4. RCRA CLOSURE AND CORRECTIVE ACTION

4.1 Purpose and Scope
The goal of the Resource Conservation and Recovery Act (RCRA) Program (www.IN.gov/idem/4995.htm) is “cradle-to-grave” management of hazardous wastes, from the point of generation through final disposition. IDEM has an authorized hazardous waste management program that operates in lieu of, and under the oversight of, the U.S. EPA for delegated portions of the program, using U.S. EPA’s guidance documents. IDEM’s authorized RCRA program issues permits to facilities that store, treat, or dispose of hazardous wastes to:

- Ensure proper management of hazardous waste
- Ensure closure of inactive hazardous waste facilities
- Ensure post-closure care of closed units, if required

Regulatory requirements apply to permitting, closure, and post-closure of hazardous waste management units for treatment, storage or disposal facilities (TSDs)

Corrective Action requirements apply to any facilities that:
- Are operating or have operated as a TSD facility
- Had interim status at any time
- Operated without a permit when they should have had one

Those facilities are required to investigate and remediate contamination resulting from any activity at the facility. TSD facilities are required to implement corrective action for all releases of hazardous waste or hazardous constituents that may cause a threat to human health or the environment. Corrective action also can be required for releases of hazardous waste or hazardous constituents that have migrated beyond the owner or operator’s property boundary. While IDEM has the authority to require corrective action through enforcement orders under IC 13-22-13, EPA did not delegate their corrective action enforcement authority to any state agency. Therefore, EPA may compel corrective action through their federal enforcement authority under sections 7003 (emergency orders) or 3008(h) (corrective action orders) of RCRA at any time. EPA will generally confer with IDEM prior to filing a federal order pursuant to the 2004 RCRA Memorandum of Understanding (MOU). The 2004 MOU sets out both the conditions facilities must meet to be protected by it (the corrective action objectives), and the conditions under which U.S. EPA may overfile.

Further information can be found in the Remediation Closure Guide (Waste-0046-R1) (www.IN.gov/idem/4694.htm). The Remediation Closure Guide supplements RCRA standards. The Remediation Closure Guide provides guidance to determine the cleanup levels necessary to control, minimize, or eliminate threats to human health and the environment.

The new Closure Guidance, RCRA Closure and Corrective Action Program is under development at the time of this publication. Please check the RCRA Program website at www.IN.gov/idem/4995.htm for announcements and any new publications.
4.2 Rules and Laws

Figure 4.1 Laws and Rules Related to RCRA Corrective Action
4.3 Process Overview

[Diagram showing process overview with decision points and actions such as submitting a closure plan, interpreting data, and certifying clean or closed in place.]
4.4 How Does a Site Enter the Program?

At the time of closure, a permitted facility must implement the approved closure plan contained within their permit.

A facility regulated under RCRA Corrective Action may begin the process by implementing the permit conditions or by entering into a Voluntary Corrective Action Agreement or IDEM may issue a Corrective Action Order.

4.5 Emergency and Immediate Actions

Permit conditions require permitted facilities to notify the IDEM Spill Line (888) 233-7745, within 24 hours of any noncompliance which may endanger health or the environment.

A facility should handle emergencies that develop during corrective action remediation in accordance with the Health and Safety Plan.

4.6 How Is the Public Involved or Notified?

IDEM notifies the public of permit actions in accordance with 329 IAC 3.1-13-10 (www.IN.gov/legislative/ic_IAC). Permit actions are often of interest to a broad segment of the public who may or may not live in the immediate area. IDEM prepares a Fact Sheet, sends notices to all interested parties, announces the public notice via radio broadcast, publishes the notice in the largest newspaper near the facility, and publishes the notice on the IDEM website (www.IN.gov/idem/5474.htm). In order to most effectively reach the interested audience, IDEM prefers to publish the notice in a daily newspaper of large circulation.

When facilities propose corrective action remedies, IDEM seeks public input on the findings of the RCRA Facility Investigation (RFI) and the Corrective Measures Study (CMS) by publishing public notices in the nearest newspaper. This newspaper may have a smaller circulation and may not be printed daily, but is selected based on whether it will reach the nearest community members, who are most likely to be interested in and/or affected by the corrective action.

For new permits, prior to the submittal of an application, facilities are required to hold a public meeting in accordance with 329 IAC 3.1-13-18.

When a remedy will include the use of an Environmental Restrictive Ordinance (ERO), it is important to obtain feedback from the water utility and from the local government unit that has enacted or that has proposed adoption of the ERO. Consultants are encouraged to work directly with the local government unit. Because IDEM must rely on local governments to enforce EROs, municipal involvement throughout the review process will help IDEM evaluate the effectiveness of proposed EROs. Local governments should be contacted for information including:

- Current and future local water resource planning
- Procedures for granting exceptions and variances to the ERO
- Local point of contact for ERO monitoring and compliance
- Notification provisions for EROs
IDEM will notify local government units and water utilities in writing of any formal proposal to utilize an ERO at a particular site; and will request input on the items listed above if the information has not already been provided in the work plan.

4.7 Investigation

The RCRA Corrective Action Program identifies and prioritizes facilities that need to be investigated based on the National Corrective Action Prioritization System list, which U.S. EPA developed based on information compiled by subcontractors in the early 1990’s. For facilities that are subject to RCRA corrective action other than via an operating or post-closure permit, IDEM may initiate RCRA Corrective Action through a Corrective Action Order or Voluntary Agreement. If the findings of the RCRA Facility Assessment indicate the need for further investigation or corrective action, the facility will be required to perform a RCRA Facility Investigation (RFI). The RFI may propose that no further action is necessary. If, however, corrective measures are determined to be necessary, the facility must conduct a Corrective Measure Study (CMS) and submit the results in a CMS Report for IDEM approval.

A facility may perform the investigation and any necessary remediation simultaneously through the RCRA Program and the Voluntary Remediation Program, or through an enforcement tool such as an Agreed Order. Investigations are tailored to unit or site circumstances, and should generally be conducted in accordance with the Remediation Closure Guide (Waste-0046-R1) (www.IN.gov/idem/4694.htm).

4.8 Remedy Decision

After the investigation has been completed and public comment has been received, IDEM may approve or require revision of the CMS Report. IDEM will indicate its approval of the selected remedial option or combination of options by issuing a Final Decision and Response to Comments. If the RFI indicates no corrective measures are necessary, IDEM may public notice a Statement of Basis recommending “no further action.” Based on the administrative record and any public comments received, IDEM will make a Corrective Action Completion determination for the facility or a portion of the facility.

4.9 Remedial Action

RCRA facilities carry out the approved remedy by performing Corrective Measures Implementation Plan (CMIP). A facility with RCRA permitted hazardous waste management units must conduct closure of those units in accordance with the approved closure plan.

A facility must conduct RCRA corrective actions for releases to the environment from solid waste management units (SWMUs) or Areas of Concern (AOCs), in accordance with permit conditions, a Voluntary Corrective Action Agreement, or a Corrective Action Order.
4.10 Closure

A facility may accomplish closure of interim status and permitted hazardous waste management units by following the IDEM-approved closure plan. When the facility has completed closure, the facility will submit a Closure Certification Report. Upon review and acceptance of the Closure Certification Report, IDEM will issue a closure certification letter.

A Corrective Action Complete determination will be issued to facilities that have investigated and addressed all contamination related to SWMUs and AOCs. Corrective Action Complete determinations may be made “With” or “Without” controls in place. The approved controls may be engineered controls and/or administrative controls. Engineered controls will require the use of an administrative control such as an environmental restrictive covenant to ensure that the engineered control remains protective over time.

Further information can be found in the Remediation Closure Guide (Waste-0046-R1) (www.IN.gov/idem/4694.htm) and the upcoming Closure Guide RCRA Closure and Corrective Action Program (see Section 4.1).

4.11 Conditions Subsequent

When contamination above industrial risk-based levels remains in place, RCRA post-closure measures may be required. These measures will be discussed in the Closure Guide RCRA Closure and Corrective Action Program.

4.12 When Issues Arise

Issue resolution can be informal or formal. Most disagreements regarding the technical aspects of a proposed closure plan or corrective action remediation requirement can be resolved through discussions with the project manager and the other parties. The facility representative or consultant should first discuss project specific disagreements with the project manager. If it is not possible to resolve issues between the technical staff, the facility representative or consultant may ask the Hazardous Waste Permit Section Chief to intervene. An issue may be raised through the IDEM chain of command for resolution.

However, in some cases, formal dispute resolution procedures may be necessary. When facilities do not agree to perform the cleanup in accordance with an approved closure plan or voluntary corrective action agreement, the IDEM may issue an administrative order (Commissioner’s Order) or a Corrective Action Enforcement Order to compel a response and remediation.

A facility may appeal IDEM’s decisions using the procedures established in IC 4-21.5, Administrative Orders and Procedures (www.IN.gov/legislative/ic_iac).
### 4.13 Forms and Checklists

Sample copies of many forms, templates and checklists discussed in this Remediation Program Guide (RPG) may be found at the end of each Chapter of this guide. **The sample forms, templates and checklists in this guide are images only, may not be current, and cannot be completed electronically.** There are no forms specific to RCRA Corrective Action at this time.

Current State Forms that can be completed electronically are posted on the IDEM Forms website ([www.IN.gov/idem/5157.htm](http://www.IN.gov/idem/5157.htm)) as PDF fillable forms, Microsoft Word documents or Excel documents. Links to those forms and checklists as well as links to many other documents and websites have been provided where the document is discussed in the text.