date of such objection, the Administrator may issue the permit pursuant to subsection (a) of this section for such source in accordance with the guidelines and requirements of this Act.

(e) In accordance with guidelines promulgated pursuant to subsection (h) (2) of section 304 of this Act, the Administrator is authorized to waive the requirements of subsection (d) of this section at the time he approves a program pursuant to subsection (b) of this section for any category (including any class, type, or size within such category) of point sources within the State submitting such program.

(f) The Administrator shall promulgate regulations establishing categories of point sources which he determines shall not be subject to the requirements of subsection (d) of this section in any State with a program approved pursuant to subsection (b) of this section. The Administrator may distinguish among classes, types, and sizes within any category of point sources.

(g) Any permit issued under this section for the discharge of pollutants into the navigable waters from a vessel or other floating craft shall be subject to any applicable regulations promulgated by the Secretary of the Department in which the Coast Guard is operating, establishing specifications for safe transportation, handling, carriage, storage, and stowage of pollutants.

(h) In the event any condition of a permit for discharges from a treatment works (as defined in section 212 of this Act) which is publicly owned is violated, a State with a program approved under subsection (b) of this section or the Administrator, where no State program is approved or where the Administrator determines pursuant to section 309(a) of this Act that a State with an approved program has not commenced appropriate enforcement action with respect to such permit, may proceed in a court of competent jurisdiction to restrict or prohibit the introduction of any pollutant into such treatment works by a source not utilizing such treatment works prior to the finding that such condition was violated.

(i) Nothing in this section shall be construed to limit the authority of the Administrator to take action pursuant to section 309 of this Act.

(j) A copy of each permit application and each permit issued under this section shall be available to the public. Such permit application or permit, or portion thereof, shall further be available on request for the purpose of reproduction.

(k) Compliance with a permit issued pursuant to this section shall be deemed compliance, for purposes of sections 309 and 505, with sections 301, 302, 306, 307, and 403, except any standard imposed under section 307 for a toxic pollutant injurious to human health. Until December 31, 1974, in any case where a permit for discharge has been applied for pursuant to this section, but final administrative disposition of such application has not been made, such discharge shall not be a violation of (1) section 301, 306, and 402, of this Act, or (2) section 13 of the Act of March 3, 1899, unless the Administrator or other plaintiff proves that final administrative disposition of such application has not been made because of the failure of the applicant to furnish information reasonably required or requested in order to process the application. For the 180-day period beginning on the date of enactment of the Federal Water Pollution Control Act Amendments of 1972, in the case of any point source discharging any pollutant or combination of pollutants immediately prior to such date of enactment which source is not subject to section 13 of the Act of March 3, 1899, the discharge by such source shall not be a violation of this Act if such a

source applies for a permit for discharge pursuant to this section within such 180-day period.

(l) Limitation on Permit Requirement.—

(1) Agricultural Return Flows. — The Administrator shall not require a permit under this section, for discharge composed entirely of return flows from irrigated agriculture, nor shall the Administrator directly or indirectly, require any State to require such a permit.

[402(l)(1) designated by PL 100-4]

[*Editor's note:* Sec. 54(c)(2) of the Clean Water Act of 1977 says:

"Any State permit program approved under section 402 of the Federal Water Pollution Control Act before the date of enactment of the Clean Water Act of 1977, which requires modification to conform to the amendment made by paragraph (1) of this subsection, shall not be required to be modified before the end of the one year period which begins on the date of enactment of the Clean Water Act of 1977 unless in order to make the required modification a State must amend or enact a law in which case such modification shall not be required for such State before the end of the two year period which begins on such date of enactment."]

(2) Stormwater Runoff From Oil, Gas, and Mining Operations. — The Administrator shall not require a permit under this section, nor shall the Administrator directly or indirectly require any State to require a permit, for discharges of stormwater runoff from mining operations or oil and gas exploration, production, processing, or treatment operations or transmission facilities, composed entirely of flows which are from conveyances or systems of conveyances (including but not limited to pipes, conduits, ditches, and channels) used for collecting and conveying precipitation runoff and which are not contaminated by contact with, or do not come into contact with, any overburden, raw material, intermediate products, finished product, byproduct, or waste products located on the site of such operations.

[Sec. 402(l)(2) added by PL 100-4]

(m) Additional Pretreatment of Conventional Pollutants Not Required. — To the extent a treatment works (as defined in section 212 of this Act) which is publicly owned is not meeting the requirements of a permit issued under this section for such treatment works as a result of inadequate design or operation of such treatment works, the Administrator, in issuing a permit under this section, shall not require pretreatment by a person introducing conventional pollutants identified pursuant to section 304(a)(4) of this Act into such treatment works other than pretreatment required to assure compliance with pretreatment standards under subsection (b)(8) of this section and section 307(b)(1) of this Act. Nothing in this subsection shall affect the Administrator's authority under sections 307 and 309 of this Act, affect State and local authority under sections 307(b)(4) and 510 of this Act, relieve such treatment works of its obligations to meet requirements established under this Act, or otherwise preclude such works from pursuing whatever feasible options are available to meet its responsibility to comply with its permit under this section.

[Sec. 402(m)—(p) added by PL 100-4]

(n) Partial Permit Program.—

(1) State Submission. — The Governor of a State may submit under subsection (b) of this section a permit program for a portion of the discharges into the navigable waters in such State.

(2) Minimum Coverage. — A partial permit program under this subsection shall cover, at a minimum, administration of a major category of the discharges into the navigable waters of the State or a major component of the permit program required by subsection (b).

(3) Approval of Major Category Partial Permit Programs. — The Administrator may approve a partial permit program covering administration of a major category of discharges under this subsection if—

(A) such program represents a complete permit program and covers all of the discharges under the jurisdiction of a department or agency of the State; and

(B) the Administrator determines that the partial program represents a significant and identifiable part of the State program required by subsection (b).

(4) Approval of Major Component Partial Permit Programs. — The Administrator may approve under this subsection a partial and phased permit program covering administration of a major component (including discharge categories) of a State permit program required by subsection (b) if—

(A) the Administrator determines that the partial program represents a significant and identifiable part of the State program required by subsection (b); and

(B) the State submits, and the Administrator approves, a plan for the State to assume administration by phases of the remainder of the State program required by subsection (b) by a specified date not more than 5 years after submission of the partial program under this subsection and agrees to make all reasonable efforts to assume such administration by such date.

(o) Anti-Backsliding.—

(1) General Prohibition. — In the case of effluent limitations established on the basis of subsection (a)(1)(B) of this section, a permit may not be renewed, reissued, or modified on the basis of effluent guidelines promulgated under section 304(b) subsequent to the original issuance of such permit, to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit. In the case of effluent limitations established on the basis of section 301(b)(1)(C) or section 303 (d) or (e), a permit may not be renewed, reissued, or modified to contain effluent

limitations which are less stringent than the comparable effluent limitations in the previous permit except in compliance with section 303(d)(4).

(2) Exceptions. — A permit with respect to which paragraph (1) applies may be renewed, reissued, or modified to contain a less stringent effluent limitation applicable to a pollutant if—

(A) material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of a less stringent effluent limitation;

(B)(i) information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation at the time of permit issuance; or

(ii) the Administrator determines that technical mistakes or mistaken interpretations of law were made in issuing the permit under subsection (a)(1)(B);

(C) a less stringent effluent limitation is necessary because of events over which the permittee has no control and for which there is no reasonably available remedy;

(D) the permittee has received a permit modification under section 301(c), 301(g), 301(h), 301(i), 301(k), 301(n), or 316(a); or

(E) the permittee has installed the treatment facilities required to meet the effluent limitations in the previous permit and has properly operated and maintained the facilities but has nevertheless been unable to achieve the previous effluent limitations, in which case the limitations in the reviewed, reissued, or modified permit may reflect the level of pollutant control actually achieved (but shall not be less stringent than required by effluent guidelines in effect at the time of permit renewal, reissuance, or modification).

Subparagraph (B) shall not apply to any revised waste load allocations or any alternative grounds for translating water quality standards into effluent limitations, except where the cumulative effect of such revised allocations results in a decrease in the amount of pollutants discharged into the concerned waters, and such revised allocations are not the result of a discharger eliminating or substantially reducing its discharge of pollutants due to complying with the requirements of this Act or for reasons otherwise unrelated to water quality.

(3) Limitations. — In no event may a permit with respect to which paragraph (1) applies be renewed, reissued, or modified to contain an effluent limitation which is less stringent than required by effluent guidelines in effect at the time the permit is renewed, reissued, or modified. In no event may such a permit to discharge into waters be renewed, reissued, or modified to contain a less stringent effluent limitation if the implementation of such limitation would result in a violation of a water quality standard under section 303 applicable to such waters.

(p) Municipal and Industrial Stormwater Discharges.—

(1) General Rule. — Prior to October 1, 1992, the Administrator or the State (in the case of a permit program approved under section 402 of this Act) shall not require a permit under this section for discharges composed entirely of stormwater.

(2) Exceptions. — Paragraph (1) shall not apply with respect to the following stormwater discharges:

(A) A discharge with respect to which a permit has been issued under this section before the date of the enactment of this subsection.

(B) A discharge associated with industrial activity.

(C) A discharge from a municipal separate storm sewer system serving a population of 250,000 or more.

(D) A discharge from a municipal separate storm sewer system serving a population of 100,000 or more but less than 250,000.

(E) A discharge for which the Administrator or the State, as the case may be, determines that the stormwater discharge contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the United States.

(3) Permit Requirements.—

(A) Industrial Discharges. — Permits for discharges associated with industrial activity shall meet all applicable provisions of this section and section 301.

(B) Municipal Discharge. — Permits for discharges from municipal storm sewers—

(i) may be issued on a system — or jurisdiction-wide basis;

(ii) shall include a requirement to effectively prohibit non-stormwater discharges into the storm sewers; and

(iii) shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.

(4) Permit Application Requirements.—

(A) Industrial and Large Municipal Discharges.— Not later than 2 years after the date of the enactment of this subsection, the Administrator shall establish regulations setting forth the permit application requirements for stormwater discharges described in paragraphs (2)(B) and (2)(C). Applications for permits for such discharges shall be filed no later than 3 years after such date of enactment. Not later than 4 years after such date of enactment, the Administrator or the State, as the case may be, shall issue or deny each such permit. Any such permit shall provide for compliance as expeditiously as practicable, but in no event later than 3 years after the date of issuance of such permit.

(B) Other Municipal Discharges. — Not later than 4 years after the date of the enactment of this subsection, the Administrator shall establish regulations setting forth the permit application requirements for stormwater discharges described in paragraph (2)(D). Applications for permits for such discharges shall be filed no later than 5 years after such date of enactment. Not later than 6 years after such date of enactment, the Administrator or the State, as the case may be, shall issue or deny each such permit. Any such permit shall provide for compliance as expeditiously as practicable, but in no event later than 3 years after the date of issuance of such permit.

(5) Studies. — The Administrator, in consultation with the States, shall conduct a study for the purposes of—

(A) identifying those stormwater discharges or classes of stormwater discharges for which permits are not required pursuant to paragraphs (1) and (2) of this subsection;

(B) determining, to the maximum extent practicable, the nature and extent of pollutants in such discharges; and

(C) establishing procedures and methods to control stormwater discharges to the extent necessary to mitigate impacts on water quality.

Not later than October 1, 1988, the Administrator shall submit to Congress a report on the results of the study described in subparagraphs (A) and (B). Not later than October 1, 1989, the Administrator shall submit to Congress a report on the results of the study described in subparagraph (C).

(6) Regulations. — Not later than October 1, 1992, the Administrator, in consultation with State and local officials, shall issue regulations (based on the results of the studies conducted under paragraph (5)) which designate stormwater discharges, other than those discharges described in paragraph (2), to be regulated to protect water quality and shall establish a comprehensive program to regulate such designated sources. The program shall, at a minimum, (A) establish priorities, (B) establish requirements for State stormwater management programs, and (C) establish expeditious deadlines. The program may include performance standards, guidelines, guidance, and management practices and treatment requirements, as appropriate.

OCEAN DISCHARGE CRITERIA

Sec. 403. (a) No permit under section 402 of this Act for a discharge into the territorial sea, the waters of the contiguous zone, or the oceans shall be issued, after promulgation of guidelines established under subsection (c) of this section, except in compliance with such guidelines. Prior to the promulgation of such guidelines, a permit may be issued under such section 402 if the Administrator determines it to be in the public interest.

(b) The requirements of subsection (d) of section 402 of this Act may not be waived in the case of permits for discharges into the territorial sea.

(c) (1) The Administrator shall, within one hundred and eighty days after enactment of this Act (and from time to time thereafter), promulgate guidelines for determining the degradation of the waters of the territorial seas, the contiguous zone, and the oceans, which shall include:

(A) the effect of disposal of pollutants on human health or welfare, including but not limited to plankton, fish, shellfish, wildlife, shorelines, and beaches;

(B) the effect of disposal of pollutants on marine life including the transfer, concentration, and dispersal of pollutants or their byproducts through biological, physical, and chemical processes; changes in marine ecosystem diversity, productivity, and stability; and species and community population changes;

(C) the effect of disposal, of pollutants on esthetic, recreation, and economic values;

(D) the persistence and permanence of the effects of disposal of pollutants;

(E) the effect of the disposal at varying rates, of particular volumes and concentrations of pollutants;

(F) other possible locations and methods of disposal or recycling of pollutants including land-based alternatives; and

(G) the effect on alternate uses of the oceans, such as mineral exploitation and scientific study.

(2) In any event where insufficient information exists on any proposed discharge to make a reasonable judgment on any of the guidelines established pursuant to this subsection no permit shall be issued under section 402 of this Act.

PERMITS FOR DREDGED OR FILL MATERIAL

Sec. 404. (a) The Secretary may issue permits, after notice and opportunity for public hearings for the discharge of dredged or fill material into the navigable waters at specified disposal sites. Not later than the fifteenth day after the date an applicant submits all the information required to complete an application for a permit under this subsection, the Secretary shall publish the notice required by this subsection.

(b) Subject to subsection (c) of this section, each such disposal site shall be specified for each such permit by the Secretary (1) through the application of guidelines developed by the Administrator, in conjunction with the Secretary, which guidelines shall be based upon criteria comparable to the criteria applicable to the territorial seas, the contiguous zones, and the ocean under section 403(c), and (2) in any case where such guidelines under clause (1) alone would prohibit the specification of a site, through the application additionally of the eco-

nomic impact of the site on navigation and anchorage.

(c) The Administrator is authorized to prohibit the specification (including the withdrawal of specification) of any defined area as a disposal site, and he is authorized to deny or restrict the use of any defined area for specification (including the withdrawal of specification) as a disposal site, whenever he determines, after notice and opportunity for public hearings, that the discharge of such materials into such area will have an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife, or recreational areas. Before making such determination, the Administrator shall consult with the Secretary. The Administrator shall set forth in writing and make public his findings and his reasons for making any determination under this subsection.

(d) The term "Secretary" as used in this section means the Secretary of the Army, acting through the Chief of Engineers.

(e) (1) In carrying out his functions relating to the discharge of dredged or fill material under this section, the Secretary may, after notice and opportunity for public hearing, issue general permits on a State, regional, or nationwide basis for any category of activities involving discharges of dredged or fill material if the Secretary determines that the activities in such category are similar in nature, will cause only minimal adverse environmental effects when performed separately, and will have only minimal cumulative adverse effect on the environment. Any general permit issued under this subsection shall (A) be based on the guidelines described in subsection (b) (1) of this section, and (B) set forth the requirements and standards which shall apply to any activity authorized by such general permit.

(2) No general permit issued under this subsection shall be for a period of more than five years after the date of its issuance and such general permit may be revoked or modifed by the Secretary if, after opportunity for public hearing, the Secretary determines that the activities authorized by such general permit have an adverse impact on the environment or such activities are more appropriately authorized by individual permits.

(f) (1) Except as provided in paragraph (2) of this subsection, the discharge of dredge or fill material—

(A) from normal farming, silviculture, and ranching activities such as plowing, seeding, cultivating, minor drainage, harvesting for the production of food, fiber, and forest products, or upland soil and water conservation practices;

(B) for the purpose of maintenance, including emergency reconstruction of recently damaged parts, of currently serviceable structures such as dikes, dams, levees, groins, riprap, breakwaters, causeways, and bridge abutments or approaches, and transportation structures;

(C) for the purpose of construction or maintenance of farm or stock ponds or irrigation ditches, or the maintenance of drainage ditches;

(D) for the purpose of construction of temporary sedimentation basins on a construction site which does not include placement of fill material into the navigable waters;

(E) for the purpose of construction or maintenance of farm roads or forest roads, or temporary roads for moving mining equipment, where such roads are constructed and maintained, in accordance with best management practices, to assure that flow and circulation patterns and chemical and biological characteristics of the navigable waters are not impaired, that the reach of the navigable waters is not reduced, and that any adverse effect on the aquatic environment will be otherwise minimized;

(F) resulting from any activity with respect to which a State has an approved program under section 208(b) (4) which meets the requirements of subparagraphs (B) and (C) of such section, is not prohibited by or otherwise subject to regulation under this section or section 301(a) or 402 of this Act (except for effluent standards or prohibitions under section 307).

(2) Any discharge of dredged or fill material into the navigable waters incidental to any activity having as its purpose bringing an area of the navigable waters into a use to which it was not previously subject, where the flow or circulation of navigable waters may be impaired or the reach of such waters be reduced, shall be required to have a permit under this section.

(g) (1) The Governor of any State desiring to administer its own individual and general permit program for the discharge of dredged or fill material into the navigable waters (other than those waters which are presently used, or are susceptible to use in their natural condition or by reasonable improvement as a means to transport interstate or foreign commerce shoreward to their ordinary high water mark, including all waters which are subject to the ebb and flow of the tide shoreward to their mean high water mark, or mean higher high water mark on the west coast, including wetlands adjacent thereto), within its jurisdiction may submit to the Administrator a full and complete description of the program it proposes to establish and administer under State law or under an interstate compact. In addition, such State shall submit a statement from the attorney general (or the attorney for those State agencies which have independent legal counsel), or from the chief legal officer in the case of an interstate agency, that the laws of such State, or the interstate compact, as the case may be, provide adequate authority to carry out the described program.

(2) Not later than the tenth day after the date of the receipt of the program and statement submitted by any State under paragraph (1) of this subsection, the Ad-

ministrator shall provide copies of such program and statement to the Secretary and the Secretary of the Interior, acting through the Director of the United States Fish and Wildlife Service.

(3) Not later than the ninetieth day after the date of the receipt by the Administrator of the program and statement submitted by any State, under paragraph (1) of this subsection, the Secretary and the Secretary of the Interior, acting through the Director of the United States Fish and Wildlife Service, shall submit any comments with respect to such program and statement to the Administrator in writing.

(h) (1) Not later than the one-hundred-twentieth day after the date of the receipt by the Administrator of a program and statement submitted by any State under paragraph (1) of this subsection, the Administrator shall determine, taking into account any comments submitted by the Secretary and the Secretary of the Interior, acting through the Director of the United States Fish and Wildlife Service, pursuant to subsection (g) of this section, whether such State has the following authority with respect to the issuance of permits pursuant to such program:

(A) To issue permits which—

(i) apply and assure compliance with, any applicable requirements of this section, including, but not limited to, the guidelines established under section (b) (1) of this section, and sections 307 and 403 of this Act;

(ii) are for fixed terms not exceeding five years; and

(iii) can be terminated or modified for cause including, but not limited to, the following:

(I) violation of any condition of the permit;

(II) obtaining a permit by misrepresentation, or failure to disclose fully all relevant facts;

(III) change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.

(B) To issue permits which apply, and assure compliance with, all applicable requirements of section 308 of this Act, or to inspect, monitor, enter, and require reports to at least the same extent as required in section 308 of this Act.

(C) To assure that the public, and any other State the waters of which may be affected, receive notice of each application for a permit and to provide an opportunity for public hearing before a ruling on each such application.

(D) To assure that the Administrator receives notice of each application (including a copy thereof) for a permit.

(E) To assure that any State (other than the permitting State), whose waters may be affected by the issuance of a permit may submit written recommendation to the permitting State (and the Administrator) with respect to any permit application and, if any part of such written recommendations are not accepted by the permitting State, that the permitting State will notify such affected State (and the Administrator) in writing of its failure to so accept such recommendations together with its reasons for so doing.

(F) To assure that no permit will be issued if, in the judgment of the Secretary, after consultation with the Secretary of the department in which the Coast Guard is operating, anchorage and navigation of any of the navigable water would be substantially impaired thereby.

(G) To abate violations of the permit or the permit program, including civil and criminal penalties and other ways and means of enforcement.

(H) To assure continued coordination with Federal and Federal-State water-related planning and review processes.

(2) If, with respect to a State program submitted under subsection (g) (1) of this section, the Administrator determines that such State—

(A) has the authority set forth in paragraph (1) of this subsection, the Administrator shall approve the program and so notify (i) such State, and (ii) the Secretary, who upon subsequent notification from such State that it is administering such program, shall suspend the issuance of permits under subsection (a) and (e) of this section for activities with respect to which a permit may be issued pursuant to such State program; or

(B) does not have the authority set forth in paragraph (1) of this subsection, the Administrator shall so notify such State, which notification shall also describe the revisions or modifications necessary so that such State may resubmit such program for a determination by the Administrator under this subsection.

(3) If the Administrator fails to make a determination with respect to any program submitted by a State under subsection (g) (1) of this section within one-hundred-twenty days after the date of the receipt of such program, such program shall be deemed approved pursuant to paragraph (2) (A) of this subsection and the Administrator shall so notify such State and the Secretary who, upon subsequent notification from such State that it is administering such program, shall suspend the issuance of permits under subsection (a) and (e) of this section for activities with respect to which a permit may be issued by such State.

(4) After the Secretary receives notification from the Administrator under paragraph (2) or (3) of this sub-

section that a State permit program has been approved, the Secretary shall transfer any applications for permits before the Secretary for activities with respect to which a permit may be issued pursuant to such State program to such State for appropriate action.

(5) Upon notification from a State with a permit program approved under this subsection that such State intends to administer and enforce the terms and conditions of a general permit issued by the Secretary under subsection (e) of this section with respect to activities in such State to which such general permit applies, the Secretary shall suspend the administration and enforcement of such general permit with respect to such activities.

(i) Whenever the Administrator determines after public hearing that a State is not administering a program approved under section (h) (2) (A) of this section, in accordance with this section, including, but not limited to, the guidelines established under subsection (b) (1) of this section, the Administrator shall so notify the State, and, if appropriate corrective action is not taken within a reasonable time, not to exceed ninety days after the date of the receipt of such notification, the Administrator shall (1) withdraw approval of such program until the Administrator determines such corrective action has been taken, and (2) notify the Secretary that the Secretary shall resume the program for the issuance of permits under subsections (a) and (e) of this section for activities with respect to which the State was issuing permits and that such authority of the Secretary shall continue in effect until such time as the Administrator makes the determination described in clause (1) of this subsection and such State again has an approved program.

(j) Each State which is administering a permit program pursuant to this section shall transmit to the Administrator (1) a copy of each permit application received by such State and provide notice to the Administrator of every action related to the consideration of such permit application, including each permit proposed to be issued by such State, and (2) a copy of each proposed general permit which such State intends to issue. Not later than the tenth day after the date of the receipt of such permit application or such proposed general permit, the Administrator shall provide copies of such permit application or such proposed general permit to the Secretary and the Secretary of the Interior, acting through the Director of the United States Fish and Wildlife Service. If the Administrator intends to provide written comments to such State with respect to such permit application or such proposed general permit, he shall so notify such State not later than the thirtieth day after the date of the receipt of such application or such proposed general permit and provide such written comments to such State, after consideration of any comments made in writing with respect to such application or such proposed general permit by the Secretary and the Secretary of the Interior, acting through the Director of the United States Fish and Wildlife Service, not later than the ninetieth day after the date of such receipt. If such State is so notified by the Administrator, it shall not issue the proposed permit until after the receipt of such comments from the Administrator, or after such ninetieth day, whichever first occurs. Such State shall not issue such proposed permit after such ninetieth day if it has received such written comments in which the Administrator objects (A) to the issuance of such proposed permit and such proposed permit is one that has been submitted to the Administrator pursuant to subsection (h) (1) (E), or (B) to the issuances of such proposed permit as being outside the requirements of this section, including, but not limited to, the guidelines developed under subsection (b) (1) of this section unless it modifies such proposed permit in accordance with such comments. Whenever the Administrator objects to the issuance of a permit under the preceding sentence such written objection shall contain a statement of the reasons for such objection and the conditions which such permit would include if it were issued by the Administrator. In any case where the Administrator objects to the issuance of a permit, on request of the State, a public hearing shall be held by the Administrator on such objection. If the State does not resubmit such permit revised to meet such objection within 30 days after completion of the hearing or, if no hearing is requested within 90 days after the date of such objection, the Secretary may issue the permit pursuant to subsection (a) or (e) of this section, as the case may be, for such source in accordance with the guidelines and requirements of this Act.

(k) In accordance with guidelines promulgated pursuant to subsection (h) (2) of section 304 of this Act, the Administrator is authorized to waive the requirements of subsection (j) of this section at the time of the approval of a program pursuant to subsection (h) (2) (A) of this section for any category (including any class, type, or size within such category) of discharge within the State submitting such program.

(l) The Administrator shall promulgate regulations establishing categories of discharges which he determines shall not be subject to the requirements of subsection (j) of this section in any State with a program approved pursuant to subsection (h) (2) (A) of this section. The Administrator may distinguish among classes, types, and sizes within any category of discharges.

(m) Not later than the ninetieth day after the date on which the Secretary notifies the Secretary of the Interior, acting through the Director of the United States Fish and Wildlife Service that (1) an application for a permit under subsection (a) of this section has been received by the Secretary, or (2) the Secretary proposes to issue a general permit under subsection (e) of this section, the Secretary of the Interior, acting through the Director of the United States Fish and Wildlife Service, shall submit any comments with respect to such application or such proposed general permit in writing to the Secretary.

(n) Nothing in this section shall be construed to limit the authority of the Administrator to take action pursuant to section 309 of this Act.

(o) A copy of each permit application and each permit issued under this section shall be available to the public. Such permit application or portion thereof, shall further be available on request for the purpose of reproduction.

(p) Compliance with a permit issued pursuant to this section, including any activity carried out pursuant to a general permit issued under this section, shall be deemed compliance, for purposes of sections 309 and 505, with sections 301, 307, and 403.

(q) Not later than the one-hundred-eightieth day after the date of enactment of this subsection, the Secretary shall enter into agreements with the Administrator, the Secretaries of the Departments of Agriculture, Commerce, Interior, and Transportation, and the heads of other appropriate Federal agencies to minimize, to the maximum extent practicable, duplication, needless paperwork, and delays in the issuance of permits under this section. Such agreements shall be developed to assure that, to the maximum extent practicable, a decision with respect to an application for a permit under subsection (a) of this section will be made not later than the ninetieth day after the date the notice of such application is published under subsection (a) of this section.

(r) The discharge of dredged or fill material as part of the construction of a Federal project specifically authorized by Congress, whether prior to or on or after the date of enactment of this subsection, is not prohibited by or otherwise subject to regulation under this section, or a State program approved under this section, or section 301(a) or 402 of the Act (except for effluent standards or prohibitions under section 307), if information on the effects of such discharge, including consideration of the guidelines developed under subsection (b) (1) of this section, is included in an environmental impact statement for such project pursuant to the National Environmental Policy Act of 1969 and such environmental impact statement has been submitted to Congress before the actual discharge of dredged or fill material in connection with the construction of such project and prior to either authorization of such project or an appropriation of funds for such construction.

(s) (1) Whenever on the basis of any information available to him the Secretary finds that any person is in violation of any condition or limitation set forth in a permit issued by the Secretary under this section, the Secretary shall issue an order requiring such persons to comply with such condition or limitation, or the Secretary shall bring a civil action in accordance with paragraph (3) of this subsection.

(2) A copy of any order issued under this subsection shall be sent immediately by the Secretary to the State in which the violation occurs and other affected States. Any order issued under this subsection shall be by personal service and shall state with reasonable specificity the nature of the violation, specify a time for compliance, not to exceed thirty days, which the Secretary determines is reasonable, taking into account the seriousness of the violation and any good faith efforts to comply with applicable requirements. In any case in which an order under this subsection is issued to a corporation, a copy of such order shall be served on any appropriate corporate officers.

(3) The Secretary is authorized to commence a civil action for appropriate relief, including a permanent or temporary injunction for any violation for which he is authorized to issue a compliance order under paragraph (1) of this subsection. Any action under this paragraph may be brought in the district court of the United States for the district in which the defendant is located or resides or is doing business, and such court shall have jurisdiction to restrain such violation and to require compliance. Notice of the commencement of such action shall be given immediately to the appropriate State.

(4) Any person who violates any condition or limitation in a permit issued by the Secretary under this section, and any person who violates any order issued by the Secretary under paragraph (1) of this subsection, shall be subject to a civil penalty not to exceed $25,000 per day for each violation. In determining the amount of a civil penalty the court shall consider the seriousness of the violation or violations, the economic benefit (if any) resulting from the violation, any history of such violations, any good-faith efforts to comply with the applicable requirements, the economic impact of the penalty on the violator, and such other matters as justice may

require.

[Sec. 404(s)(4) deleted and (5) amended and redesignated as (4) by PL 100-4]

(t) Nothing in this section shall preclude or deny the right of any State or interstate agency to control the discharge of dredged or fill material in any portion of the navigable waters within the jurisdiction of such State, including any activity of any Federal agency, and each such agency shall comply with such State or interstate requirements both substantive and procedural to control the discharge of dredged or fill material to the same extent that any person is subject to such requirements. This section shall not be construed as affecting or impairing the authority of the Secretary to maintain navigation.

DISPOSAL OF SEWAGE SLUDGE

Sec. 405. (a) Notwithstanding any other provision of this Act or of any other law, in the case where the disposal of sewage sludge resulting from the operation of a treatment works as defined in section 212 of this Act (including the removal of in-place sewage sludge from one location and its deposit at another location) would result in any pollutant from such sewage sludge entering the navigable waters, such disposal is prohibited except in accordance with a permit issued by the Administrator under section 402 of this Act.

(b) The Administrator shall issue regulations governing the issuance of permits for the disposal of sewage sludge subject to subsection (a) of this section and section 402 of this Act. Such regulations shall require the application to such disposal of each criterion, factor, procedure, and requirement applicable to a permit issued under section 402 of this title.

(c) Each State desiring to administer its own permit program for disposal of sewage sludge subject to subsection (a) of this section within its jurisdiction may do so in accordance with section 402 of this Act.

(d) Regulations.—

(1) Regulations. — The Administrator, after consultation with appropriate Federal and State agencies and other interested persons, shall develop and publish, within one year after the date of enactment of this subsection and from time to time thereafter, regulations providing guidelines for the disposal of sludge and the utilization of sludge for various purposes. Such regulations shall

(A) identify uses for sludge, including disposal;

(B) specify factors to be taken into account in determining the measures and practices applicable to each such use or disposal (including publication of information on costs);

(C) identify concentrations of pollutants which interfere with each such use or disposal.

The Administrator is authorized to revise any regulation issued under this subsection.

(2) Identification and Regulation of Toxic Pollutants.—

(A) On Basis of Available Information.—

(i) Proposed Regulations. — Not later than November 30, 1986, the Administrator shall identify those toxic pollutants which, on the basis of available information on their toxicity, persistence, concentration, mobility, or potential for exposure, may be present in sewage sludge in concentrations which may adversely affect public health or the environment, and propose regulations specifying acceptable management practices for sewage sludge containing each such toxic pollutant and establishing numerical limitations for each such pollutant for each use identified under paragraph (1)(A).

(ii) Final Regulations. — Not later than August 31, 1987, and after opportunity for public hearing, the Administrator shall promulgate the regulations required by subparagraph (A)(i).

(B) Others.—

(i) Proposed Regulations. — Not later than July 31, 1987, the Administrator shall identify those toxic pollutants not identified under subparagraph (A)(i) which may be present in sewage sludge in concentrations which may adversely affect public health or the environment, and propose regulations specifying acceptable management practices for sewage sludge containing each such toxic pollutant and establishing numerical limitations for each pollutant for each such use identified under paragraph (1)(A).

(ii) Final Regulations. — Not later than June 15, 1988, the Administrator shall promulgate the regulations required by subparagraph (B)(i).

(C) Review. — From time to time, but not less often than every 2 years, the Administrator shall review the regulations promulgated under this paragraph for the purpose of identifying additional toxic pollutants and promulgating regulations for such pollutants consistent with the requirements of this paragraph.

(D) Minimum Standards; Compliance Date. — The management practices and numerical criteria established under subparagraphs (A), (B), and (C) shall be adequate to protect public health and the environment from any reasonably anticipated adverse effects of each pollutant. Such regulations shall require compliance as expeditiously as practicable but in no case later than 12 months after their publication, unless such regulations require the construction of new pollution control facilities, in which case the regulations shall require compliance as expeditiously as practicable but in no case later than two years from the date of their publication.

[Sec. 405(d)(2) — (5) added by PL 100-4]

(3) Alternative Standards. — For purposes of this subsection, if, in the judgment of the Administrator, it is not feasible to prescribe or enforce a numerical limitation for a pollutant identified under paragraph (2), the Administrator may instead promulgate a design, equipment, management practice, or operational standard, or combination thereof, which in the Administrator's judgment is adequate to protect public health and the environment from any reasonably anticipated adverse effects of such pollutant. In the event the Administrator promulgates a design or equipment standard under this subsection, the Administrator shall include as part of such standard such requirements as will assure the proper operation and maintenance of any such element of design or equipment.

(4) Conditions on Permits — Prior to the promulgation of the regulations required by paragraph (2), the Administrator shall impose conditions in permits issued to publicly owned treatment works under section 402 of this Act or take such other measures as the Administrator deems appropriate to protect public health and the environment from any adverse effects which may occur from toxic pollutants in sewage sludge.

(5) Limitation on Statutory Construction. — Nothing in this section is intended to waive more stringent requirements established by this Act or any other law.

[*Editor's note:* Section 406(e) of PL 100-4 stipulates:

"(e) Removal Credits. — The part of the decision of Natural Resources Defense Council, Inc. v. U.S. Environmental Protection Agency, No. 84-3530 (3d. Cir. 1986), which addresses section 405(d) of the Federal Water Pollution Control Act is stayed until August 31, 1987, with respect to—

(1) those publicly owned treatment works the owner or operator of which received authority to revise pretreatment requirements under section 307(b)(1) of such Act before the date of the enactment of this section, and

(2) those publicly owned treatment works the owner or operator of which has submitted an application for authority to revise pretreatment requirements under such section 307(b)(1) which application is pending on such date of enactment and is approved before August 31, 1987.

The Administrator shall not authorize any other removal credits under such Act until the Administrator issues the regulations required by paragraph (2)(A)(ii) of section 405(d) of such Act, as amended by subsection (a) of this section."]

(e) Manner of Sludge Disposal. — The determination of the manner of disposal or use of sludge is a local determination, except that it shall be unlawful for any person to dispose of sludge from a publicly owned treatment works or any other treatment works treating domestic sewage for any use for which regulations have been established pursuant to subsection (d) of this section, except in accordance with such regulations.

[Sec. 405(e) revised by PL 100-4]

(f) Implementation of Regulations.—

(1) Through Section 402 Permits. — Any permit issued under section 402 of this Act to a publicly owned treatment works or any other treatment works treating domestic sewage shall include requirements for the use and disposal of sludge that implement the regulations established pursuant to subsection (d) of this section unless such requirements have been included in a permit issued under the appropriate provisions of subtitle C of the Solid Waste Disposal Act, part C of the Safe Drinking Water Act, the Marine Protection, Research and Sanctuaries Act of 1972, or the Clean Air Act, or under State permit programs approved by the Administrator, where the Administrator determines that such programs assure compliance with any applicable requirements of this section. Not later than December 15, 1986 the Administrator shall promulgate procedures for approval of State programs pursuant to this paragraph.

(2) Through Other Permits. — In the case of a treatment works described in paragraph (1) that is not subject to section 402 of this Act and to which none of the other above listed permit programs nor approved State permit authority apply, the Administrator may issue a permit to such treatment works solely to impose requirements for the use and disposal of sludge that implement the regulations established pursuant to subsection (d) of this section. The Administrator shall include in the permit appropriate requirements to assure compliance with the regulations established pursuant to subsection (d) of this section. The Administrator shall establish procedures for issuing permits pursuant to this paragraph.

[Sec. 405(f) added by PL 100-4]

(g) Studies and Projects.—

(1) Grant Program: Information Gathering. — The Administrator is authorized to conduct or initiate scientific studies, demonstration projects, and public information and education projects which are designed to promote the safe and beneficial management or use of sewage sludge for such purposes as aiding the restoration of abandoned mine sites, conditioning soil for parks and recreation areas, agricultural and horticultural uses, and other beneficial purposes. For the purposes of carrying out this subsection, the Administrator may make grants to State water pollution control agencies, other public or nonprofit agencies, institutions, organizations, and individuals. In cooperation with other Federal departments and agencies, other public and private agencies, institutions, and organizations, the Administrator is authorized to collect and disseminate information pertaining to the safe and beneficial use of sewage sludge.

(2) Authorization of Appropriations. — For the purposes of carrying out the scientific studies, demonstration projects, and public information and education projects authorized in this section, there is authorized to be appropriated for fiscal years beginning after September 30, 1986, not to exceed $5,000,000.

[Sec. 405(g) added by PL 100-4]

TITLE V—GENERAL PROVISIONS

ADMINISTRATION

Sec. 501. (a) The Administrator is authorized to prescribe such regulations as are necessary to carry out his functions under this Act.

(b) The Administrator, with the consent of the head of any other agency of the United States, may utilize such officers and employees of such agency as may be found necessary to assist in carrying out the purposes of this Act.

(c) Each recipient of financial assistance under this Act shall keep such records as the Administrator shall prescribe, including records which fully disclose the amount and disposition by such recipient of the proceeds of such assistance, the total cost of the project or undertaking in connection with which such assistance is given or used, and the amount of that portion of the cost of the project or undertaking supplied by other sources, and such other records as will facilitate an effective audit.

(d) The Administrator and the Comptroller General of the United States, or any of their duly authorized representatives, shall have access, for the purpose of audit and examination, to any books, documents, papers, and records of the recipients that are pertinent to the grants received under this Act. For the purpose of carrying out audits and examinations with respect to recipients of Federal assistance under this Act, the Administrator is authorized to enter into noncompetitive procurement contracts with independent State audit organizations, consistent with chapter 75 of title 31, United States Code. Such contracts may only be entered into to the extent and in such amounts as may be provided in advance in appropriation Acts.

[501(d) amended by PL 100-4]

(e) (1) It is the purpose of this subsection to authorize a program which will provide official recognition by the United States Government to those industrial organizations and political subdivisions of States which during the preceding year demonstrated an outstanding technological achievement or an innovative process, method, or device in their waste treatment and pollution abatement programs. The Administrator shall, in consultation with the appropriate State water pollution control agencies, establish regulations under which such recognition may be applied for and granted, except that no applicant shall be eligible for an award under this subsection if such applicant is not in total compliance with all applicable water quality requirements under this Act, or otherwise does not have a satisfactory record with respect to environmental quality.

(2) The Administrator shall award a certificate or plaque of suitable design to each industrial organization or political subdivision which qualifies for such recognition under regulations established under this subsection.

(3) The President of the United States, the Governor of the appropriate State, the Speaker of the House of Representatives, and the President pro tempore of the Senate shall be notified of the award by the Administrator and the awarding of such recognition shall be published in the Federal Register.

(f) Upon the request of a State water pollution control agency, personnel of the Environmental Protection Agency may be detailed to such agency for the purpose of carrying out the provisions of this Act.

GENERAL DEFINITIONS

Sec. 502. Except as otherwise specifically provided, when used in this Act:

(1) The term "State water pollution control agency" means the State agency designated by the Governor having responsibility for enforcing State laws relating to the abatement of pollution.

(2) The term "interstate agency" means an agency of two or more States established by or pursuant to an agreement of compact approved by the Congress, or any other agency of two or more States, having substantial powers or duties pertaining to the control of pollution as determined and approved by the Administrator.

(3) The term "State" means a State, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and the Trust Territory of the Pacific Islands.

[Sec. 502(3) amended by PL 100-4]

(4) The term "municipality" means a city, town, borough, county, parish, district, association, or other public body created by or pursuant to State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of this Act.

(5) The term "person" means an individual, corporation, partnership, association, State, municipality, commission, or political subdivision of a State, or any interstate body.

(6) The term "pollutant" means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water. This term does not mean (A) "sewage from vessels" within the meaning of section 312 of this Act; or (B) water, gas, or other material which is injected into a well to facilitate production of oil or gas, or water derived in association with oil or gas production and disposed of in a well, if the well used either to facilitate production or for disposal purposes is approved by authority of the State in which the well is located, and if such State determines that such injection or disposal will not result in the degradation of ground or surface water resources.

(7) The term "navigable waters" means the waters of the United States, including the territorial seas.

(8) The term "territorial seas" means the belt of the seas measured from the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters, and extending seaward a distance of three miles.

(9) The term "contiguous zone" means the entire zone established or to be established by the United States under article 24 of the Convention of the Territorial Sea and the Contiguous Zone.

(10) The term "ocean" means any portion of the high seas beyond the contiguous zone.

(11) The term "effluent limitation" means any restriction established by a State or the Administrator on quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources into navigable waters, the waters of the contiguous zone, or the ocean, including schedules of compliance.

(12) The term "discharge of a pollutant" and the term "discharge of pollutants" each means (A) any addition of any pollutant to navigable waters from any point source, (B) any addition of any pollutant to the waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft.

(13) The term "toxic pollutant" means those pollutants, or combinations of pollutants, including disease-causing agents, which after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will, on the basis of information available to the Administrator, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunctions in reproduction) or physical deformations, in such organisms or their offspring.

(14) The term "point source" means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include agricultural stormwater discharges and return flows from irrigated agriculture.

[Sec. 502(14) amended by PL 100-4]

[*Editor's note:* Section 507 of PL 100-4 states:
"Sec. 507. Definition of Point Source.
For purposes of the Federal Water Pollution Control Act, the term "point source" includes a landfill leachate collection system."]

(15) The term "biological monitoring" shall mean the determination of the effects on aquatic life, including accumulation of pollutants in tissue, in receiving waters due to the discharge of pollutants (A) by techniques and procedures, including sampling of organisms representative of appropriate levels of the food chain appropriate to the volume and the physical, chemical, and biological characteristics of the effluent, and (B) at appropriate frequencies and locations.

(16) The term "discharge" when used without qualification includes a discharge of a pollutant, and a discharge of pollutants.

(17) The term "schedule of compliance" means a schedule of remedial measures including an enforceable sequence of actions or operations leading to compliance with an effluent limitation, other limitation, prohibition, or standard.

(18) The term "industrial user" means those industries identified in the Standard Industrial Classification Manual, Bureau of the Budget, 1967, as amended and supplemented, under the category "Division D—Manufacturing" and such other classes of significant waste products as, by regulation, the Administrator deems appropriate.

(19) The term "pollution" means the man-made or man-induced alteration of the chemical, physical, biological and radiological integrity of water.

WATER POLLUTION CONTROL ADVISORY BOARD

Sec. 503. (a) (1) There is hereby established in the Environmental Protection Agency a Water Pollution Control Advisory Board, composed of the Administrator or his designee, who shall be Chairman, and nine members appointed by the President, none of whom shall be Federal officers or employees. The appointed members, having due regard for the purposes of this Act, shall be selected from among representatives of various State, interstate, and local governmental agencies, of public or private interests contributing to, affected by, or concerned with pollution, and of other public and private agencies, organizations, or groups demonstrating an active interest in the field of pollution prevention and control, as well as other individuals who are expert in this field. [illegible] sections [illegible]

(2) (A) Each member appointed by the President shall hold office for a term of three years, except that (i) any member appointed to fill a vacancy occurring prior to the expiration of the term for which his predecessor was appointed shall be appointed for the remainder of such term, and (ii) the terms of office of the members first taking office after June 30, 1956, shall expire as follows: three at the end of one year after such date, three at the end of two years after such date, and three at the end of three years after such date, as designated by the President at the time of appointment, and (iii) the term of any member under the preceding provisions shall be extended until the date on which his successor's appointment is effective. None of the members appointed by the President shall be eligible for reappointment within one year after the end of his preceding term.

(B) The members of the Board who are not officers or employees of the United States, while attending conferences or meetings of the Board or while otherwise serving at the request of the Administrator, shall be entitled to receive compensation at a rate to be fixed by the Administrator, but not exceeding $100 per diem, including travel-time, and while away from their homes or regular places of business they may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by law (5 U.S.C. 73b-2) for persons in the Government service employed intermittently.

(b) The Board shall advise, consult with, and make recommendations to the Administrator on matters of policy relating to the activities and functions of the Administrator under this Act.

(c) Such clerical and technical assistance as may be necessary to discharge the duties of the Board shall be provided from the personnel of the Environmental Protection Agency.

EMERGENCY POWERS

Sec. 504. (a) Notwithstanding any other provision of this Act, the Administrator upon receipt of evidence that a pollution source or combination of sources is presenting an imminent and substantial endangerment to the health of persons or to the welfare of persons where such endangerment is to the livelihood of such persons, such as inability to market shellfish, may bring suit on behalf of the United States in the appropriate district court to immediately restrain any person causing or contributing to the alleged pollution to stop the discharge of pollutants causing or contributing to such pollution or to take such other action as may be necessary.

(b) [504(b) repealed by PL 96-510, Sec. 304(a)]

CITIZEN SUITS

Sec. 505. (a) Except as provided in subsection (b) of this section, and section 309(g)(6) any citizen may commence a civil action on his own behalf—

[Sec. 505(a) amended by PL 100-4]

(1) against any person (including (i) the United States, and (ii) any other governmental instrumentality or agency to the extent permitted by the eleventh amendment to the Constitution) who is alleged to be in violation of (A) an effluent standard or limitation under this Act or (B) an order issued by the Administrator or a State with respect to such a standard or limitation, or

(2) against the Administrator where there is alleged a failure of the Administrator to perform any act or duty under this Act which is not discretionary with the Administrator.

The district courts shall have jurisdiction, without regard to the amount in controversy or the citizenship of the parties, to enforce such an effluent standard or limitation, or such an order, or to order the Administrator to perform such act or duty, as the case may be, and to apply any appropriate civil penalties under section 309 (d) of this Act.

(b) No action may be commenced—

(1) under subsection (a) (1) of this section—

(A) prior to sixty days after the plaintiff has given notice of the alleged violation (i) to the Administrator, (ii) to the State in which the alleged violation occurs, and (iii) to any alleged violator of the standard, limitation, or order, or

(B) if the Administrator or State has commenced and is diligently prosecuting a civil or criminal action in a court of the United States, or a State to require compliance with the standard, limitation, or order, but in any such action in a court of the United States any citizen may intervene as a matter of right.

(2) under subsection (a) (2) of this section prior to sixty days after the plaintiff has given notice of such action to the Administrator,

except that such action may be brought immediately after such notification in the case of an action under this section respecting a violation of sections 306 and 307(a) of this Act. Notice under this subsection shall be given in such manner as the Administrator shall prescribe by regulation.

(c) (1) Any action respecting a violation by a discharge source of an effluent standard or limitation or an order respecting such standard or limitation may be brought under this section only in the judicial district in which such source is located.

(2) In such action under this section, the Administrator, if not a party, may intervene as a matter of right.

(3) Protection of Interests of United States. — Whenever any action is brought under this section in a court of the United States, the plaintiff shall serve a copy of the complaint on the Attorney General and the Administrator. No consent judgment shall be entered in an action in which the United States is not a party prior to 45 days following the receipt of a copy of the proposed consent judgment by the Attorney General and the Administrator.

[Sec. 505 (c)(3) added by PL 100-4]

(d) The court, in issuing any final order in any action brought pursuant to this section, may award costs of litigation (including reasonable attorney and expert witness fees) to any prevailing or substantially prevailing party, whenever the court determines such award is appropriate. The court may, if a temporary restraining order or preliminary injunction is sought, require the filing of a bond or equivalent security in accordance with the Federal Rules of Civil Procedure.

[Sec. 505(d) amended by PL 100-4]

(e) Nothing in this section shall restrict any right which any person (or class of persons) may have under any statute or common law to seek enforcement of any effluent standard or limitation or to seek any other relief (including relief against the Administrator or a State agency).

(f) For purposes of this section, the term "effluent standard or limitation under this Act" means (1) effective July 1, 1973, an unlawful act under subsection (a) of section 301 of this Act; (2) an effluent limitation or other limitation under section 301 or 302 of this Act; (3) standard of performance under section 306 of this Act; (3) prohibition, effluent standard or pretreatment standards under section 307 of this Act; (5) certification under section 401 of this Act; (6) a permit or condition thereof issued under section 402 of this Act, which is in effect under this Act (including a requirement applicable by reason of section 313 of this Act); or (7) a regulation under section 405(d) of this Act..

[Sec. 505(f) amended by PL 100-4]

(g) For the purposes of this section the term "citizen" means a person or persons having an interest which is or may be adversely affected.

(h) A Governor of a State may commmence a civil action under subsection (a), without regard to the limitations of subsection (b) of this section, against the Administrator where there is alleged a failure of the Administrator to enforce an effluent standard or limitation under this Act the violation of which is occurring in another State and is causing an adverse effect on the public health or welfare in his State, or is causing a violation of any water quality requirement in his State.

FEDERAL PROCUREMENT

Sec. 508. (a) No Federal agency may enter into any contract with any person, who has been convicted of any offense under section 309 (c) of this Act, for the procurement of goods, materials, and services if such contract is to be performed at any facility at which the violation which gave rise to such conviction occurred, and if such facility is owned, leased, or supervised by such person. The prohibition in the preceding sentence shall continue until the Administrator certifies that the condition giving rise to such conviction has been corrected.

(b) The Administrator shall establish procedures to provide all Federal agencies with the notification necessary for the purposes of subsection (a) of this section.

(c) In order to implement the purposes and policy of this Act to protect and enhance the quality of the Nation's water, the President shall, not more than one hundred and eighty days after enactment of this Act, cause to be issued an order (1) requiring each Federal agency authorized to enter into contracts and each Federal agency which is empowered to extend Federal assistance by way of grant, loan, or contract to effectuate the purpose and policy of this Act in such contracting or assistance activities, and (2) setting forth procedures, sanctions, penalties, and such other provisions, as the President determines necessary to carry out such requirement.

(d) The President may exempt any contract, loan, or grant from all or part of the provisions of this section where he determines such exemption is necessary in the paramount interest of the United States and he shall notify the Congress of such exemption.

(e) The President shall annually report to the Congress on measures taken in compliance with the purpose and intent of this section, including, but not limited to, the progress and problems associated with such compliance.

ADMINISTRATIVE PROCEDURE AND JUDICIAL REVIEW

Sec. 509. (a) (1) For the purposes of obtaining information under section 305 of this Act, or carrying out section 507 (e) of this Act, the Administrator may issue subpenas for the attendance and testimony of witnesses and the production of relevant papers, books, and documents, and he may administer oaths. Except for effluent data, upon a showing satisfactory to the Administrator that such papers, books, documents, or information or particular part thereof, if made public, would divulge trade secrets or secret processes, the Administrator shall consider such record, report, or information or particular portion thereof confidential in accordance with the purposes of section 1905 of title 18 of the United States Code, except that such paper, book, document, or information may be disclosed to other officers, employees, or authorized representatives of the United States concerned with carrying out this Act, or when relevant in any proceeding under this Act. Witnesses summoned shall be paid the same fees and mileage that are paid witnesses in the courts of the United States. In case of contumacy or refusal to obey a subpena served upon any person under this subsection, the district court of the United States for any district in which such person is found or resides or transacts business, upon application by the United States and after notice to such person, shall have jurisdiction to issue an order requiring such person to appear and give testimony before the Administrator, to appear and produce papers, books, and documents before the Administrator, or both, and any failure to obey such order of the court may be punished by such court as a contempt thereof.

(2) The district courts of the United States are authorized, upon application by the Administrator, to issue subpenas for attendance and testimony of witnesses and the production of relevant papers, books, and documents, for purposes of obtaining information under sections 304 (b) and (c) of this Act. Any papers, books, documents, or other information or part thereof, obtained by reason of such a subpena shall be subject to the same requirements as are provided in paragraph (1) of this subsection.

(b) (1) Review of the Administrator's action (A) in promulgating any standard of performance under section 306, (B) in making any determination pursuant to section 306(b) (1) (C), (C) in promulgating any effluent standard, prohibition, or pretreatment standard under section 307, (D) in making any determination as to a State permit program submitted under section 402(b), (E) in approving or promulgating any effluent limitation or other limitation under sections 301, 302, 306, or 405 [,] (F) in issuing or denying any permit under section 402, and (G) in promulgating any individual control strategy under section 304(l), may be had by any interested person in the Circuit Court of Appeals of the United States for the Federal judicial district in which such person resides or transacts business which is directly affected by such action upon application by such person. Any such application shall be made within 120 days from the date of such determination, approval,

promulgation, issuance or denial, or after such date only if such application is based solely on grounds which arose after such 120th day.

[Sec. 509(b)(1) amended by PL 100-4]

(2) Action of the Administrator with respect to which review could have been obtained under paragraph (1) of this subsection shall not be subject to judicial review in any civil or criminal proceeding for enforcement.

(3) Venue.—

[Sec. 509(b)(3) added by PL 100-4]

(A) Selection Procedure. — If applications for review of the same agency action have been filed under paragraph (1) of this subsection in 2 or more Circuit Courts of Appeals of the United States and the Administrator has received written notice of the filing of one or more applications within 30 days or less after receiving written notice of the filing of the first application, then the Administrator shall promptly advise in writing the Administrative Office of the United States Courts that applications have been filed in 2 or more Circuit Courts of Appeals of the United States, and shall identify each court for which he has written notice that such applications have been filed within 30 days or less of receiving written notice of the filing of the first such application. Pursuant to a system of random selection devised for this purpose, the Administrative Office thereupon shall, within 3 business days of receiving such written notice from the Administrator, select the court in which the record shall be filed from among those identified by the Administrator. Upon notification of such selection, the Administrator shall promptly file the record in such court. For the purpose of review of agency action which has previously been remanded to the Administrator, the record shall be filed in the Circuit Court of Appeals of the United States which remanded such action.

(B) Administrative Provisions. — Where applications have been filed under paragraph (1) of this subsection in two or more Circuit Courts of Appeals of the United States with respect to the same agency action and the record has been filed in one of such courts pursuant to subparagraph (A), the other courts in which such applications have been filed shall promptly transfer such applications to the Circuit Court of Appeals of the United States in which the record has been filed. Pending selection of a court pursuant to subparagraph (A), any court in which an application has been filed under paragraph (1) of this subsection may postpone the effective date of the agency action until 15 days after the Administrative Office has selected the court in which the record shall be filed.

(C) Transfers. — Any court in which an application with respect to any agency action has been filed under paragraph (1) of this subsection, including any court selected pursuant to subparagraph (A), may transfer such application to any other Circuit Court of Appeals of the United States for the convenience of the parties or otherwise in the interest of justice.

(4) Award of Fees. — In any judicial proceeding under this subsection, the court may award costs of litigation (including reasonable attorney and expert witness fees) to any prevailing or substantially prevailing party whenever it determines that such award is appropriate.

[Sec. 509(b)(4) added by PL 100-4]

(c) In any judicial proceeding brought under subsection (b) of this section in which review is sought of a determination under this Act required to be made on the record after notice and opportunity for hearing, if any party applies to the court for leave to adduce additional evidence, and shows to the satisfaction of the court that such additional evidence is material and that there were reasonable grounds for the failure to adduce such evidence in the proceeding before the Administrator, the court may order such additional evidence (and evidence in rebuttal thereof) to be taken before the Administrator in such manner and upon such terms and conditions as the court may deem proper. The Administrator may modify his findings as to the facts, or make new findings, by reason of the additional evidence so taken and he shall file such modified or new findings, and his recommendation, if any, for the modification or setting aside of his original determination, with the return of such additional evidence.

STATE AUTHORITY

Sec. 510. Except as expressly provided in this Act, nothing in this Act shall (1) preclude or deny the right of any State or political subdivision thereof or interstate agency to adopt or enforce (A) any standard or limitation respecting discharges of pollutants, or (B) any requirement respecting control or abatement of pollution; except that if an effluent limitation, or other limitation, effluent standard, prohibition, pretreatment standard, or standard of performance is in effect under this Act, such State or political subdivision or interstate agency may not adopt or enforce any effluent limitation, or other limitation, effluent standard, prohibition, pretreatment standard, or standard of performance which is less stringent than the effluent limitation, or other limitation, effluent standard, prohibition, pretreatment standard, or standard of performance under this Act; or

(2) be construed as impairing or in any manner affecting any right or jurisdiction of the States with respect to the waters (including boundary waters) of such States.

OTHER AFFECTED AUTHORITY

Sec. 511 (a) This act shall not be construed as (1) limiting the authority or functions of any officer or agency of the United States under any other law or regulation not inconsistent with this Act; (2) affecting or impairing the authority of the Secretary of the Army (A) to maintain navigation or (B) under the Act of March 3, 1899 (30 Stat. 1112); except that any permit issued under section 404 of this Act shall be conclusive as to the effect on water quality of any discharge resulting from any activity subject to section 10 of the Act of March 3, 1899, or (3) affecting or impairing the provisions of any treaty of the United States.

(b) Discharges of pollutants into the navigable waters subject to the Rivers and Harbors Act of 1910 (36 Sta. 593; 33 U.S.C. 421) and the Supervisory Harbors Act of 1888 (25 Stat. 209; 33 U.S.C. 441-451b) shall be regulated pursuant to this Act, and not subject to such Act of 1910 and the Act of 1888 except as to effect on navigation and anchorage.

(c) (1) Except for the provision of Federal financial assistance for the purpose of assisting the construction of publicly owned treatment works as authorized by section 201 of this Act, and the issuance of a permit under section 402 of this Act for the discharge of any pollutant by a new source as defined in section 306 of this Act, no action of the Administrator taken pursuant to this Act shall be deemed a major Federal action significantly affecting the quality of the human environment within the meaning of the National Environmental Policy Act of 1969 (83 Stat. 852); and

(2) Nothing in the National Environmental Policy Act of 1969 (83 Stat. 852) shall be deemed to—

(A) authorize any Federal agency authorized to license or permit the conduct of any activity which may result in the discharge of a pollutant into the navigable waters to review any effluent limitation or other requirement established pursuant to this Act or the adequacy of any certification under section 401 of this Act; or

(B) authorize any such agency to impose, as a condition precedent to the issuance of any license or permit, any effluent limitation other than any such limitation established pursuant to this Act.

(d) Notwithstanding this Act or any other provision of law, the Administrator (1) shall not require any State to consider in the development of the ranking in order of priority of needs for the construction of treatment works (as defined in title II of this Act), any water pollution control agreement which may have been entered into between the United States and any other nation, and (2) shall not consider any such agreement in the approval of any such priority ranking.

SEPARABILITY

Sec. 512. If any provision of this Act, or the application of any provision of this Act to any person or circumstance, is held invalid, the application of such provision to other persons or circumstances, and the remainder of this Act, shall not be affected thereby.

LABOR STANDARDS

Sec. 513. The Administrator shall take such action as may be necessary to insure that all laborers and mechanics employed by contractors or subcontractors on treatment works for which grants are made under this Act shall be paid wages at rates not less than those prevailing for the same type of work on similar construction in the immediate locality, as determined by the Secretary of Labor, in accordance with the Act of March 3, 1931, as amended, known as the Davis-Bacon Act (46 Stat. 1494; 40 U.S.C., sec. 276a through 276a-5). The Secretary of Labor shall have, with respect to the labor standards specified in this subsection, the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (15 F.R. 3176) and section 2 of the Act of June 13, 1934, as amended (48 Stat. 948; 40 U.S.C. 276c).

PUBLIC HEALTH AGENCY COORDINATION

Sec. 514. The permitting agency under section 402 shall assist the applicant for a permit under such section in coordinating the requirements of this Act with those of the appropriate public health agencies.

EFFLUENT STANDARDS AND WATER QUALITY INFORMATION ADVISORY COMMITTEE

Sec. 515. (a) (1) There is established an Effluent Standards and Water Quality Information Advisory Committee, which shall be composed of a Chairman and eight members who shall be appointed by the Administrator within sixty days after the date of enactment of this Act.

(2) All members of the Committee shall be selected from the scientific community, qualified by education, training, and experience to provide, assess, and evaluate scientific and technical information on effluent standards and limitations.

(3) Members of the Committee shall serve for a term of four years, and may be reappointed.

(b) (1) No later than one hundred and eight days prior to the date on which the Administrator is required to publish any proposed regulations required by section 304(b) of this Act, any proposed standard of performance for new sources required by section 306 of this Act, or any proposed toxic effluent standard required by section 307 of this Act, he shall transmit to the Committee a notice of intent to propose such regulations. The Chairman of the Committee within ten days after receipt of such notice may publish a notice of a public hearing by the Committee, to be held within thirty days.

(2) No later than one hundred and twenty days after receipt of such notice, the Committee shall transmit to the Administrator such scientific and technical information as is in its possession, including that presented at any public hearing, related to the subject matter contained in such notice.

(3) Information so transmitted to the Administrator shall constitute a part of the administrative record and comments on any proposed regulations or standards as information to be considered with other comments and information in making any final determinations.

(4) In preparing information for transmittal, the Committee shall avail itself of the technical and scientific services of any Federal agency, including the United States Geological Survey and any national environmental laboratories which may be established.

(c) (1) The Committee shall appoint and prescribe the duties of a Secretary, and such legal counsel as it deems necessary to exercise and fulfill its powers and responsibilities. The compensation of all employees appointed by the Committee shall be fixed in accordance with chapter 51 and subchapter III of chapter 53 of title V of the United States Code.

(2) Members of the Committee shall be entitled to receive compensation at a rate to be fixed by the President but not in excess of the maximum rate of pay for GS-18, as provided in the General Schedule under section 5332 of title V of the United States Code.

(d) Five members of the Committee shall constitute a quorum, and official actions of the Committee shall be taken only on the affirmative vote of at least five members. A special panel composed of one or more members upon order of the Committee shall conduct any hearing authorized by this section and submit the transcript of such hearing to the entire Committee for its action thereon.

(e) The Committee is authorized to make such rules as are necessary for the orderly transaction of its business.

REPORTS TO CONGRESS

Sec. 516. (a) Within ninety days following the convening of each session of Congress, the Administrator shall submit to the Congress a report, in addition to any other report required by this Act, on measures taken toward implementing the objective of this Act, including, but not limited to, (1) the progress and problems associated with developing comprehensive plans under section 102 of this Act, area-wide plans under section 208 of this Act, basin plans under section 209 of this Act, and plans under section 303(e) of this Act; (2) a summary of actions taken and results achieved in the field of water pollution control research, experiments, studies, and related matters by the Administrator and other Federal agencies and by other persons and agencies under Federal grants or contracts; (3) the progress and problems associated with the development of effluent limitations and recommended control techniques; (4) the status of State programs, including a detailed summary of the progress obtained as compared to that planned under State program plans for development and enforcement of water quality requirements; (5) the identification and status of enforcement actions pending or completed under such Act during the preceding year; (6) the status of State, interstate, and local pollution control programs established pursuant to, and assisted by, this Act; (7) a summary of the results of the survey required to be taken under section 210 of this Act; (8) his activities including recommendations under sections 109 through 111 of this Act; and (9) all reports and recommendations made by the Water Pollution Control Advisory Board.

(b) (1) The Administrator, in cooperation with the States, including water pollution control agencies and other water pollution control planning agencies, shall make (A) a detailed estimate of the cost of carrying out the provisions of this Act; (B) a detailed estimate, biennially revised, of the cost of construction of all needed publicly owned treatment works in all of the States and of the cost of construction of all needed publicly owned treatment works in each of the States; (C) a comprehensive study of the economic impact on affected units of government of the cost of installation of treatment facilities; and (D) a comprehensive analysis of the national requirements for and the cost of treating municipal, industrial, and other effluent to attain the water quality objectives as established by this Act or applicable State law. The Administrator shall submit such detailed estimate and such comprehensive study of such cost to the Congress no later than February 10 of each odd-numbered year. Whenever the Administrator, pursuant to this subsection, requests and receives an esti-

mate of cost from a State, he shall furnish copies of such estimate together with such detailed estimate to Congress.

[*Editor's note*: Section 25 of PL 97-117 provides:

"NEEDS SURVEY

Sec. 25. The Administrator of the Environmental Protection Agency shall submit to the Congress, not later than December 31, 1982, a report containing the detailed estimates, comprehensive study, and comprehensive analysis required by section 516(b) of the Federal Water Pollution Control Act, including an estimate of the total cost and the amount of Federal funds necessary for the construction of needed publicly owned treatment facilities. Such report shall be prepared in the same manner as is required by such section and shall reflect the changes made in the Federal water pollution control program by this Act and the amendments made by this Act. In preparing this report, the Administrator shall give emphasis to the effects of the amendment made by section 2(a) of this Act in addressing water quality needs adequately and appropriately."]

(2) Notwithstanding the second sentence of paragraph (1) of this subsection, the Administrator shall make a preliminary detailed estimate called for by subparagraph (B) of such paragraph and shall submit such preliminary detailed estimate to the Congress no later than September 3, 1974. The Administrator shall require each State to prepare an estimate of cost for such State, and shall utilize the survey form EPA-1, O.M.B. No. 158-R0017, prepared for the 1973 detailed estimate, except that such estimate shall include all costs of compliance with section 201(g) (2) (A) of this Act and water quality standards established pursuant to section 303 of this Act, and all costs of treatment works as defined in section 212(2), including all eligible costs of constructing sewage collection systems and correcting excessive infiltration or inflow and all eligible costs of correcting combined storm and sanitary sewer problems and treating storm water flows. The survey form shall be distributed by the Administrator to each State no later than January 31, 1974.

(c) The Administrator shall submit to the Congress by October 1, 1978, a report on the status of combined sewer overflows in municipal treatment works operations. The report shall include (1) the status of any projects funded under this Act to address combined sewer overflows, (2) a listing by State of combined sewer overflow needs identified in the 1977 State priority listings, (3) an estimate for each applicable municipality of the number of years necessary, assuming an annual authorization and appropriation for the construction grants program of $5,000,000,000 to correct combined sewer overflow problems, (4) an analysis using representative municipalities faced with major combined sewer overflow needs, of the annual discharges of pollutants from overflows in comparison to treated effluent discharges, (5) an analysis of the technological alternatives available to municipalities to correct major combined sewer overflow problems, and (6) any recommendations of the Administrator for legislation to address the problem of combined sewer overflows, including whether a separate authorization and grant program should be established by the Congress to address combined sewer overflows.

(d) The Administrator shall submit to the Congress by October 1, 1978, a report on the status of the use of municipal secondary effluent and sludge for agricultural and other purposes that utilize the nutrient value of treated wastewater effluent. The report shall include (1) a summary of results of research and development programs, grants, and contracts carried out by the Environmental Protection Agency pursuant to sections 104 and 105 of this Act, regarding alternatives to disposal, landfill, or incineration of secondary effluent of sludge, (2) an estimate of the amount of sludge generated by public treatment works and its disposition, including an estimate of annual energy costs to incinerate sludge, (3) an analysis of current technologies for the utilization, reprocessing, and other uses of sludge to utilize the nutrient value of sludge, (4) legal, institutional, public health, economic, and other impediments to the greater utilization of treated sludge, and (5) any recommendations of the Administrator for legislation to encourage or require the expanded utilization of sludge for agricultural and other purposes. In carrying out this subsection, the Administrator shall consult with, and use the services of the Tennessee Valley Authority and other departments, agencies and instrumentalities of the United States, to the extent it is appropriate to do so.

(e) The Administrator, in cooperation with the States, including water pollution control agencies, and other water pollution control planning agencies, and water supply and water resources agencies of the States and the United States shall submit to Congress, within two years of the date of enactment of this section, a report with recommendations for legislation on a program to require coordination between water supply and wastewater control plans as a condition to grants for construction of treatment works under this Act. No such report shall be submitted except after opportunity for public hearings on such proposed report.

[*Editor's note*: Section 516(f) has not been enacted.]

(g) State Revolving Fund Report.—

(1) In General. — Not later than February 10, 1990, the Administrator shall submit to Congress a report on the financial status and operations of water pollution control revolving funds established by the States under title VI of this Act. The Administrator shall prepare such report in cooperation with the States, including water pollution control agencies and other water pollution control planning and financing agencies.

(2) Contents. — The report under this subsection shall also include the following:

(A) an inventory of the facilities that are in significant noncompliance with the enforceable requirements of this Act;

(B) an estimate of the cost of construction necessary to bring such facilities into compliance with such requirements;

(C) an assessment of the availability of sources of funds for financing such needed construction, including an estimate of the amount of funds available for providing assistance for such construction through September 30, 1999, from the water pollution control revolving funds established by the States under title VI of this Act;

(D) an assessment of the operations, loan portfolio, and loan conditions of such revolving funds;

(E) an assessment of the effect on user charges of the assistance provided by such revolving funds compared to the assistance provided with funds appropriated pursuant to section 207 of this Act; and

(F) an assessment of the efficiency of the operation and maintenance of treatment works constructed with assistance provided by such revolving funds compared to the efficiency of the operation and maintenance of treatment works constructed with assistance provided under section 201 of this Act.

[Sec. 516(g) added by PL 100-4]

GENERAL AUTHORIZATION

Sec. 517. There are authorized to be appropriated to carry out this Act, other than sections 104, 105, 106(a), 107, 108, 112, 113, 114, 115, 206, 207, 208 (f) and (h), 209, 304, 311 (c), (d), (f), and (k), 314, 315, and 317, $250,000,000 for the fiscal year ending June 30, 1973, $300,000,000 for the fiscal year ending June 30, 1974, $350,000,000 for the fiscal year ending June 30, 1975, $100,000,000 for the fiscal year ending September 30, 1977, $150,000,000 for the fiscal year ending September 30, 1978, $150,000,000 for the fiscal year ending September 30, 1979, $150,000,000 for the fiscal year ending September 30, 1980, $150,000,000 for the fiscal year ending September 30, 1981, $161,000,000 for the fiscal year ending September 30, 1982, such sums as may be necessary for fiscal years 1983 through 1985, and $135,000,000 per fiscal year for each of the fiscal years 1986 through 1990.

[Sec. 517 amended by PL 96-483; PL 100-4]

Sec. 518. Indian Tribes.

[New Sec. 518 added by PL 100-4]

(a) Policy. — Nothing in this section shall be construed to affect the application of section 101(g) of this Act, and all of the provisions of this section shall be carried out in accordance with the provisions of such section 101(g). Indian tribes shall be treated as States for purposes of such section 101(g).

(b) Assessment of Sewage Treatment Needs; Report. — The Administrator, in cooperation with the Director of the Indian Health Service, shall assess the need for sewage treatment works to serve Indian tribes, the degree to which such needs will be met through funds allotted to States under section 205 of this Act and priority lists under section 216 of this Act, and any obstacles which prevent such needs from being met. Not later than one year after the date of the enactment of this section, the Administrator shall submit a report to Congress on the assessment under this subsection, along with recommendations specifying (1) how the Administrator intends to provide assistance to Indian tribes to develop waste treatment management plans and to construct treatment works under this Act, and (2) methods by which the participation in and administration of programs under this Act by Indian tribes can be maximized.

(c) Reservation of Funds. — The Administrator shall reserve each fiscal year beginning after September 30, 1986, before allotments to the States under section 205(e), one-half of one percent of the sums appropriated under section 207. Sums reserved under this subsection shall be available only for grants for the development of waste treatment management plans and for the construction of sewage treatment works to serve Indian tribes.

(d) Cooperative Agreements. — In order to ensure the consistent implementation of the requirements of this Act, an Indian tribe and the State or States in which the lands of such tribe are located may enter into a cooperative agreement, subject to the review and approval of the Administrator, to jointly plan and administer the requirements of this Act.

(e) Treatment as States. — The Administrator is authorized to treat an Indian tribe as a State for purposes of title II and sections 104, 106, 303, 305, 308, 309, 314, 319, 401, 402, and 404 of this Act to the degree necessary to carry out the objectives of this section, but only if—

(1) the Indian tribe has a governing body carrying out substantial governmental duties and powers;

(2) the functions to be exercised by the Indian tribe pertain to the management and protection of water resources which are held by an Indian tribe, held by the United States in trust for Indians, held by a member of an Indian tribe if such property interest is subject to a trust restriction on alienation, or otherwise within the borders of an Indian reservation; and

(3) the Indian tribe is reasonably expected to be capable, in the Administrator's judgment, of carrying out the functions to be exercised in a manner consistent with the terms and purposes of this Act and of all applicable regulations.

Such treatment as a State may include the direct provision of funds reserved under subsection (c) to the governing bodies of Indian tribes, and the determination of priorities by Indian tribes, where not determined by the Administrator in cooperation with the Director of the Indian Health Service. The Administrator, in cooperation with the Director of the Indian Health Service, is authorized to make grants under title II of this Act in an amount not to exceed 100 percent of the cost of a project. Not later than 18 months after the date of the enactment of this section, the Administrator shall, in consultation with Indian tribes, promulgate final regulations which specify how Indian tribes shall be treated as States for purposes of this Act. The Administrator shall, in promulgating such regulations, consult affected States sharing common water bodies and provide a mechanism for the resolution of any unreasonable consequences that may arise as a result of differing water quality standards that may be set by States and Indian tribes located on common bodies of water. Such mechanism shall provide for explicit consideration of relevant factors including, but not limited to, the effects of differing water quality permit requirements on upstream and downstream dischargers, economic impacts, and present and historical uses and quality of the waters subject to such standards. Such mechanism should provide for the avoidance of such unreasonable consequences in a manner consistent with the objective of this Act.

(f) Grants for Nonpoint Source Programs. — The Administrator shall make grants to an Indian tribe under section 319 of this Act as though such tribe was a State. Not more than one-third of one percent of the amount appropriated for any fiscal year under section 319 may be used to make grants under this subsection. In addition to the requirements of section 319, an Indian tribe shall be required to meet the requirements of paragraphs (1), (2), and (3) of subsection (d) of this section in order to receive such a grant.

(g) Alaska Native Organizations. — No provision of this Act shall be construed to—

(1) grant, enlarge, or diminish, or in any way affect the scope of the governmental authority, if any, of any Alaska Native organization, including any federally-recognized tribe, traditional Alaska Native council, or Native Council organized pursuant to the Act of June 18, 1934 (48 Stat. 987), over lands or persons in Alaska;

(2) create or validate any assertion by such organization or any form of governmental authority over lands or persons in Alaska; or

(3) in any way affect any assertion that Indian country, as defined in section 1151 of title 18, United States Code, exists or does not exist in Alaska.

(h) Definitions. — For purposes of this section, the term—

(1) "Federal Indian reservation" means all land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation; and

(2) "Indian tribe" means any Indian tribe, band, group, or community recognized by the Secretary of the Interior and exercising governmental authority over a Federal Indian reservation.

SHORT TITLE

Sec. 519 This Act may be cited as the "Federal Water Pollution Control Act" (commonly referred to as the Clean Water Act).

[Former Sec. 518 redesignated as 519 by PL 100-4]

TITLE VI — STATE WATER POLLUTION CONTROL REVOLVING FUNDS

[Title VI added by PL 100-4]

Sec. 601. Grants to States for Establishment of Revolving Funds.

(a) General Authority. — Subject to the provisions of this title, the Administrator shall make capitalization grants to each State for the purpose of establishing a water pollution control revolving fund for providing assistance (1) for construction of treatment works (as defined in section 212 of this Act) which are publicly owned, (2) for implementing a management program under section 319, and (3) for developing and imple-