

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
HAZARDOUS WASTE POST-CLOSURE PERMIT

Name of Permittee: Waste Management of Indiana, LLC

Facility Location: Wheeler Landfill, Wheeler, IN

EPA Identification Number: IND000708446

Issuance Date:

Expiration Date:

Authorized Activities

Pursuant to the Indiana Environmental Statutes (IC 13) and the rules promulgated thereunder and codified in Title 329 of the Indiana Administrative Code, Article 3.1 (329 IAC 3.1), the State permit conditions (hereinafter called the permit) of the Resource Conservation and Recovery Act of 1976 (RCRA) permit are issued to Waste Management of Indiana, LLC (hereinafter called the Permittee) to maintain and monitor a closed hazardous waste landfill located in Wheeler, Indiana, Section 2 and 3, Township 35N, Range 4W at latitude 41° 30' 59" N and longitude 87° 11' 56" W, Portage Indiana Quadrangle, on the U.S. Geological Survey topographic map.

The State RCRA program is authorized under 40 CFR Part 271 and Section 3006 of RCRA to administer the hazardous waste management program in lieu of the Federal program.

The Permittee is required to maintain and monitor the closed landfill for the duration of this permit.

Federal regulations 40 CFR Parts 260 through 270 have been incorporated by reference. Where exceptions to incorporated Federal regulations are necessary, these exceptions will be noted in the text of the State rule (329 IAC 3.1-1-7).

Applicable Regulations

The conditions of this post-closure permit were developed in accordance with the following applicable provisions of 329 IAC 3.1:

- ID & Listing of Hazardous Waste: 329 IAC 3.1-6, 40 CFR 261
- Standards for Owners and Operators of Treatment, Storage, and Disposal Facilities: 329 IAC 3.1-9, 40 CFR 264 Subpart A
- General Facility Standards: 329 IAC 3.1-9, 40 CFR 264 Subpart B
- Groundwater Protection: 329 IAC 3.1-9, 40 CFR 264 Subpart F
- Post-Closure: 329 IAC 3.1-9, 40 CFR 264 Subpart G
- Financial Requirements: 329 IAC 3.1-15
- Landfills: 329 IAC 3.1-9, 40 CFR 264 Subpart N
- Corrective Action for Solid Waste Management Units: 329 IAC 3.1-9, 40 CFR 264 Subpart S
- Hazardous Waste Permit Programs: 329 IAC 3.1-13, 40 CFR 270 Subparts A, B, C, and D
- Inspection and Investigation: 329 IAC 3.1-1-3 and 329 IAC 3.1-1-4
- Enforcement: 329 IAC 3.1-1-5

Permit Approval

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein (including those in any Attachments) and the applicable rules and requirements contained in 329 IAC 3.1 and 40 CFR 260 through 270 as specified in the permit. Applicable rules are those that are in effect on the date of issuance of this permit. 329 IAC 3.1-13; 40 CFR 270.32

This permit is based on the assumption that the information submitted in the permit application (VFC# 82871647), and any subsequent amendments (VFC# 82941022 & 82998985), is accurate and that the facility has been or will be constructed and/or operated as specified in the application. The IDEM Virtual File Cabinet (VFC)

may be viewed online from the IDEM homepage at www.IN.gov/idem.

Any inaccuracies found in the application may be grounds for the modification, revocation and reissuance, or termination of this permit (329 IAC 3.1-13-7), and potential enforcement action. The Permittee must inform the Indiana Department of Environmental Management (IDEM) of any deviation from, or changes in, the information in the application that would affect the Permittee's ability to comply with the applicable rules or permit conditions.

Pursuant to IC 13-15-5-3 and IC 4-21.5-3-5(f), this permit takes effect 15 days from receipt of this notice. If you wish to challenge this decision, IC 13-15-6-1 and IC 4-21.5-3-7 require that you file a Petition for Administrative Review. If you seek to have the effectiveness of the permit stayed during administrative review, you must also file a Petition for Stay. The petition(s) must be submitted to the Office of Environmental Adjudication, Government Center North, Room N103, 100 North Senate Avenue, Indianapolis, Indiana 46204, within 15 days after your receipt of this notice. The petition(s) must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision, or otherwise entitled to review by law. Identifying the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, or date of this notice will expedite review of the petition. Additionally, IC 13-15-6-2 requires that a Petition for Administrative Review must include:

1. the name and address of the person making the request;
2. the interest of the person making the request;
3. identification of any persons represented by the person making the request;
4. the reasons, with particularity, for the request;
5. the issues, with particularity, proposed for consideration at the hearing; and
6. identification of the terms of the permit that, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing licenses of the type granted or denied by the Commissioner.

Pursuant to IC 4-21.5-3-1(f), any document serving as a petition for review or review and stay must be filed with the Office of Environmental Adjudication. Filing of such a document is complete on the earliest of the following dates:

1. the date the petition is delivered to the Office of Environmental Adjudication, Government Center North, Room N103, 100 North Senate Avenue, Indianapolis, Indiana 46204;
2. the date of the postmark on the envelope containing the petition, if the petition is mailed by United States mail; or
3. the date the petition is deposited with a private carrier, as shown by a receipt issued by the carrier, if the petition is sent by private carrier.

The portions of the permit for which a Petition for Stay has been filed will take effect at the expiration of the additional 15 day period unless or until an Environmental Law Judge stays the permit in whole or in part. This permit will remain in effect until the expiration date unless revoked and reissued, modified, or terminated (329 IAC 3.1-13-7), or continued in accordance with IC 13-15-6-3.

This permit terminates and supersedes any other State hazardous waste management permit.

Issued this _____ day of _____ 2020.

By

Corey Webb
Deputy Assistant Commissioner
Office of Land Quality

Wheeler Landfill
Wheeler, Indiana
IND000708446

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I. STANDARD CONDITIONS

A. EFFECT OF PERMIT

The Permittee is authorized to maintain and monitor a closed hazardous waste landfill in accordance with the conditions of this State hazardous waste management post-closure permit. Any management of hazardous waste not authorized in this permit or the regulations is prohibited.

Pursuant to 329 IAC 3.1 and 40 CFR 260 through 270 (for HSWA Provisions), compliance with the conditions of this State hazardous waste management permit generally constitutes compliance for purposes of enforcement, with the Indiana Environmental Statutes and Resource Conservation and Recovery Act (RCRA), as amended by Hazardous Solid Waste Amendments (HSWA), except for those requirements not included in the Permit that become effective by statute, or that are promulgated under 329 IAC 3.1 and 40 CFR Section 260 through 270, restricting the placement of hazardous wastes in or on the land.

Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of Federal, State, or local laws or regulations.

Compliance with the terms of this permit does not constitute a defense to any Order issued or any action brought under Section 3013 or Section 7003 of RCRA; Section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601), commonly known as CERCLA, as amended by the Superfund Amendments and Reauthorization Act of 1986 (42 U.S.C. 9606(a)), commonly known as SARA, or any other law providing for protection of public health or the environment. 329 IAC 3.1-13; 40 CFR 270.4; IC 13

B. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated for cause as specified in 329 IAC 3.1-13-7. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition.

C. SEVERABILITY

The provisions of the permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit will not be affected thereby. In the event that a condition of this permit is stayed for any reason, all provisions of the permit severable from the stayed provisions will take effect. With regard to stayed provisions of the permit, the Permittee shall continue to comply with the related applicable and relevant Permitted standards in 329 IAC 3.1-9 and 329 IAC 3.1-15 from the previously issued permit until final resolution of the stayed condition, unless the Commissioner of the Indiana Department of Environmental Management (Commissioner) determines that compliance with the related applicable and relevant standards would be technologically incompatible with other conditions of this permit that have not been stayed. 329 IAC 3.1-13; 40 CFR 270.32

D. DUTIES AND REQUIREMENTS

1. Duty to Comply The Permittee must comply with all conditions of the State permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance, other than noncompliance authorized by an emergency permit, constitutes a violation of IC 13 and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. 329 IAC 3.1-13; 40 CFR 270.30(a); 270.61
2. Duty to Reapply The Permittee must submit a complete application for a new permit at least 180 days before this permit expires unless: a) the Permittee has been notified by the Commissioner that it is no longer required to have a State hazardous waste management permit; or b) permission for submittal on a later date has been granted by the Commissioner. The Commissioner will not grant permission for application to be submitted later than the expiration date of the existing permit. 329 IAC 3.1-13; 329 IAC 3.1-13-3(h); 40 CFR 270.30(b)
3. Permit Expiration The duration of this permit shall not exceed the expiration date of the permit, except as provided by 329 IAC 3.1-13-15. This permit, and all conditions herein, will remain in effect beyond the permit's expiration date if the Permittee has submitted a timely, complete application for a new permit and through no fault of the Permittee, the Commissioner has not issued a new permit with an effective date under 329 IAC 3.1-13-14 on or before the expiration date of the previous permit. 329 IAC 3.1-13-16

4. Need to Halt or Reduce Activity Not a Defense It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. 329 IAC 3.1-13; 40 CFR 270.30(c)
5. Duty to Mitigate In the event of non-compliance with this Permit, the Permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment. 329 IAC 3.1-13; 40 CFR 270.30(d)
6. Proper Operation and Maintenance The Permittee shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit. 329 IAC 3.1-13; 40 CFR 270.30(e)
7. Duty to Provide Information The Permittee shall furnish to the Commissioner, within a reasonable time, any relevant information that the Commissioner may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Commissioner, upon request, copies of records required to be kept by this permit. 329 IAC 3.1-13; 40 CFR 270.30(h); 264.74
8. Inspection and Entry The Permittee shall allow the Commissioner, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:
 - a. enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit (329 IAC 3.1-13; 40 CFR 270.30(i)(1));
 - b. have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit (329 IAC 3.1-13;

40 CFR 270.30(i)(2));

- c. inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit (329 IAC 3.1-13; 40 CFR 270.30(i)(3)); and
- d. sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by IC 13, any substances or parameters at any location (329 IAC 3.1-13; 40 CFR 270.30(i)(4)).

9. Monitoring and Reporting

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste to be analyzed must be the appropriate method from 329 IAC 3.1-6; 40 CFR 261, Appendix I. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, SW-846, (Third Edition as amended by updates) (as referenced in 40 CFR 260.11); Standard Methods for the Examination of Water and Wastewater, (the 19th Edition, 1995); or an equivalent method as specified in the attached Waste Analysis Plan. 329 IAC 3.1-13; 40 CFR 270.30(j)(1)
- b. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by this permit, and records of all data used to complete the application for this permit for a period of at least 3 years from the date of the sample, measurement, report, or record or for a period of time greater than 3 years as specified elsewhere in this permit. This period may be extended by request of the Commissioner at any time and is automatically extended during the course of any unresolved enforcement action regarding this facility. 329 IAC 3.1-13; 40 CFR 270.30(j)(2) and 40 CFR 264.74(b)
- c. Records of monitoring information shall include:
 - i. The date(s), exact place, and times of sampling or measurements (329 IAC 3.1-13-1; 40 CFR 270.30(j)(3)(i));

- ii. The individual(s) who performed the sampling or measurements (329 IAC 3.1-13-1; 40 CFR 270.30(j)(3)(ii));
 - iii. The date(s) analyses were performed (329 IAC 3.1-13-1; 40 CFR 270.30(j)(3)(iii));
 - iv. The individual(s) and laboratory who performed the analyses (329 IAC 3.1-13-1; 40 CFR 270.30(j)(3)(iv));
 - v. The analytical technique(s) or method(s) used. Analytical technique(s) or method(s) is defined as encompassing both the sampling technique (method) and method of chemical analysis used. This information must be provided in the Waste Analysis Plan (329 IAC 3.1-13-1; 40 CFR 270.30(j)(3)(v)); and
 - vi. The result(s) of such analyses, including QA/QC documentation (329 IAC 3.1-13-1; 40 CFR 270.30(j)(3)(vi)).
- d. Monitoring results shall be reported to the Commissioner at the intervals specified elsewhere in this permit. 329 IAC 3.1-13; 40 CFR 270.30(l)(4)
10. Reporting Planned Changes The Permittee shall give notice to the Commissioner as soon as possible of any planned physical alterations or additions to the permitted facility. 329 IAC 3.1-13; 40 CFR 270.30(l)(1)
11. Transfer of Permits This permit may be transferred to a new owner or operator only if it is modified or revoked and reissued pursuant to 329 IAC 3.1-13-1; 40 CFR 270.40(b) or 40 CFR 270.41(b)(2) to identify the new permittee and incorporate such other requirements as may be necessary under IC 13. Before transferring ownership or operation of the facility during its operating life, the Permittee shall notify the new owner or operator, in writing, of the requirements of 329 IAC 3.1 and IC 13. 329 IAC 3.1-13-1; 40 CFR 270.40
12. Reporting Anticipated Noncompliance The Permittee shall give advance notice to the Commissioner of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements. Such notification does not excuse the Permittee's duty to comply with permit requirements. 329 IAC 3.1-13-1; 40 CFR 270.30(l)(2)

13. Compliance Schedules Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date. 329 IAC 3.1-13-1; 40 CFR 270.30(l)(5)

14. Twenty-four Hour Reporting The Permittee shall report to the Commissioner any noncompliance with the permit that may endanger health or the environment. Any such information must be reported orally to the IDEM 24 hour emergency telephone number (888) 233-7745, within 24 hours from the time the Permittee becomes aware of the circumstances. This report must include the following:
 - a. Information concerning the release of any hazardous waste that may endanger public drinking water supplies.

 - b. Information concerning the release or discharge of any hazardous waste, or of a fire or explosion at the facility, that could threaten the environment or human health outside the facility. The description of the occurrence and its cause shall include:
 - i. Name, address, and telephone number of the owner or operator;
 - ii. Name, address, and telephone number of the facility;
 - iii. Date, time, and type of incident;
 - iv. Name and quantity of material(s) involved;
 - v. The extent of injuries, if any;
 - vi. An assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and

 - vii. Estimated quantity and disposition of recovered material that resulted from the incident.

A written submission shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The written submission shall contain: a description of the noncompliance and its cause; the period

of noncompliance (including exact dates and times); whether the noncompliance has been corrected; and if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Permittee need not comply with the 5 day written notice requirement if the Commissioner waives the requirement and the Permittee submits a written report within 15 days of the time the Permittee becomes aware of the circumstances. 329 IAC 3.1-13-1; 40 CFR 270.30(l)(6)

15. Other Noncompliance The Permittee shall report all instances of noncompliance not otherwise required to be reported under Condition I.D. 12-14 at the time monitoring reports, as required by this permit, are submitted. The reports shall contain the information listed in Condition I.D.14. 329 IAC 3.1-13-1; 40 CFR 270.30(l)(10)
16. Other Information When the Permittee becomes aware that the facility failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Commissioner, the Permittee shall promptly submit such facts or information. 329 IAC 3.1-13-1; 40 CFR 270.30(l)(11)
17. Submittal of Reports or Other Information All reports or other information required to be submitted by the terms of this permit must be sent to:

Indiana Department of Environmental Management
Office of Land Quality
Attn: Chief Hazardous Waste Permit Section
IGCN 1101
100 North Senate Avenue
Indianapolis, IN 46204

18. All other requirements contained in 40 CFR 270.30 not set forth herein are hereby fully incorporated in this permit.

E. SIGNATORY REQUIREMENT

All reports or other information requested by the Commissioner shall be signed and certified. 329 IAC 3.1-13-1; 40 CFR 270.11

F. CONFIDENTIAL INFORMATION

The Permittee may claim confidential any information required to be submitted by

this permit. Confidential claims must be submitted in accordance with 329 IAC 6.1. 329 IAC 3.1-13-4; IC 13-14-11-1

G. DOCUMENTS TO BE MAINTAINED AT FACILITY SITE

Except as noted, until the post-closure period is completed and certified by the owner/operator and a qualified professional engineer, the Permittee shall maintain at the facility the most recent version of the following documents required by this permit:

1. Groundwater Monitoring Plan and any document(s) referenced therein to describe on-site procedures (329 IAC 3.1-9, 40 CFR 264.97);
2. groundwater monitoring data (329 IAC 3.1-9, 40 CFR 264.97);
3. Post-Closure Plan (329 IAC 3.1-9, 40 CFR 264.118(c);
4. inspection schedules (329 IAC 3.1-9, 40 CFR 264.15(b)(2)); and
5. record of facility inspections kept for at least 3 years from the date of the inspection. 329 IAC 3.1-9; 40 CFR 264.15(b)(2); 264.15(d)

II. GENERAL FACILITY CONDITIONS

A. MAINTENANCE OF FACILITY

The Permittee shall maintain the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water that could threaten human health or the environment.

B. SECURITY

The Permittee shall comply with the security provisions described in the Post-Closure Plan, Attachment C, which is incorporated herein by reference. 329 IAC 3.1-9; 40 CFR 264.14(b) and (c)

C. GENERAL INSPECTION REQUIREMENTS

The Permittee shall follow the inspection schedule in Attachment B, which is incorporated herein by reference. The Permittee shall remedy any deterioration or malfunction discovered by an inspection. 329 IAC 3.1-9; 40 CFR 264.15(c)

D. RECORDKEEPING AND REPORTING

If the Permittee is a generator of hazardous waste, it shall comply with the biennial report requirements of 329 IAC 3.1-9 and 40 CFR 264.75.

E. POST-CLOSURE

The Permittee shall maintain post-closure of the facility in accordance with the Post-Closure Plan, Attachment C, which is incorporated herein by reference. 329 IAC 3.1-9; 40 CFR 264.117

F. COST ESTIMATE FOR FACILITY POST-CLOSURE

The Permittee's post-closure cost estimate, prepared in accordance with 329 IAC 3.1-15-5, is specified in the Post-Closure Plan, Attachment C.

1. The Permittee must revise the post-closure cost estimate whenever there is a change in the facility's post-closure plan. 329 IAC 3.1-15-5(c)

2. The Permittee must keep at the facility the latest post-closure cost estimate. 329 IAC 3.1-15-5(d)

G. FINANCIAL ASSURANCE FOR POST-CLOSURE CARE

The Permittee shall demonstrate continuous compliance with 329 IAC 3.1-15-6 by providing documentation of financial assurance, as specified by 329 IAC 3.1-15-10, in at least the amount of the cost estimates required by Permit Condition II.F. Changes in financial assurance mechanisms must be approved by the Commissioner. 329 IAC 3.1-15-6

H. INCAPACITY OF OWNERS OR OPERATORS, GUARANTORS, OR FINANCIAL INSTITUTIONS

The Permittee shall comply with 329 IAC 3.1-15-9 whenever necessary.

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III. LANDFILL CONDITIONS

A. WASTE IDENTIFICATION

The Permittee has disposed of the following wastes at the Wheeler Recycling and Disposal Facility.

<u>Waste Code</u>	<u>Description</u>	<u>Approx. Volume</u>
D008	TCLP for Lead	265 yd ³
F001	Spent halogenated solvents used in degreasing	7376.4 yd ³
K051	API separator sludge from the petroleum refining industry	7560.8 yd ³
K087	Decanter tar sludge from coking operations	3961.9 yd ³

Hazardous wastes, as well as municipal solid wastes, were disposed of in Wheeler Landfill from May 1981 through January 1983.

B. LOCATION INFORMATION

The landfill is located in the area as shown in Facility Description, Attachment A, incorporated herein by reference.

C. SURVEYING AND RECORD KEEPING

The owner or operator of a landfill must maintain the following items:

1. on a map, the exact location and dimensions, including depth, of each cell with respect to permanently surveyed benchmarks; and
2. the contents of each cell and the approximate location of each hazardous waste type within each cell. 329 IAC 3.1-9; 40 CFR 264.309

D. POST-CLOSURE

The owner or operator must comply with all post-closure requirements contained in 329 IAC 3.1-9 and 40 CFR 264.117 through 40 CFR 264.120 and 40 CFR 264.310.

E. REPORTING

The Permittee will submit records of the landfill inspections, conducted in accordance with Attachment B, and leachate generation data annually.

IV. CORRECTIVE ACTION CONDITIONS

A. STANDARD REQUIREMENTS

1. Corrective Action At The Facility

In accordance with Section 3004(u) of RCRA (IC13-22-2-5) and the regulations promulgated pursuant thereto, the Permittee must institute corrective action as necessary to protect human health and the environment for all releases of hazardous waste(s) and hazardous constituent(s) from any solid waste management unit (SWMU) or area of concern (AOC) at the facility, regardless of the time the waste was placed in such units.

2. Corrective Action Beyond The Facility Boundary

In accordance with Section 3004(v) of RCRA (IC 13-22-2-5) and the regulations promulgated pursuant thereto, the Permittee must implement corrective action(s) beyond the facility property boundary, where necessary to protect human health and the environment, unless the Permittee demonstrates to IDEM's satisfaction that, despite the Permittee's best efforts, the Permittee was unable to obtain the necessary permission to undertake such actions. The Permittee is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where off-site access is denied.

3. Applicable Guidance

The Permittee shall use the principles and procedures set forth in IDEM's 2012 Remediation Closure Guide, and all revisions and additions thereto, or other risk-based methodologies approved by IDEM's Office of Land Quality Permits Branch, as the basis for selecting risk-based endpoints that will be used for the investigations, studies, interim measures, and corrective measures under the permit. Additional guidance includes IDEM's Remediation Program Guide, USEPA's "Test Methods for Evaluating Solid Waste" (SW-846, the 3rd Edition, or most recent edition, and the most recent updates), and Standard Methods for the Examination of Water and Wastewater (the 23rd Edition, or most recent edition).

4. Notification

a. Field Activities

The Permittee must notify IDEM at least 7 days before engaging in any field

activities, such as well drilling, installation of equipment, or sampling. At IDEM's request, the Permittee must provide IDEM or its authorized representative split samples of all samples collected by the Permittee pursuant to this permit. Similarly, at the Permittee's request, IDEM will allow the Permittee or its authorized representatives to take split or duplicate samples of all samples collected by IDEM under this permit.

b. Submittals

One hard copy and one PDF copy on CD of all reports, plans, and other submissions relating to or required by this permit must be sent to:

Indiana Department of Environmental Management
Office of Land Quality
Hazardous Waste Permit Section
IGCN 1101
100 N. Senate Avenue
Indianapolis, IN 46204

B. IDENTIFICATION OF SWMUs

1. Definitions

- a. "Area of Concern (AOC)" means a unit or area, existing or historical, that could potentially produce unacceptable exposures or be a potential source of groundwater contamination, but the unit or area does not meet the definition of a solid waste management unit.
- b. "Facility" means all contiguous property under the control of the owner/operator of a facility seeking a permit under RCRA Subtitle C.
- c. "Hazardous waste," as defined in IC 13-11-2-99, means a solid waste or combination of solid wastes that may cause or significantly contribute to an increase in: mortality, serious irreversible illness, or an incapacitating reversible illness; or pose a substantial present or potential hazard to human health or the environment. This term is further defined in 40 CFR Part 261.3.
- d. "Hazardous constituent" means any constituent identified in Appendix VIII of 40 CFR Part 261, or any constituent identified in Appendix IX of 40 CFR Part 264.

- e. "Release" means any spilling, leaking, pouring, emitting, emptying, discharging, injecting, pumping, escaping, leaching, dumping, or disposing of hazardous wastes or hazardous constituents into the environment, including the abandonment or discarding of barrels, containers, and other closed receptacles containing hazardous wastes or hazardous constituents.
- f. "Solid waste" means any garbage, refuse, sludge, or other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, or agricultural operations or from community activities. This term is further defined in 40 CFR Part 261.2.
- g. "Solid Waste Management Unit (SWMU)" means any discernable unit, permitted or unpermitted, existing or historical, at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include any area at a facility at which solid wastes have been routinely and systematically released.

2. SWMUs and AOCs Requiring Corrective Action

Based on the information contained in the administrative record, corrective action activities for the solid waste portion of the landfill (Areas 2 – 4) are deferred while being performed under the post-closure care of the hazardous waste landfill. For all other known SWMUs and AOCs at the facility, corrective action is not required at this time. A map showing the location of the SWMUs and AOCs is given in Attachment E.

C. CONDITIONS PERTAINING TO ALL SWMUs AND AOCs

1. Notification Requirements

The Permittee must notify IDEM, within 30 days of discovery, of the following information for any new SWMU or AOC identified at the facility, in accordance with 329 IAC 3.1-13-1 and 40 CFR 270.14(d):

- a. the location of the unit on the site topographic map;
- b. designation of the type of unit;
- c. general dimensions and structural description (supply any available

drawings);

- d. when the unit was operated; and
- e. specifications of all waste(s) that have been managed at the unit.

2. Release Information

The Permittee must submit to IDEM, within 30 days of discovery, all available information pertaining to any release of hazardous waste(s) and hazardous constituent(s) from any new or existing SWMU or AOC.

3. Corrective Action

IDEM will review the information provided as required in the above permit conditions, and may, as necessary, require investigations and/or corrective measures. The Permittee must submit a written RFI Work Plan to the Section Chief of the Hazardous Waste Permit Section in accordance with Condition IV.D.2.

D. CORRECTIVE ACTION ACTIVITIES

The major tasks and required submittal dates are shown below. Additional tasks and associated submittal dates may also be specified in the Corrective Action Activities Schedule (Condition IV.F.).

1. Interim Measures (IM)

- a. The Permittee may undertake interim measure activities to prevent or minimize the further spread of contamination while long-term remedies are pursued. An IM Work Plan must be submitted to IDEM for approval before the Permittee initiates any remedial activity. The interim measure(s) must be capable of being integrated into any long-term solution at the facility.
- b. While performing work pursuant to Permit Condition IV, if the Permittee identifies an immediate threat to human health or the environment, the Permittee must immediately notify the Section Chief orally and in writing within 7 days summarizing the immediacy and magnitude of the potential threat to human health or the environment.

This notification should be made to:

Indiana Department of Environmental Management
Office of Land Quality
Attn: Chief, Hazardous Waste Permit Section
IGCN 1101
100 North Senate Avenue
Indianapolis, IN 46204
800-451-6027 or 317-232-8603

Upon receiving this information, IDEM will determine if an IM Work Plan is necessary. If one is necessary, the Section Chief will send a notice to the Permittee requiring the submission of an IM Work Plan. Within 21 days after receiving this notice, the Permittee must submit to the Section Chief a work plan for approval that identifies the interim measure(s).

The work plan should be consistent with and integrated into any long-term solution at the facility. In addition, the following Interim Measure schedule must be initiated:

- i. Within 5 days of identifying an immediate threat to human health or the environment, the Permittee must provide an alternate water supply to parties that have a contaminated water supply well;
- ii. Within 7 days of identifying an immediate threat to human health or the environment, the Permittee must submit a report to the Section Chief detailing the activity pursued and a plan for further Interim Measures activity;
- iii. Within 7 days following the Section Chief's transmission of comments, the Permittee must revise the plan in accordance with the comments; and
- iv. Within 7 days following IDEM's approval or modification of the plan, the Permittee must implement the revised plan in accordance with the schedule therein.

2. RCRA Facility Investigation (RFI)

The Permittee must conduct an RFI to thoroughly evaluate the nature and extent of the release of hazardous waste(s) and hazardous constituent(s) from

all SWMUs and AOCs identified as requiring an RFI.

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a. RFI Work Plan

The Permittee must submit a written RFI Work Plan to the Section Chief within 90 days after written notification by the Section Chief that further investigation is necessary.

IDEM will approve, modify and approve, or disapprove and provide comments on the work plan in writing to the Permittee. Within 60 days of receipt of such comments, the Permittee must provide a response to IDEM's comments.

b. RFI Implementation

Within 30 days of IDEM's written approval of the RFI Work Plan, the Permittee must implement the plan according to the terms and schedule contained therein.

c. RFI Report

Within 90 days after the completion of the RFI, the Permittee must submit an RFI Report to the Section Chief. The RFI Report must describe the procedures, methods, and results of the RFI. The report must contain adequate information to support further corrective action decisions at the facility. After the Permittee submits the RFI Report, IDEM will either approve or disapprove the report in writing. If IDEM disapproves the report, the Section Chief will notify the Permittee in writing of the deficiencies. The Permittee has 60 days after receipt of IDEM's comments to submit a revised RFI Report to the Section Chief.

3. Determination of No Further Action

a. Permit Modification

After completion of the RFI, and based on its results and other relevant information, the Permittee may submit an application to the Section Chief for a permit modification under 40 CFR 270.42 to terminate the corrective action tasks of the Corrective Action Activities Schedule for all or a portion of the facility. Tasks identified in Permit Condition IV.F. for the SWMUs, solid waste management areas (a group of SWMUs in an area to be addressed as a single unit), and/or the AOCs identified in the modification (for a determination of no further action) will be stayed pending a decision by IDEM. This permit modification must

demonstrate that there are no releases of hazardous waste(s), including hazardous constituents, from SWMUs or AOCs that are the subject of the modification at the facility that pose a threat to human health or the environment.

If, based upon review of the Permittee's request for a permit modification, the results of the completed RFI, and other information, IDEM determines that releases or suspected releases that were investigated either are nonexistent or do not pose a threat to human health or the environment, IDEM will grant the requested modification.

b. Further Investigations

A determination of no further action will not preclude IDEM from requiring further investigations, studies, or remediation at a later date, if new information (including different risk assumptions) or subsequent analysis indicates that a release or likelihood of a release from a SWMU or AOC at the facility is likely to pose a threat to human health or the environment. In such a case, IDEM will initiate a modification to the Corrective Action Activities Schedule to rescind the determination made in accordance with the above permit condition. Additionally, IDEM may determine that there is insufficient information on which to base a determination, and may require the Permittee to perform additional investigations as needed to generate the needed information.

4. Community Relations Plan

The Permittee must prepare and submit to IDEM for review and approval a Community Relations Plan for the dissemination of information to the public regarding investigation activities and results for offsite activities. The plan must be consistent with "IDEM's Guide for Citizen Participation" and U. S. EPA's "1996 RCRA Public Participation Manual."

5. Corrective Measures Study (CMS) and Remedy Selection

If IDEM determines, based on the results of the RFI and other relevant information, that corrective measures are necessary, the Section Chief will notify the Permittee in writing that the Permittee must conduct a CMS. The purpose of the CMS is to develop and evaluate the corrective action alternative(s) that will satisfy the performance objectives specified by IDEM. The CMS must be conducted within 60 days of notification by the Section Chief that the CMS is required. This period of time may be extended by the

Section Chief if necessary to adequately complete the CMS. Note that this process can be significantly shortened by the selection of presumptive remedies (i.e., remedies that are known to be effective). Additional tasks and associated submittal dates may also be specified in the Corrective Action Activities Schedule (Condition IV.F.).

a. CMS Report

Within 60 days after the completion of the CMS, the Permittee must submit a CMS Report to the Section Chief. The CMS Report must summarize the results of the investigations for each remedy studied and must include an evaluation of each remedial alternative. After the Permittee submits the CMS Report, IDEM will either approve, modify and approve, or disapprove the Report. If IDEM disapproves the report, the Section Chief will notify the Permittee in writing of the deficiencies. The Permittee has 60 days after receipt of IDEM's comments to submit a revised CMS Report to the Section Chief. The CMS Report, as approved, becomes an enforceable condition of this permit.

b. CMS Remedy Selection

IDEM will approve a corrective measure for implementation based on the following factors. The corrective measure selected for implementation must: (1) be protective of human health and the environment; (2) attain media cleanup standards; (3) control the source(s) of releases so as to reduce or eliminate further releases of hazardous waste(s) (including hazardous constituent(s)); (4) minimize the transfer of contamination from one environmental medium to another; and (5) comply with all applicable standards for management of wastes.

If two or more of the corrective measures studied meet the threshold criteria set out above, IDEM will choose among alternatives for implementation by considering remedy selection factors including: (1) long-term reliability and effectiveness; (2) the degree to which the corrective measure will reduce the toxicity, mobility or volume; (3) the corrective measure's short-term effectiveness; (4) the corrective measure's implementability; and (5) the relative cost associated with the alternative. In selecting the corrective measure(s), IDEM may also consider such other factors as may be presented by site-specific conditions.

6. Permit Modification

Within 30 days of IDEM's approval of a corrective measure, the Permittee will initiate a permit modification, pursuant to 40 CFR 270.41 or 40 CFR 270.42, respectively, for the implementation of the corrective measure(s) selected. No permit modification fees are required for any modifications submitted under this condition.

7. Corrective Measures Implementation (CMI)

a. If the corrective measure(s) recommended in the Corrective Measures Study Report is (are) not the corrective measure(s) approved by IDEM after consideration of public comments, the Section Chief will inform the Permittee in writing of the reasons for such decision. Within 30 days after the effective date of the permit modification, the Permittee must implement the corrective measure(s).

b. Financial Assurance

As part of the permit modification of this permit to incorporate the CMI, the Permittee must provide financial assurance in the amount specified in the IDEM-approved CMS Report as required by 40 CFR 264.101(b) and (c).

8. Incorporation of Plans and Reports

All approved plans and reports prepared for this permit will be incorporated into this permit on the date the Section Chief or his/her designee approves such plan or report.

E. DISPUTE RESOLUTION

1. If IDEM disapproves or modifies and approves any submission required by Condition IV of the permit, IDEM will provide the Permittee with a written notice setting forth the reasons for the disapproval or modification and approval.
2. If the Permittee disagrees, in whole or in part, with any written decision concerning IDEM's disapproval or modification and approval of any submission required by Condition IV of the permit, the Permittee must notify IDEM of the dispute. The Permittee and IDEM must informally, and in good faith, endeavor to resolve the dispute.

3. If the Permittee and IDEM cannot resolve the dispute informally, the Permittee may pursue the matter formally by submitting a written statement of position to the Commissioner or his/her designee, within 28 days of receipt of IDEM's written disapproval or modification and approval. The Permittee's statement of position must set forth the specific matters in dispute, the position that the Permittee asserts should be adopted as consistent with the requirements of the permit, the basis for the Permittee's position, and must include any supporting documentation. If the Permittee fails to follow any of the requirements contained in this paragraph, then it will have waived its right to further consideration of the disputed issue. IDEM's decision to discontinue further consideration under this condition will constitute a final agency action, which is subject to review under IC 4-21.5.
4. IDEM and the Permittee will have an additional 14 days from the date of the Commissioner's receipt of the Permittee's statement of position to meet or confer to attempt to resolve the dispute. This time period may be extended by mutual agreement of the Permittee and IDEM. If agreement is reached, the Permittee must submit a revised submission, if necessary, and must implement the submission in accordance with such agreement.
5. If IDEM and the Permittee are not able to reach agreement within the 14 day period, or such longer period corresponding to IDEM's extension for good cause, the Permittee may submit any additional written arguments and evidence not previously submitted, or further explain any arguments or evidence previously submitted, to the Commissioner. Based on the record, the Commissioner, or delegate, will thereafter issue a written decision that will include a response to the Permittee's arguments and evidence. This written decision will constitute a final agency action, which is subject to review under IC 4-21.5.
6. Notwithstanding the invocation of this dispute resolution procedure, the Permittee must proceed to take any action required by those portions of the submission and of the permit that IDEM determines are not substantially affected by the dispute. The activity schedule for those portions of the submission and of the permit that are substantially affected by the dispute will be suspended during the period of dispute resolution.

F. CORRECTIVE ACTION ACTIVITIES SCHEDULE FOR NEWLY IDENTIFIED SWMUs and AOCs

<u>Activity</u>	<u>Due Date</u>
1. IM Work Plan	21 days after receiving IDEM's notice
2. RFI Work Plan	90 days after receiving IDEM's notice
3. Notification of newly identified SWMUs of AOCs	30 days after discovery
4. RFI Work Plan for newly identified SWMUs or AOCs	90 days after receiving IDEM's notice
5. RFI Work Plan modification	60 days after receiving IDEM's comments
6. RFI Implementation	30 days after RFI Work Plan approved
7. RFI Report	90 days after completion of RFI
8. RFI Report Modification	60 days after receiving IDEM's comments
9. Progress Reports	Semi-annually; to coincide with groundwater reporting if possible
10. CMS Report	60 days after receiving IDEM's notification
11. CMS Report Modification	60 days after receiving IDEM's comments
12. Permit Modification for Corrective Measure Implementation	30 days after receiving IDEM's notification (modification may be a Class 1, 2, or 3 at IDEM's discretion)
13. CMI Program Plan	30 days after effective date of permit modification
14. CMI Program Plan Modification	30 days after receiving IDEM's comments
15. CMI Reports	Semi-annually; to coincide with groundwater reporting if possible

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| 16. CMI Report Modification | 30 days after receiving IDEM's comments |
| 17. Operation and Maintenance Progress Reports | Semi-annually; to coincide with groundwater reporting if possible |

IDEM may, at the facility's request, grant extensions to the time frames listed in this section. IDEM-approved time extensions will not require a permit modification.

G. FORCE MAJEURE

"Force Majeure," for purposes of this Permit, is defined as any event arising from causes beyond the control of the Permittee that delays or prevents the performance of any obligation under this Permit despite Permittee's best efforts to fulfill the obligation. The requirement that the Permittee exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure event as it is occurring and best efforts to address the effects of any potential force majeure event as it is occurring and following the potential force majeure event, such that the delay is minimized to the greatest extent possible. "Force Majeure" does not include financial inability to complete the work required by this Permit nor any increases of costs to perform the work.

The Permittee must notify IDEM by calling within 3 calendar days and by writing no later than 7 calendar days after any event that the Permittee contends is a force majeure. Such notification must describe the anticipated length of the delay, the cause or causes of the delay, the measures taken or to be taken by the Permittee to minimize the delay, and the timetable by which these measures will be implemented. The Permittee must include with any notice all available documentation supporting its claim that the delay was attributable to a force majeure. Failure to comply with the above requirements will preclude the Permittee from asserting any claim of force majeure for that event. The Permittee will have the burden of demonstrating that the event is a force majeure. The decision of whether an event is a force majeure will be made by IDEM. Said decision will be communicated to the Permittee.

If a delay is attributable to a force majeure, IDEM will extend, verbally or in writing, the time period for performance under this Permit by the amount of time that is attributable to the event constituting the force majeure. Any final determination by IDEM under this section will be reviewable under IC 4-21.5. However, if the Permittee appeals an IDEM decision concerning force majeure, such appeal will not toll the accrual of penalties during the review of that appeal.

V. GROUNDWATER MONITORING CONDITIONS

Condition V of this permit addresses groundwater monitoring under the hazardous waste rules (i.e., 329 IAC 3.1 and 40 CFR 264).

A. WELL LOCATION AND CONSTRUCTION

1. The Permittee must maintain the groundwater monitoring wells specified below, at the locations shown in Figure A-2 of Permit Attachment A throughout the effective term of this permit.

The groundwater monitoring system for the facility consists of wells: G01BR, G02BR, G03BR, G05BR, G07A, G07BR, G11B, G12B, G13, G14, G14D, G15 and G16. The construction specifications contained in the Groundwater Sampling Plan in Permit Attachment D documents the construction of the wells. Construction of any new wells must follow the specifications summarized in the Groundwater Sampling Plan in Permit Attachment D.

2. The Permittee must maintain the groundwater monitoring wells identified in Permit Condition V.A.1 in accordance with the maintenance requirements specified in the Groundwater Sampling Plan in Permit Attachment D.
3. The Permittee must submit a permit modification for any additional borings, groundwater monitoring wells or piezometers, and the sealing of any wells or piezometers necessary to maintain compliance with 40 CFR 264.97 and 264.98. This proposal must contain:
 - a. The most recent potentiometric maps (with the water level recordings for all piezometers and wells displayed) representative of each hydrostratigraphic unit under the facility.
 - b. Table of water levels for all wells and piezometers.
 - c. A minimum of two flow nets, one north-south cross section and one east-west cross section, plus any others necessary to encompass all hydrostratigraphic units if sufficient information is available. The potentiometric surface maps,

one for the base of the A zone and one for the base of the B zone will be completed semi-annually after the first year of monitoring.

- d. Representative groundwater flow rates for each hydrostratigraphic unit.

Any of these requirements may be modified or waived upon approval of the Commissioner.

4. The Permittee must maintain a groundwater monitoring system at the point of compliance. Based on the data generated during the hydrogeological study (included as Appendix 11 of the November 22, 1991, application (VFC # 83022959), the point of compliance is the existing 13 groundwater monitoring wells listed in Permit Condition V.A.1.
5. Access ways to each groundwater monitoring well or piezometer must be maintained and passable throughout each season of the year. The use of these access ways must be restricted to persons authorized by the owner, operator, or permittee.

B. SAMPLING AND ANALYSIS PROCEDURES

The Permittee shall obtain and analyze samples from the groundwater monitoring wells specified in Permit Condition V.A.1 using the techniques and procedures described in the Groundwater Sampling Plan and the Quality Assurance Project Plan in Permit Attachment D for sample collection, preservation, analysis, and chain-of-custody.

C. GROUNDWATER ELEVATION

1. The Permittee must determine the water level in each groundwater monitoring well and piezometer, specified in Permit Condition V.A.1, each time the groundwater is sampled in accordance with Permit Condition V.D. The Permittee must determine groundwater flow rates and direction and submit the results of these determinations to the Commissioner by August 1 of the following year per 40 CFR 264.98(e) and 40 CFR 264.77(c).

Flow rate and direction will be determined by mapping two potentiometric surfaces for each sampling event. One potentiometric surface map will be constructed for wells completed at the base of

the A zone. An additional potentiometric surface map will be constructed for wells completed at the base of the upper member of the B zone and wells completed in the shale gravels. The contour interval for the potentiometric surface maps will be no greater than 1.0 foot.

2. The Permittee must submit a permit modification for any additional wells or piezometers needed if the ground water flow direction evaluation under Permit Condition V.C.1 indicates that the monitoring wells are no longer adequately monitoring the compliance point specified in Permit Condition V.A.4. This permit modification must be submitted to the Commissioner along with the report required under Permit Condition V.C.1.

D. DETECTION MONITORING PROGRAM

1. The Permittee must perform detection monitoring for the parameters, as specified in Permit Attachment D, semiannually throughout the life of the post-closure period for this portion of the facility. Notwithstanding, the sampling frequency shall be such that, based on the velocity, flow direction, and the distance to the property boundary, contaminants would not leave the property without detection within the semiannual sampling period.
2. The landfill will conduct a detection monitoring program under the hazardous waste (i.e., 329 IAC 3.1) rules. The detection monitoring program for the hazardous waste program is described in the body of this permit and Permit Attachment D. The Detection Monitoring parameters are listed in Table 4 of the Groundwater Sampling Plan in Permit Attachment D.

E. BACKGROUND DETERMINATIONS

1. The Permittee must establish background values for the detection monitoring indicator parameters listed in Table 4 of the Groundwater Sampling Plan in Permit Attachment D in accordance with procedures described in the Statistical Plan in Permit Attachment D.
2. The Permittee must analyze samples collected during the first sampling event following installation of a new, non-replacement groundwater monitoring well for the parameters listed in 40 CFR 264, Appendix IX. Analytical methods provided in the most recent

edition of Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods, SW 846 will be utilized. If any Appendix IX constituents are detected above the PQLs in the initial sample, the Permittee may resample the well to confirm their presence.

3. If Appendix IX parameters are confirmed, then the Permittee must follow the notification, reporting, and compliance requirements of Permit Condition V.G.
4. Background sampling for new groundwater monitoring wells, not installed as replacements for existing wells, shall be conducted on a quarterly basis for two years starting with the first sampling event after installation. After obtaining eight quarters of data, the indicator background values shall be computed according to procedures described in the Statistical Plan in Permit Attachment D. Groundwater sampling and adjustments to background values shall be performed in accordance with the Statistical Plan in Permit Attachment D after the first two years.
5. If a new monitoring well is installed as a replacement for an existing well and is placed within ten feet of the replaced well, then 40 CFR 264, Appendix IX sampling will not be required during the first sampling event. Indicator background values for the new well shall be those established for the replaced well, with updates performed in accordance with the Statistical Plan in Permit Attachment D. Detection monitoring, in these cases, shall commence with the first sampling event after installation.

F. STATISTICAL PROGRAM

1. Groundwater monitoring wells G01BR and G05BR are upgradient monitoring wells. Groundwater samples are collected from G01BR and G05BR, and the results are compared to intrawell statistical limits. However, these wells were installed to provide information on groundwater quality upgradient from the facility. Changes in groundwater quality in G01BR and G05BR are not considered attributable to the landfill; rather, changes in parameter concentrations in G01BR and G05BR are interpreted to result from the influences upgradient from the landfill. The Permittee will not initiate a verification resampling program or an assessment monitoring program based on results from G01BR or G05BR.

2. Statistical analysis of groundwater data collected at the facility will be performed using the procedures described in the Statistical Plan in Permit Attachment D. For existing groundwater monitoring wells, background data collected since 1989 was used in preparing parametric and non-parametric prediction limits for each indicator constituent listed in Table 4 of the Groundwater Sampling and Analysis Plan at each well. Background data for new wells will be collected according to the procedures described in Permit Condition V.E. Statistical testing procedures include:

- a. For the indicator parameters identified in Permit Condition V.E.1, which have intrawell prediction limits established in accordance with the Statistical Plan in Permit Attachment D, the Permittee must conduct the following evaluation:

The prediction limit value that was established for the indicator parameters will be compared to the value from each scheduled sampling event for that well.

- b. If the analytical results of none of the parameters presented in the Groundwater Sampling Plan in Permit Attachment D exceed the prediction limit value, then the conclusion will be that a statistically significant increase has not occurred for the well in question and no further action will be required.
- c. If the analytical result of any indicator parameter in a downgradient well exceeds the statistical limit value, then the Permittee will collect as many as two independent verification samples within the time frames identified in Permit Condition V.G.1. If the result of the first verification sample does not exceed the corresponding background value, then the conclusion will be that a significant increase has not occurred and a second verification sample is not necessary. In the event the first verification sample exceeds the corresponding background value, then the Permittee will collect a second independent verification sample. If the result of the second verification sample does not exceed the background value, then the conclusion will be that a significant increase has not occurred. In the event the second verification sample exceeds the corresponding background value, then the conclusion will be that a statistically significant increase has occurred for the well in question and the Permittee must

proceed to comply with Permit Condition V.G.

- d. Providing there are no confirmed statistical increases, the Permittee must continue detection monitoring in accordance with Permit Condition V.D.

G. RECORDKEEPING AND REPORTING

The Permittee must enter into the operating record all monitoring, testing, and analytical data obtained in accordance with Permit Attachment D.

All samples, chemical analyses, and statistical analyses required for the monitoring program described in Permit Attachment D will be collected semiannually during the first and third quarters of each calendar year. All data collected for the groundwater monitoring program and all analytical statistical results will be submitted to the IDEM Office of Land Quality (OLQ) within 120 days of the sampling event and include an electronic copy of the sampling results in accordance with the electronic data submittal guidelines included in the Quality Assurance Project Plan in Permit Attachment D.

If the Permittee determines, based on the results of the statistical evaluation, that there is a statistically significant increase for any of the parameters specified in Table 4 of the Groundwater Sampling Plan in Permit Attachment D at any monitoring well at the compliance point, the Permittee must:

1. Notify the Commissioner of this finding in writing indicating what parameters and wells have shown statistical increases and provide all associated statistical calculations. The Permittee must submit this notification to IDEM within seven days of the date of the determination of a statistically significant increase. This statistically significant increase determination must be made in a time period not to exceed 120 days from the date of the initial sampling event in which the increase was discovered.
2. Immediately sample the groundwater in all wells and determine the concentration of all constituents identified in 40 CFR 264, Appendix IX such that the results will accompany the permit modification required by Permit Condition V.G.3, below. The Permittee may re-sample the wells within one month to confirm the initial results as outlined in 40 CFR 264.98(g).

3. Submit to the Commissioner of IDEM an application for a permit modification to establish a compliance monitoring program meeting the requirements of 40 CFR 264.99.

The application will be submitted to the Commissioner within 90 days of the date of the notification required under Permit Condition V.G.1. Furthermore, the application must include the following information:

- a. An identification of the concentration of any 40 CFR 264, Appendix IX constituents found in the groundwater at each monitoring well at the compliance point;
 - b. Any proposed changes to the groundwater monitoring system at the facility necessary to meet the requirements of 40 CFR 264.99;
 - c. Any proposed changes to the monitoring frequency, sampling and analysis procedures, or methods or statistical procedures used at the facility necessary to meet the requirements of 40 CFR 264.99; and
 - d. For each hazardous constituent found at the compliance point, a proposed concentration limit under 40 CFR 264.94(a)(1) or (2) as revised by 329 IAC 3.1-9-2(10), or a notice of intent to seek an alternate concentration under 40 CFR 264.94(b).
4. Within 180 days of the date of the notification required under Permit Condition V.G.1., submit to the Commissioner:
 - a. All data necessary to justify any alternate concentration sought under 40 CFR 264.94(b); and
 - b. An engineering feasibility plan for a corrective action program necessary to meet the requirements of 40 CFR 264.100, unless:

- i. All hazardous constituents identified under Permit Condition V.G.2 above are listed in 40 CFR 264.94 and their concentrations do not exceed the respective values given in Table 1 of 329 IAC 3.1-9-2(10); or
 - ii. The Permittee has sought alternate concentration limit under 40 CFR 264.94(b) for every hazardous constituent identified under Permit Condition V.G.2.
5. If the Permittee determines, pursuant to Permit Condition V.F., that there is a statistically significant increase above the background values for the detection monitoring parameters specified in the Groundwater Sampling Plan in Permit Attachment D, the Permittee may demonstrate that a source other than a regulated unit caused the increase or that the increase resulted from error in sampling, analysis, or evaluation. However, the owner or operator is not relieved of the requirement to submit a permit modification application within 90 days of the date of the notification required under Permit Condition V.G.1., unless the demonstration made under this paragraph successfully shows that a source other than a regulated unit caused the increase, or that the increase resulted from error in sampling, analysis, or evaluation.
To make this demonstration, the Permittee must:
 - a. Submit notification to the Commissioner in writing within seven (7) days of determining a statistically significant increase at the compliance point, and within one hundred and twenty (120) days of the initial sampling event in which the increase was discovered, that the Permittee intends to make a demonstration.
 - b. Within 90 days of the notification required under Permit Condition V.G.5.a., the Permittee must submit, for approval, a report to the Commissioner of the IDEM, demonstrating that a source other than a regulated unit caused the increase, or that the increase resulted from error in sampling, analysis, or evaluation.
 - c. Submit to the Commissioner for approval, an application for a permit modification to make any appropriate changes to the detection monitoring program. This application will be submitted within 90 days of the date of the notification

required under Permit Condition V.G.5.a.

- d. Continue to monitor in accordance with the detection monitoring program at the facility.

H. PERMIT MODIFICATION

If the Permittee determines that the detection monitoring program no longer satisfies the requirements of 40 CFR 264.98, the Permittee must, within 90 days, submit an application for a permit modification to make any appropriate changes to the program which will satisfy the regulations.

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VI. COMPLIANCE SCHEDULE CONDITIONS

1. Within 180 days after the issuance of this permit, the Permittee must submit an updated Post-Closure Cost Estimate that incorporates the maintenance and monitoring costs for the solid waste portion of the landfill (Areas 2 through 4). The financial assurance should be updated, accordingly.

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Attachment A – Facility Description

A-1 General Description

40 CFR 270.14(b)(1)

Wheeler Recycling and Disposal Facility (Wheeler RDF) was purchased from Folmer Nyby by Indiana Waste Systems, Inc., a Waste Management company, in 1978. Prior to that purchase, a sanitary landfill was operated by other companies near the east end of the property. Previous to the landfill, the property was utilized as farmland.

Wheeler RDF is located in the Western 1/2 of Section 2 and the Northeastern 1/3 of Section 3, Township 35, North, Range 7 West, Porter County, Indiana. The site is directly adjacent to farmland and is approximately one mile northwest of Wheeler, Indiana, which is the nearest population center. The facility is located near the corner of State Road 130 and Jones Road, and southwest of the Penn-Central Railroad and the New York, Chicago and St. Louis Railroad tracks.

Wheeler RDF consists of a 160-acre site, of which 60 acres are under permit. Eleven acres were utilized in the past for co-disposal of municipal and hazardous wastes. Figure A-1 shows the approximate location of the facility on the U.S.G.S. Quadrangle.

In 1980, Indiana Waste Systems, Inc. submitted a Part A Application to obtain interim status authorization for the disposal of hazardous wastes at Wheeler RDF. The Part A was subsequently modified to add waste codes, identifying which wastes may be landfilled. Wastes were disposed in the landfill beginning in May 1981.

The portion of the site used to dispose of hazardous waste is commonly referred to as the "Hazardous Waste Cell" or "Area 1". Area 1 is approximately 11 acres in size with total depth of fill ranging from 50 to 95 feet. Hazardous wastes accepted were generated in the State of Indiana. The waste materials consisted of the following types: decanter tank tar sludge from coking operations; lead petroleum tank bottoms; contaminated soil; burning ground ash; and API separator sludge from the petroleum industry. Area 1 was also used for the disposal of nonhazardous waste, including municipal solid waste. Approximately 1% of the total volume of waste in Area 1 is considered hazardous as per the Resource Conservation and Recovery Act (RCRA). The area fill method of operation was used for disposing of waste in Area 1. The last shipment of hazardous waste was received on January 24, 1983.

Interim status closure and post-closure plans were submitted to and approved by the Indiana Department of Environmental Management (IDEM). The Hazardous Waste Cell was closed in mid-1984. Closure certification was approved by IDEM on December 20, 1989. Figures A-2 and A-3 show the location of Area 1 on the Wheeler RDF property.

A leachate barrier of clay was constructed to separate the hazardous waste portion of the facility from the non-hazardous portions. The barrier was constructed on the slopes of the

hazardous waste portion adjacent to the non-hazardous portion. Area 1 was covered with 3.5 feet of compacted, fine textured soil. The cover was sloped to provide surface water runoff. A minimum of 6 inches of topsoil was placed over the cover soil and the entire area was vegetated when the unit was closed.

Sixty acres of the 160-acre site are under permit. Only non-hazardous wastes and special wastes as stipulated by individual permits from IDEM were accepted. The non-hazardous wastes included municipal waste from the surrounding area, consisting of residential, office and commercial waste products, as well as construction demolition and debris; digested sanitary sewage sludge co-disposed by combining semi-solid and solid wastes together; and bulky wastes (tree stumps, furniture, appliances, etc.), which were crushed and co-disposed in the daily active area. The Municipal Solid Waste Facility received its Post-Closure Permit in 1996.

Hazardous wastes received and managed by the facility were delivered by truck and were analyzed and fingerprint tested according to the facility's Waste Analysis Plan. As mentioned above, the hazardous wastes disposed of in Area 1 were principally wastes generated from the cleanout of tanks or impoundments and from site cleanup or spill cleanup activities. These wastes were bulk solids or semi-solids with no free liquid content, were non-ignitable and non-reactive, and had pH values that ranged from 7 to 10. No liquid, sulfide or cyanide wastes were disposed of in Area 1.

Public water supplies exist in the area surrounding Wheeler RDF. Homes do not rely on domestic water wells for home water supply.

The land use surrounding the Wheeler RDF is composed of rural residential, offices and institutions, shopping center business, light industrial, and general business. There is a small single-family residential area located east of the site across the railroad track and road. Figure A-2 shows the surrounding land use.

A-2 Topographic Map

40 CFR 270.14(b)(19), 40 CFR 270.14(c), 264.97

Wheeler RDF is situated in the Valparaiso Moraine area of northwestern Indiana. This area underwent repeated glacial advances and recessions during the Pleistocene Epoch. Regional surface elevations range from 530 feet above mean sea level (ft msl) along Lake Michigan to 650 ft msl at the Wheeler RDF. The Wheeler RDF locality and adjacent lands are gently rolling to nearly level. The landfill is located within the drainage basin of Deep River.

The topography surrounding Wheeler RDF varies from elevation 640 ft msl in the northern corner along the railroad tracks to an approximate elevation of 650 ft msl in the southern portion of the site. Figure A-1 presents the site location on the U.S.G.S. Quadrangle.

The base grade of Area 1 is 610 ft msl. The cap surface elevation of Area 1 is 702 ft msl. A final grade elevation of 710 ft msl across three-quarters of Area 1 reflects overlapping by the municipal solid waste portion as allowed in the operating plan.

A-3 Floodplain Standard

40 CFR 270.14(b)(11)(iii), 264.18(b)

A review of the Flood Insurance Rate Map (FIRM) for the vicinity of the Wheeler RDF was conducted. The flood map is number 18127C0114D and is found on the Federal Emergency Management Agency (FEMA) Flood Map Service Center website (<https://msc.fema.gov/portal/search>). The map has an effective date of September 30, 2015. Most of the facility, including the Hazardous Waste Cell, is located in Zone X, which is defined as “Areas of minimal flooding”. The map indicates that a portion of the non-hazardous waste disposal area is within Zone AE, which is defined as a “regulatory floodway with base flood elevations”. A copy of the map is provided as Figure A-4.

A-3a Floodplain Proofing and Flood Protection Measures

40 CFR 270.14(b)(11)(iv)(A) and (B)

A portion of the Wheeler RDF lies within a floodway. On April 30, 1982, the operators of the facility requested and received approval from the Indiana Department of Natural Resources (IDNR) to construct in a floodway. The construction involved channel diversion of an unnamed tributary to Duck Creek, otherwise known as Krull Ditch.

The constructed channels run along the north and south of the landfill and the southern channel receives run-off from Area I. The channels were constructed to handle the flow from the 100-year, 1-hour storm event and are expected to prevent flooding of Area 1.

A-3b Floodplain Standard Waiver

40 CFR 270.18(b)(1)(i) and (ii)

Not Applicable

A-4 Post Closure Notices

40 CFR 264.116, 265.119(a) and (b), 270.14(b)(14)

Notice to the local land authority by the Wheeler RDF's owner/operator has been made. A copy of the Deed Notice is contained in Exhibit A-1.

Figure A-1
Facility Location Map

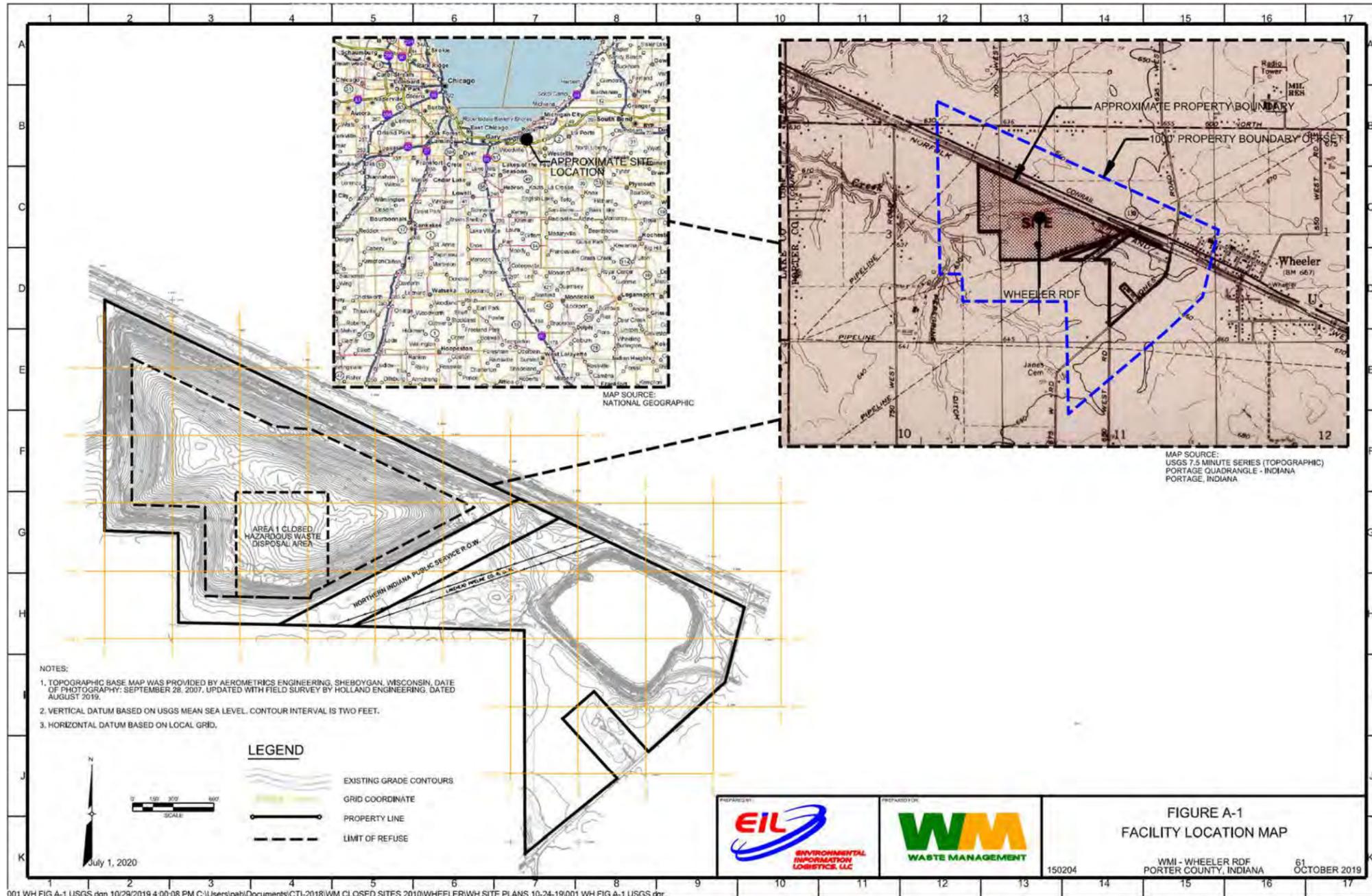


Figure A-2
Topographic Map

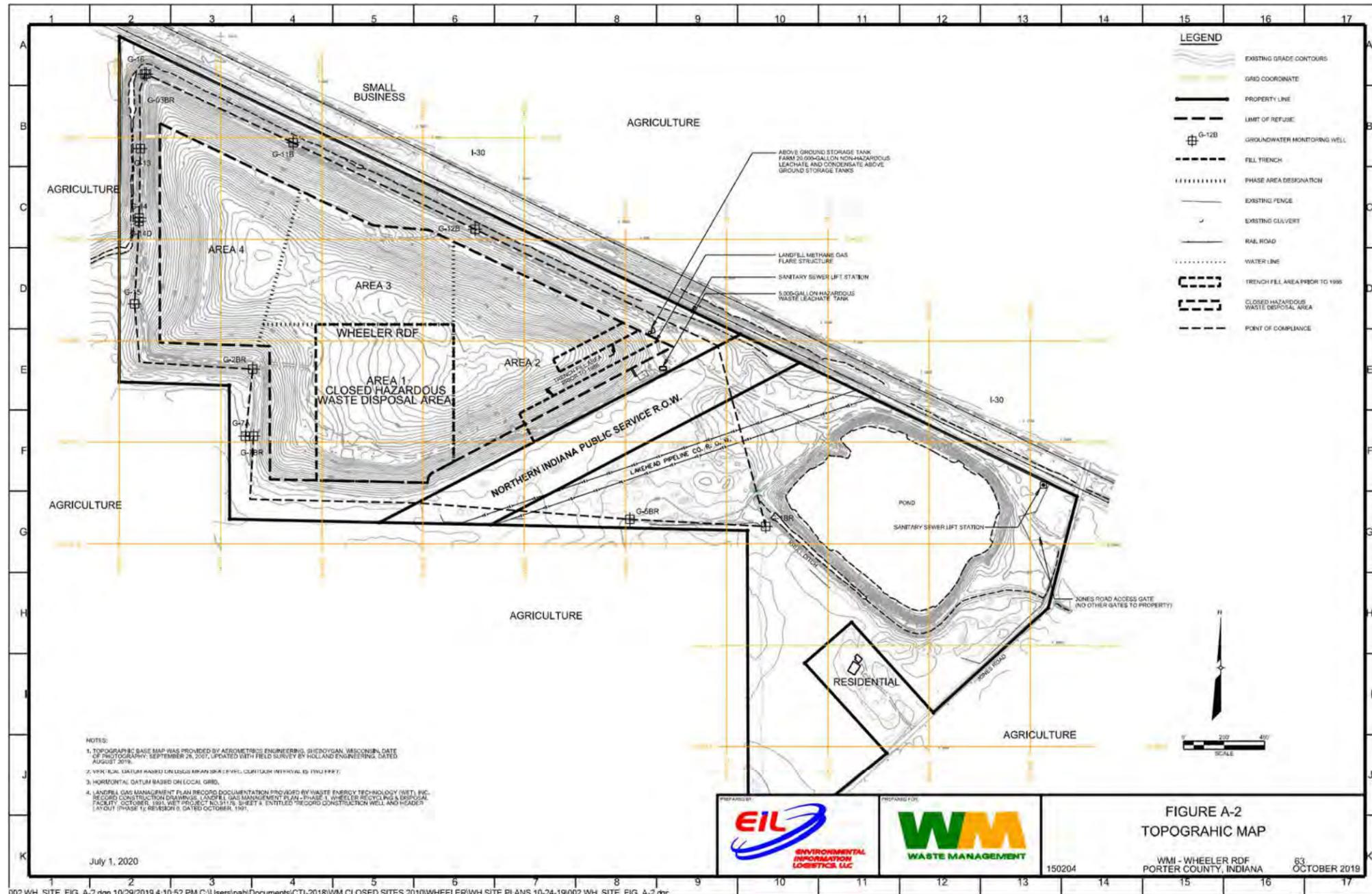


FIGURE A-2
 TOPOGRAPHIC MAP

WMI - WHEELER RDF
 PORTER COUNTY, INDIANA
 83 OCTOBER 2019

Figure A-3

Leachate Collection System &
Base Grade

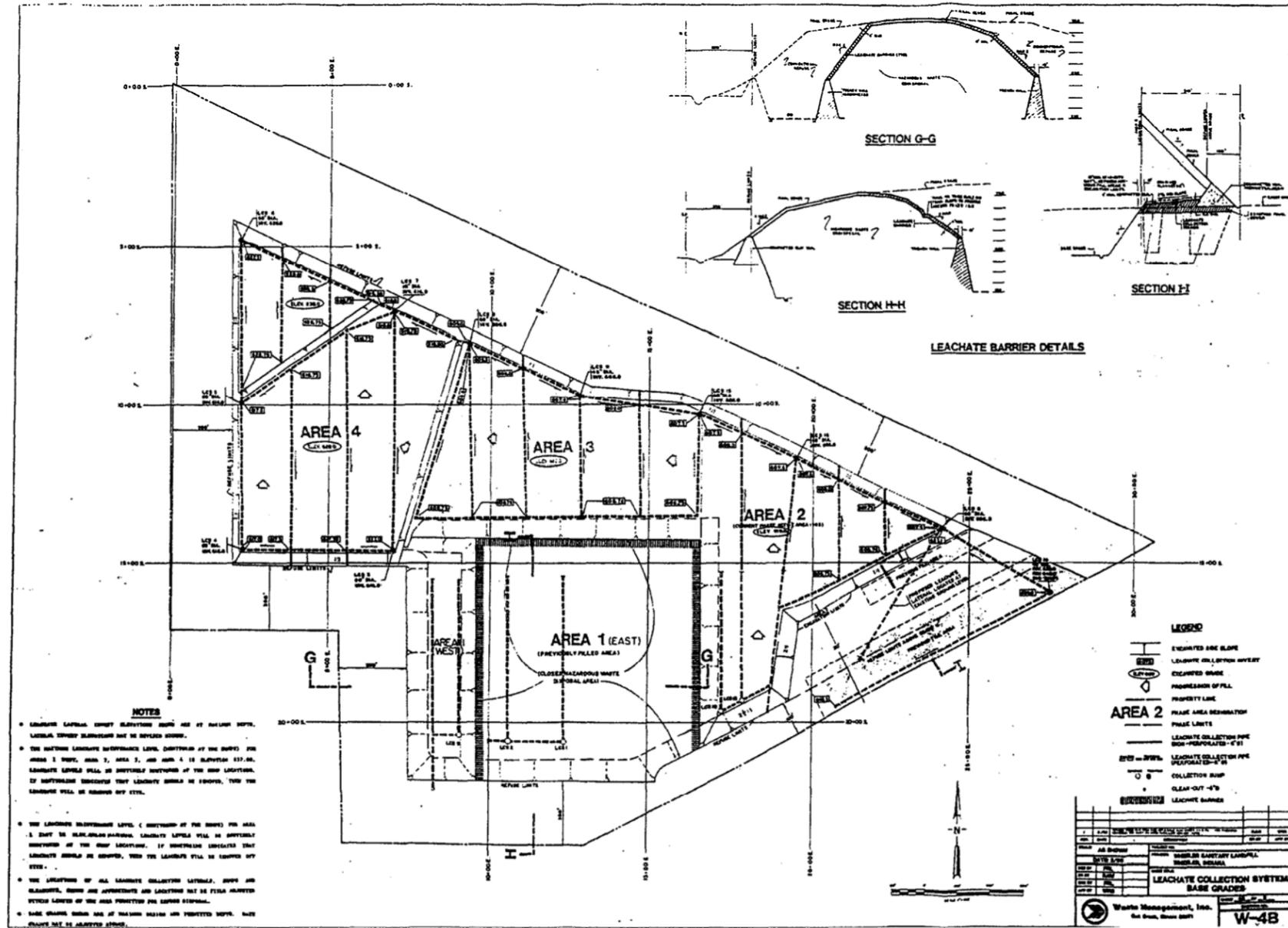


Figure A-3

July 1, 2020

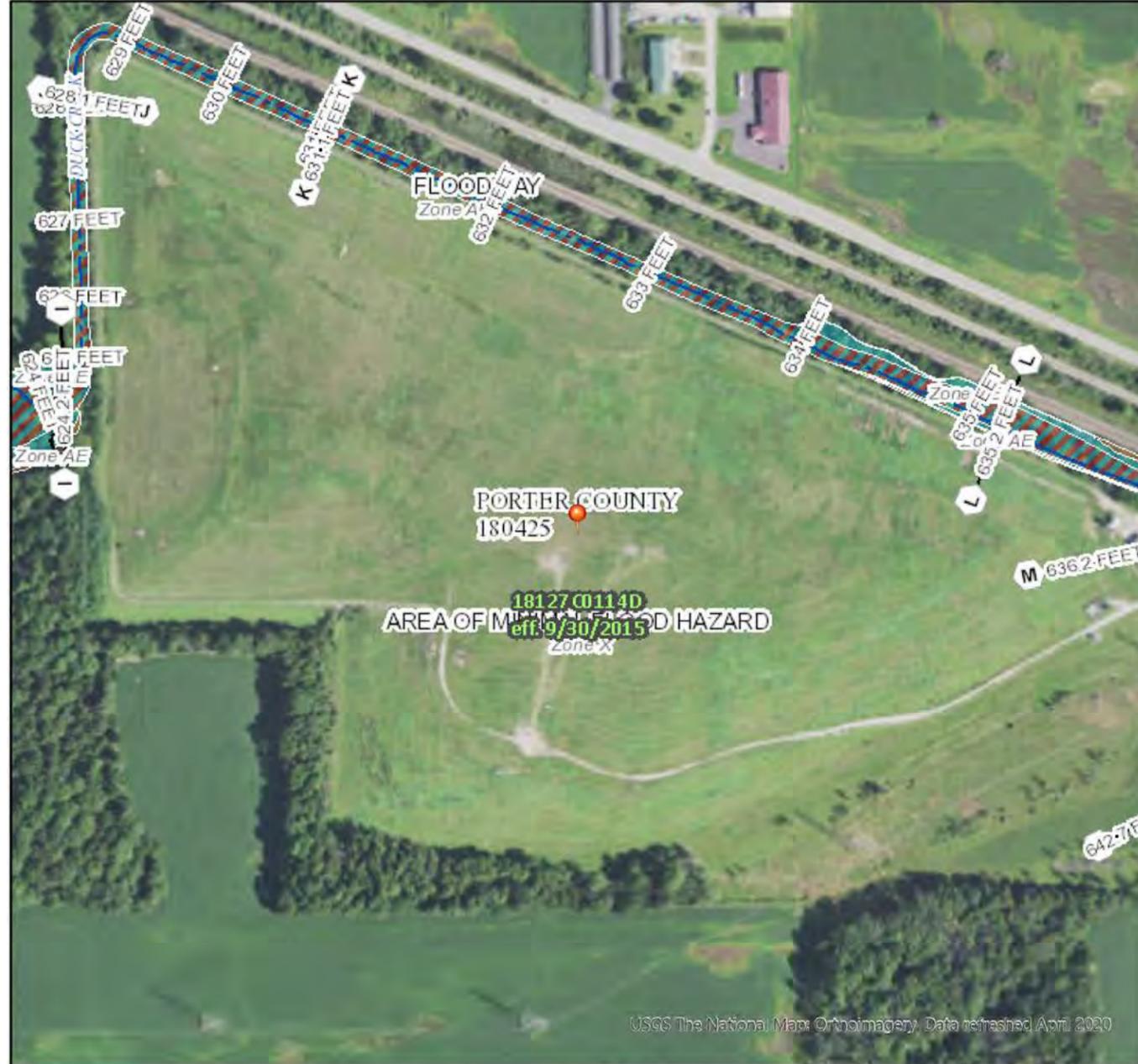
Figure A-4

Flood Insurance Rate Map (FIRM)

National Flood Hazard Layer FIRMette



87°12'13"W 41°31'8"N



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes, Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard Zone D
		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
MAP PANELS		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
		Digital Data Available
		No Digital Data Available
		Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 8/10/2020 at 10:44 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

USGS The National Map (Orthoimagery) Data refreshed April 2020
 0 250 500 1,000 1,500 2,000 Feet 1:6,000
 87°11'36"W 41°30'41"N

Exhibit A-1

Deed Notice

1

2017-003956
STATE OF INDIANA
PORTER COUNTY
FILED FOR RECORD
02/14/2017 8:56 AM
JON MILLER, RECORDER
REC FEE: 24.00
PAGES: 7

Environmental Restrictive Covenant

This ENVIRONMENTAL RESTRICTIVE COVENANT ("Covenant") is made this 9th day of ~~January~~^{FEBRUARY}, 2017 by Waste Management of Indiana, L.L.C., a/k/a Indiana Waste Systems, Inc., an Indiana corporation ("Owner").

WHEREAS: Owner is the fee owner of certain property in the County of Porter, Indiana, which is located at 625 W 540 N, at the corner of State Road 130 and Jones Road, Wheeler, Porter County, Indiana being 76.69 acres more particularly described on the attached **Exhibit "A,"** which is hereby incorporated and made a part hereof;

WHEREAS: The Real Estate is part of that certain property acquired by Owner by way of Warranty Deed recorded on January 5, 1983, as Deed Book Volume 346, Page 282 and by way of Corrective Warranty Deed recorded on May 3, 1973 as Deed Book Volume 263, Page 516 in the Office of the Recorder of Porter County, Indiana;

WHEREAS: Owner utilized the Solid Waste Area of the Real Estate more particularly described on the attached **Exhibit "B"** and identified on the site map attached as **Exhibit "C,"** which are hereby incorporated and made a part hereof, as a landfill ("Landfill") for disposal and storage of Municipal Solid Waste ("MSW") as defined in 329 IAC 10-2, in accordance with laws of the State of Indiana;

WHEREAS: Plot plans depicting the location of waste materials and depth of fill, and with surface contours at intervals of two (2) feet indicating surface water run-off directions, surface water diversions structures, and final grade contours are contained in **Exhibits "C" and "D,"** which are hereby incorporated and made a part hereof; and

WHEREAS: Environmental investigation reports and other related documents are hereby incorporated by reference and may be examined at the offices of the Indiana Department of Environmental Management ("IDEM"), which is located in the Indiana Government Center North building at 100 N. Senate Avenue, Indianapolis, Indiana. The documents may also be viewed electronically in the Department's Virtual File Cabinet by accessing the Department's Web Site (currently www.in.gov/idem/);

NOW THEREFORE, Owner subjects the Real Estate to the following restrictions and provisions.

RESTRICTIONS AND GENERAL PROVISIONS

I. Restrictions. Pursuant to Article 10-22-8 of Title 329 of the Indiana Administrative Code, no construction, installation of ground water monitoring wells, pipes, conduits, or septic systems, or any other excavation may be done on the Real Estate without approval of the Commissioner of the IDEM.



II. Restrictions to Run with the Land. The restrictions and other requirements described in this Covenant shall run with the Real Estate and be binding upon, and inure to the benefit of the Owner of the Real Estate and the Owner's successors, assignees, heirs and lessees and their authorized agents, employees, contractors, representatives, agents, lessees, licensees, invitees, guests, or persons acting under their direction or control (each, hereinafter a "Related Party") and shall continue as a servitude running in perpetuity with the Real Estate. No transfer, mortgage, lease, license, easement, or other conveyance of any interest in or right to occupancy in all or any part of the Real Estate by any person shall affect the restrictions set forth herein.

III. Binding upon Future Owners. By taking title to an interest in or occupancy of the Real Estate, any subsequent Owner or a Related Party agrees to comply with all of the restrictions set forth in paragraph I above and with all other terms of this Covenant.

IV. Indiana Law. This Covenant shall be governed by, and shall be construed and enforced according to, the laws of the State of Indiana.

V. Modification and Termination. This Covenant shall not be amended, modified, or terminated without IDEM's prior written approval.

VI. Conflict of and Compliance with Laws. If any provision of this Covenant is also the subject of any law or regulation established by any federal, state, or local government, the strictest standard or requirement shall apply. Compliance with this Covenant does not relieve the Owner of its obligation to comply with any other applicable laws.

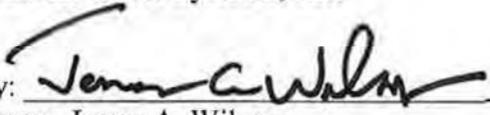
VII. Change in Law, Policy or Regulation. In no event shall this Covenant be rendered unenforceable if Indiana's laws, regulations, or remediation policies change as to form or content. All statutory references include any successor provisions.

VIII. Authority to Execute and Record. The undersigned person executing this Covenant represents that he or she is the current fee Owner of the Real Estate or is the authorized representative of the Owner, and further represents and certifies that he or she is duly authorized and fully empowered to execute and record, or have recorded, this Covenant.

Owner hereby attests to the accuracy of the statements in this document and all attachments and affirms, under the penalties for perjury, that it has taken reasonable care to redact each Social Security number in this document, as required by law.

IN WITNESS WHEREOF, Owner of the Real Estate described above has caused this Environmental Restrictive Covenant to be executed on this 9th day of ~~January~~, 2017.
FEBRUARY

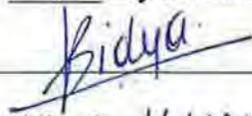
Waste Management of Indiana, L.L.C., a/k/a
Indiana Waste Systems, Inc.

By: 
Name: James A. Wilson
Title: Vice President

STATE OF ILLINOIS)
) SS:
COUNTY OF DUPAGE)

Before me, the undersigned, a Notary Public in and for said County and State, personally appeared James A. Wilson, the Vice President of the Owner, Waste Management of Indiana, L.L.C., a/k/a Indiana Waste Systems, Inc., who acknowledged the execution of the foregoing instrument for and on behalf of said entity.

Witness my hand and Notarial Seal this 9th day of ~~January~~, 2017.
FEBRUARY

, Notary Public
Residing in ILLINOIS County, COOK.

My Commission Expires: 10/21/2019

EXHIBIT A

DESCRIPTIONS:

PARCEL 1 (CONTAINING 19.70 ACRES):

ALL THAT PART OF THE EAST 1/2 OF THE EAST 1/2 OF THE NORTHEAST 1/4 OF SECTION 3, TOWNSHIP 35 NORTH, RANGE 7 WEST, LYING SOUTH OF THE PRESENT RIGHT-OF-WAY OF THE NEW YORK, CHICAGO & ST. LOUIS RAILROAD COMPANY, EXCEPTING THEREFROM A STRIP OF LAND 112 FEET WIDE EAST AND WEST OFF THE ENTIRE WEST SIDE THEREOF AND SUBJECT TO ALL LEGAL HIGHWAYS AND EASEMENTS.

PARCEL 2 (CONTAINING 56.99 ACRES):

A PART OF THE WEST 1/2 OF SECTION 2, TOWNSHIP 35 NORTH, RANGE 7 WEST, BOUNDED AND DESCRIBED AS FOLLOWS: COMMENCING AT THE WEST 1/4 POST OF SAID SECTION 2; THENCE SOUTH ALONG THE WEST LINE OF SAID SECTION 2 658.78 FEET TO THE SOUTHWEST CORNER OF THE NORTH 1/2 OF THE SOUTHWEST 1/4 OF SAID SECTION 2; THENCE EAST ALONG THE SOUTH LINE OF SAID NORTH 1/2 750.54 FEET TO THE WEST LINE OF LAND NOW OWNED BY NORTHERN INDIANA PUBLIC SERVICE COMPANY; THENCE NORTHEASTERLY ALONG SAID NORTHERN INDIANA PUBLIC SERVICE COMPANY WEST LINE 2000.34 FEET TO A POINT ON THE SOUTHERLY RIGHT-OF-WAY LINE OF THE PENN-CENTRAL RAILROAD WHICH IS 141.25 FEET NORTHWESTERLY AS MEASURED ALONG SAID RAILROAD SOUTHERLY RIGHT-OF-WAY LINE FROM ITS INTERSECTION WITH THE EAST LINE OF THE NORTHWEST 1/4 OF SAID SECTION 2; THENCE NORTHWESTERLY ALONG SAID SOUTHERLY RIGHT OF WAY LINE 2799.33 FEET TO THE WEST LINE OF SAID SECTION 2; THENCE SOUTH 1460.79 FEET TO THE POINT OF COMMENCEMENT. ALL IN PORTER COUNTY, INDIANA AND SUBJECT TO ALL LEGAL HIGHWAYS AND EASEMENTS.

SHEET 2 OF 2
JOB NUMBER: 14-09-013
DATE: SEPTEMBER 30, 2010

HOLLAND
ENGINEERING

ENGINEERING | SURVEYING | PIPELINE SERVICES

220 Hoover Boulevard, Suite 2
Holland, Michigan 49423-3766
www.hollandengineering.com
T 616-392-6930 F 616-392-2116

July 1, 2020

EXHIBIT B

DESCRIPTION:

SOLID WASTE AREA EXCLUDING HAZARDOUS CELL:

COMMENCING AT THE SOUTHWEST CORNER OF THE NORTH 1/2 OF THE NORTH 1/2 OF THE SOUTHWEST 1/4 OF SAID SECTION 2 AND RUNNING THENCE EAST ON THE SOUTH LINE OF THE NORTH 1/2 OF THE NORTH 1/2 OF SAID SOUTHWEST 1/4 A DISTANCE OF 413.00 FEET; THENCE NORTHERLY ON A LINE PARALLEL WITH THE WEST LINE OF SAID SOUTHWEST 1/4 A DISTANCE OF 202.28 FEET TO THE POINT OF BEGINNING; THENCE NORTH 86 DEGREES 56 MINUTES 02 SECONDS WEST, A DISTANCE OF 252.43 FEET; THENCE NORTH 00 DEGREES 13 MINUTES 00 SECONDS WEST, A DISTANCE OF 649.97 FEET; THENCE NORTH 87 DEGREES 29 MINUTES 14 SECONDS WEST, A DISTANCE OF 521.74 FEET; THENCE NORTH 00 DEGREES 17 MINUTES 16 SECONDS EAST, A DISTANCE OF 1147.90 FEET; THENCE SOUTH 63 DEGREES 55 MINUTES 15 SECONDS EAST, A DISTANCE OF 1206.32 FEET; THENCE SOUTH 88 DEGREES 51 MINUTES 20 SECONDS EAST, A DISTANCE OF 325.21 FEET; THENCE SOUTH 64 DEGREES 31 MINUTES 55 SECONDS EAST, A DISTANCE OF 886.87 FEET; THENCE SOUTH 44 DEGREES 20 MINUTES 44 SECONDS EAST, A DISTANCE OF 366.52 FEET; THENCE SOUTH 60 DEGREES 26 MINUTES 08 SECONDS WEST, A DISTANCE OF 1185.06 FEET; THENCE NORTH 00 DEGREES 13 MINUTES 00 SECONDS WEST, A DISTANCE OF 715.98 FEET; THENCE SOUTH 85 DEGREES 46 MINUTES 30 SECONDS WEST, A DISTANCE OF 690.00 FEET; THENCE SOUTH 00 DEGREES 13 MINUTES 00 SECONDS EAST, A DISTANCE OF 757.72 FEET TO THE POINT OF BEGINNING.

HOLLAND ENGINEERING

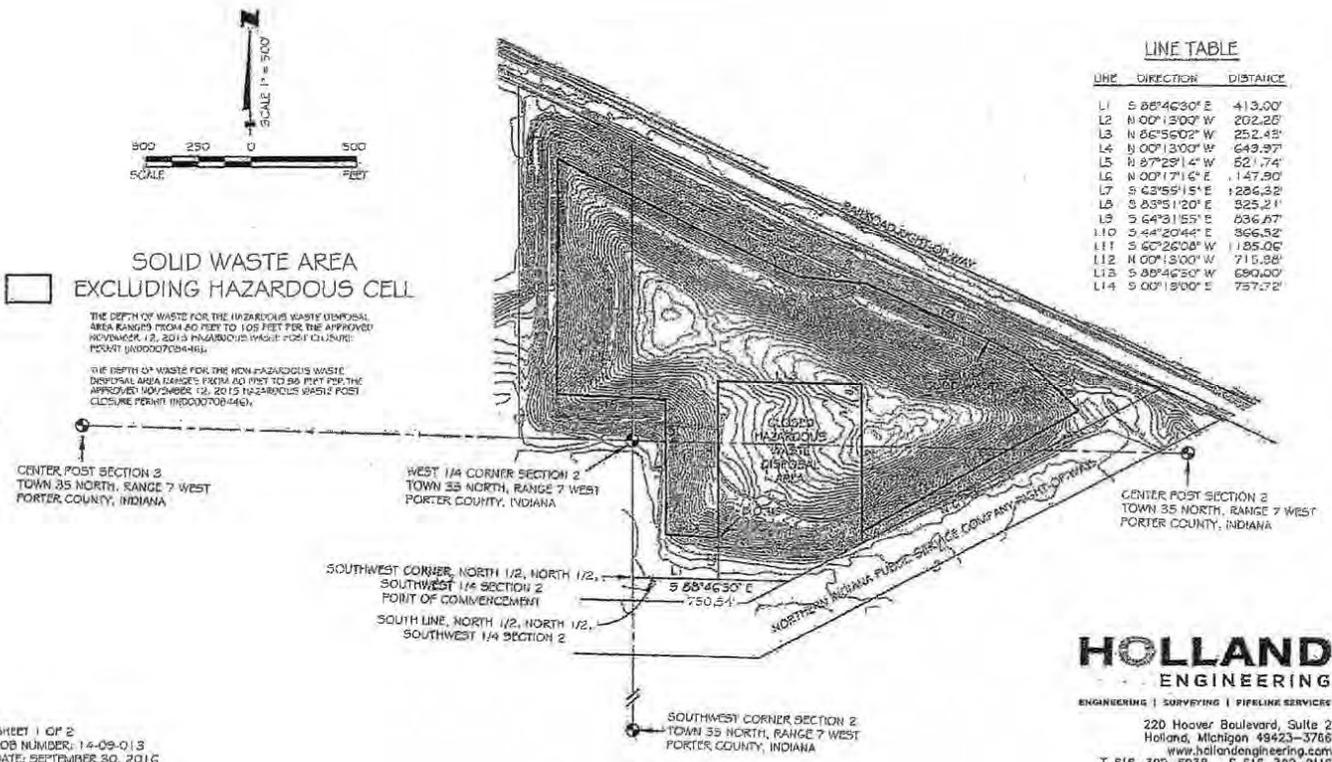
ENGINEERING | SURVEYING | PIPELINE SERVICES

220 Hoever Boulevard, Suite 2
Holland, Michigan 49423-3766
www.hollandengineering.com
T 616-392-5938 F 616-392-2116

SHEET 2 OF 2
JOB NUMBER: 14-09-013
DATE: SEPTEMBER 30, 2016

July 1, 2020

EXHIBIT C

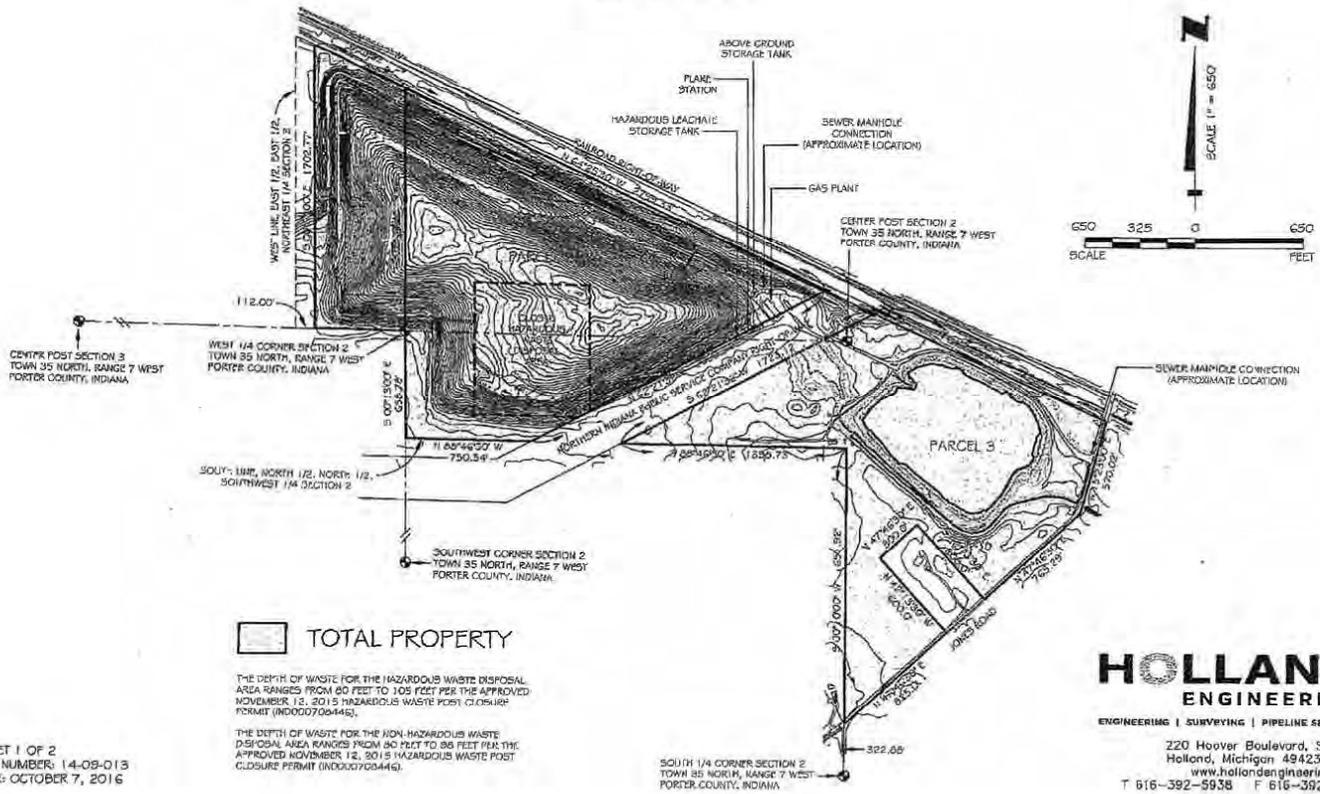


SHEET 1 OF 2
 JOB NUMBER: 14-09-Q13
 DATE: SEPTEMBER 30, 2013

HOLLAND ENGINEERING
 ENGINEERING | SURVEYING | PIPELINE SERVICES
 220 Hoover Boulevard, Suite 2
 Holland, Michigan 49423-3786
 www.hollandengineering.com
 T 516-392-5938 F 516-392-2118

July 1, 2020

EXHIBIT D



SHEET 1 OF 2
 JOB NUMBER: 14-09-013
 DATE: OCTOBER 7, 2016

HOLLAND
ENGINEERING
 ENGINEERING | SURVEYING | PIPELINE SERVICES
 220 Hoover Boulevard, Suite 2
 Holland, Michigan 49423-3766
 www.hollandengineering.com
 T 616-392-5938 F 616-392-2116

JON C. MILLER
RECORDER OF PORTER COUNTY
155 INDIANA AVENUE
VALPARAISO, IN 46383
(219) 465-3465

LEECH TISHMAN FUSCALDO LAMPL
02/14/2017 8:56 AM
TRANSACTION # 4090625
2017-003956 24.00 RESTRI & COV
MISC RECORDING FEE: 24.00
TOTAL 24.00
CASH: 1.00 LEECH TISHMAN FUSCALDO
LAMPL
CHECK: 23.00 LEECH TISHMAN FUSCALDO
005707

THANK YOU

IDEM SW # 64-03 - Proposed ERC & Solid Waste Area (Excluding Hazardous Cell) - Wheeler Landfill



Deed Info: Deed Book Volume 263, Page 516 Recorded May3, 1973
 Corrective Warranty Deed (deed not provided)

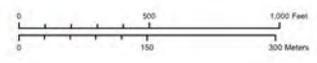
Parcel ID:
 64-08-03-276-001-000-019
 64-08-02-151-001-000-019

PLSS Info:
 Sections 2 & 3, T35N, R7W
 Union Township
 Porter County, Indiana

Property:
 625 W 542 N (corner of State Road 130 & James Road)



Proposed Environmental Restrictive Covenant
 Solid Waste Area Excluding Hazardous Cell



Mapped By: Max Hill, IDEM, Office of Land Quality, Science Services Branch
 Engineering & GIS Services, January 23, 2017

Deed Notation: Deed notation polygons based on Exhibit A in proposed Environmental Restrictive Covenant.

Solid Waste Area Info:
 Solid Waste Area (Excluding Hazardous Cell) polygon based on Exhibit B in proposed Environmental Restrictive Covenant.
 2013 Statewide Orthophotography Program

Disclaimer: This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

STATE OF ILLINOIS }
COUNTY OF COOK } ss:

ST. OF IND.
PORTER COUNTY
FILED

NOTICE TO FUTURE OWNERS
OF PAST MANAGEMENT AND DISPOSAL
OF HAZARDOUS WASTE, INCLUDING PLAT
OF DISPOSAL AREA AND RECORD
OF HAZARDOUS WASTES DISPOSED

'87 FEB 26 10:42

LOIS ...
RECORDER

The real estate described and delineated in the Exhibit B attached hereto and made a part hereof by reference, located in Porter County, State of Indiana, and commonly known as the Wheeler Landfill, has been used to manage and dispose of hazardous waste.

The use of this real estate is restricted under 320 IAC 4.1-21-7(c), and a Restrictive Covenant has been filed in the Recorder's Office of Porter County, State of Indiana, in accordance with the requirements of IC 13-7-8.5-5(d).

A survey plat indicating the location and dimensions of the disposal areas in which hazardous waste was disposed and containing a note stating the owner's or operator's obligation to restrict disturbance of the site as specified in 320 IAC 4.1-21-7(c) is attached hereto as Exhibit A and made a part hereof by reference. This survey plat hereby is filed in accordance with the requirements of 320 IAC 4.1-21-9.

A record and identification of the type, location, and quantity of hazardous wastes disposed of within each cell or area of the facility is attached hereto as Exhibit C and made a part hereof by reference. This record and identification is filed in accordance with the requirements of 320 IAC 4.1-21-9.

By William R. Schubert
WILLIAM R. SCHUBERT
Regional Engineer
Indiana Waste Systems, Inc.
7300 W. College Drive
Palos Heights, Illinois 60463
312/821-8100

STATE OF ILLINOIS }
COUNTY OF COOK } ss:

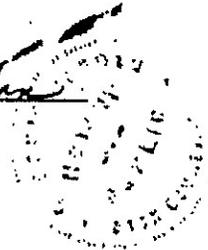
Before me, Sherrie Jordan, a Notary Public in and for said County and State, this 23rd day of February, 1987, personally appeared William R. Schubert of Indiana Waste Systems, Inc., its Regional Engineer, and acknowledged the execution of the foregoing instrument.

Given under my hand and seal this 23rd day of February, 1987.

Sherrie Jordan
NOTARY PUBLIC

My Commission expires: 4-26-88

This instrument was prepared by: Carolyn Lowm
Attorney at Law
3003 Butterfield Road
Oak Brook, Illinois 60521



SURVEY

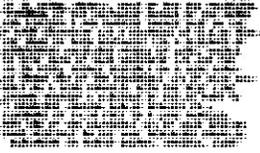
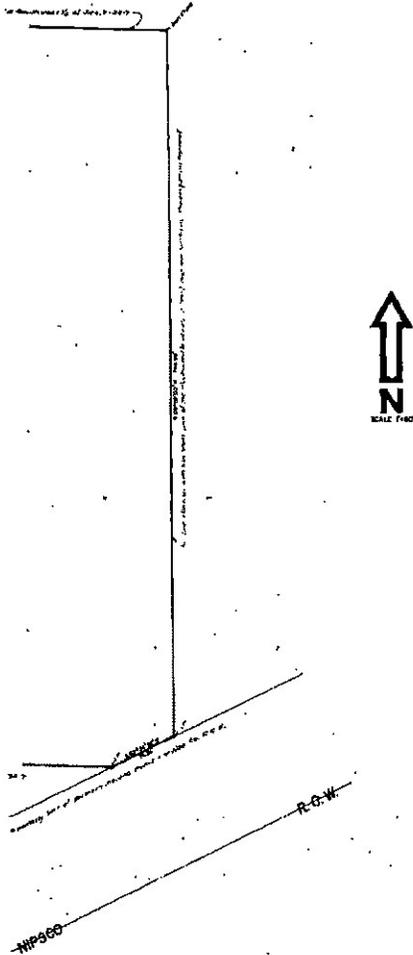


Exhibit A

NOTE: The owner and/or operator is obligated to restrict disturbance of the site as specified in 202 IAC 4.1-21-7(D).



STATE OF INDIANA }
COUNTY OF BOWEN }

I, Clara Rowan, a Registered Indiana Land Surveyor, do hereby state that I have surveyed the property described in the caption to the herein from plan, and that said survey is a true and correct representation of said survey. Blotches shown herein are in fact and detail parts thereof, and are corrected to a temperature of 62 degrees Fahrenheit.

DATED THIS 10 DAY OF APR, A.D. 1983

Clara Rowan
REGISTERED No. 3081

ROBINSON ENGINEERS AND SURVEYORS INCORPORATED	R.M. ROBINSON & ASSOCIATES Co. Registered Professional Engineers and Land Surveyors 220 East 2nd South Michigan Street, Room 1007 Phone (317) 531-4700 • Chicago, Ill. 60601	Scale: 1" = 100'
FOR: MUSEUM MANAGEMENT, INC.		

EXHIBIT B

That part of the West 1/2 of Section 2, Township 35 North, Range 7, West of the 2nd Principal Meridian bounded and described as follows: Commencing at the southwest corner of the North 1/2 of the North 1/2 of the Southwest 1/4 of said Section 2 and running thence East on the South line of the North 1/2 of the North 1/2 of said Southwest 1/4 a distance of 413.00 feet; thence Northerly on a line parallel with the West line of said Southwest 1/4 a distance of 155.30 feet to the point of beginning of the hereinafter described parcel of land; thence continuing Northerly on a line parallel with the West line of said Southwest 1/4 and the Northerly prolongation thereof a distance of 804.70 feet; thence Easterly on a line parallel with the South line of the North 1/2 of the North 1/2 of the Southwest 1/4 of said Section 2 a distance of 690.00 feet; thence Southerly on a line parallel with the West line of said Southwest 1/4 and the Northerly prolongation thereof a distance of 768.60 feet to the northwesterly line of the land now owned by Northern Indiana Public Service Co.; thence Southwest on the last described line a distance of 74.86 feet to a line parallel with the South line of the North 1/2 of the North 1/2 of the Southwest 1/4 of said Section 2 and drawn through the point of beginning; thence Westerly on the last described parallel line a distance of 623.52 feet to the point of beginning in Porter County, Indiana. (Containing 553,874 sq. ft. or 12.7152 acres).

EXHIBIT C

In the area described below, hazardous wastes were co-disposed with municipal refuse. The total amount of hazardous waste received at the site is 19,168 c.y. This represents approximately 1% of the total waste volume in the hazardous waste disposal area. No liquid hazardous wastes were accepted. All hazardous wastes accepted were generated in the State of Indiana. The waste types accepted are summarized as follows:

- 1) Decanter tank tar sludge from coking operations.
- b) Leaded petroleum tank bottoms.
- c) Contaminated soil.
- d) Burning grounds ash.
- e) API separator sludge from the Petroleum Industry.

These wastes were disposed in the following area:

That part of the West 1/2 of Section 2, Township 35 North, Range 7, West of the 2nd Principal Meridian bounded and described as follows: Commencing at the Southwest corner of the North 1/2 of the North 1/2 of the Southwest 1/4 of said Section 2 and running thence East on the South line of the North 1/2 of the North 1/2 of said Southwest 1/4 a distance of 413.00 feet; thence Northerly on a line parallel with the West line of said Southwest 1/4 a distance of 155.30 feet to the point of beginning of the hereinafter described parcel of land; thence continuing Northerly on a line parallel with the West line of said Southwest 1/4 and the Northerly prolongation thereof a distance of 804.70 feet; thence Easterly on a line parallel with the South line of the North 1/2 of the North 1/2 of the Southwest 1/4 of said Section 2 a distance of 690.00 feet; thence Southerly on a line parallel with the West line of said Southwest 1/4 and the Northerly prolongation thereof a distance of 768.60 feet to the northwesterly line of the land now owned by Northern Indiana Public Service Co.; thence Southwest on the last described line a distance of 74.86 feet to a line parallel with the South line of the North 1/2 of the North 1/2 of the Southwest 1/4 of said Section 2 and drawn through the point of beginning; thence Westerly on the last described parallel line a distance of 623.52 feet to the point of beginning in Porter County, Indiana. (Containing 553,874 sq.ft. or 12.7152 acres).

Attachment B – Extended Post-Closure Inspection Requirements

(40 CFR 264.15, 264.118(b), and 270.14(b))

B-1 Written Inspection Plan

40 CFR 264.15(b), 270.21(d)

The landfill will be inspected every six (6) months during the extended post-closure care period, unless otherwise noted below. This frequency is adequate to provide maintenance of the facility. This frequency also follows the two wet seasons of the year, spring and fall, which are the most probable seasons causing a need for continued maintenance of the facility.

The inspections will be conducted by individuals trained in the review, evaluation, and performance of the particular task associated with the inspection element. This may be a contractor or the Wheeler RDF's own representative. Extended post-closure cost estimates are based on a third party performing the work.

General extended post-closure inspection procedures will include the following:

1. Visually inspect the perimeter fence and all gates. Check for fence integrity and note any areas of damage. Note the working condition of each gate, and check to ensure that all locks and other security systems are in place and functioning.
2. Visually inspect the landfill cover and surrounding areas. Note any evidence of cover erosion, vegetative stress, or established woody vegetation. Also note any unusual conditions such as odors, ponded water or bubbling. Visually inspect the run-on/run-off control berms and ditches. Mark any areas requiring further inspection or repairs so that arrangements can be made for necessary repairs.

Perform a semiannual survey of the landfill cap to determine whether differential settlement is occurring.

3. Visually inspect the area around each groundwater monitoring well for overgrown vegetation. Vegetation that restricts access to the well will be trimmed prior to the next groundwater sampling event.

Visually inspect the well covers for damage during each sampling event. Check the well cap and well cover lock to ensure they are functioning and have not been tampered with. Note areas around wells for erosion, settling or vegetative stress. Damage or wear which may impact the groundwater monitoring program will be repaired before the next sampling event.

Three markers are installed as permanent benchmarks. Visually inspect each benchmark. Report any missing benchmarks, and note any damage to the benchmarks. Surveyors will survey and inspect the condition of the benchmarks semiannually concurrent with the groundwater well elevation survey.

4. Visually inspect the leachate collection sumps and risers (LCS1 and LCS2) and note any damage. Verify the liquid level in each withdrawal sump. If necessary, make arrangements for leachate removal. Note that the pumps utilize automatic level controllers to maintain the leachate levels below the compliance limit.
5. Visually inspect the leachate collection tank weekly for indications of leaks or damage in accordance with the RCRA Burden Reduction Initiative. Report leaks and/or damage.
6. Visually inspect any applicable safety and emergency equipment. Report missing and/or damaged equipment.

Results of the semiannual inspections will be recorded on the Extended Post-Closure Inspection Report, Figure B-1, or on a similar, but no less stringent form. Completed forms will be submitted annually with the groundwater monitoring results. Results of the weekly leachate tank inspections will be recorded on the RCRA Hazardous Waste Tank Inspection Form, Figure B-2. Copies of inspection reports will be kept at the facility. Documentation of repairs performed or replacements required to properly maintain the site will be kept with either the inspection reports or the site maintenance log and included in the annual report.

B-2 Inspection Remedial Actions

40 CFR 264.15(c), 264.118(b)(2)

The following are the remedial actions to deficiencies discovered during inspections:

- **Fencing and Landfill Cover:** Damage or deterioration of the fencing or the landfill cap will be repaired as soon as possible, as weather permits, after discovery.
- **Monitoring Wells and Leachate Collection System:** Repairs will be repaired as soon as possible, as weather permits, after discovery.
- **Safety and Emergency Equipment:** Safety and emergency equipment will be replaced or in operational condition as soon as possible after discovery.

B-3 Inspection Log

40 CFR 264.15(d)

Following each inspection, a copy of the inspection log report will be placed in the facility's operating record.

Figure B-1

Extended Post-Closure Inspection Form

Figure B-1

WHEELER RECYCLING & DISPOSAL FACILITY RCRA EXTENDED POST-CLOSURE INSPECTION REPORT				
NAME:			WEATHER CONDITIONS:	
TITLE				
SIGNATURE				
DATE & TIME OF INSPECTION				
INSPECTION CHECKLIST				
EQUIPMENT/ STRUCTURE ITEM	INSPECTION ELEMENT	STATUS		IF UNACCEPTABLE SPECIFY REASONS
		ACCEPT- ABLE	UNACCEPT -ABLE	
Equipment Fence & Gates	Check entire perimeter for breaches, damage, signs; Gates for proper lock function			
Benchmark/ Groundwater Monitoring System	Well integrity	See Note 1		
	Check for damage to benchmarks			
	Vegetation around wells			
Leachate Control System	Check sumps and risers			
	Check tank for damage/ leaks and system status.	See Note 2		
Cover Conditions	Erosion			
	Settlement	See Note 3		
	Vegetation			
Run-on/Run-off	Siltation debris			
	Seepage			
Safety and Emergency Equipment	Missing or damaged equipment			
OTHER OBSERVATIONS:				

Notes:

1. Groundwater wells are inspected during sampling events; results are included in the annual report. See the monitoring well integrity form in Exhibit D-2, Appendix B.
2. See Hazardous Waste Leachate Tank Inspection forms; forms are filed on site
3. See results of semiannual settlement survey, which are included in annual monitoring reports.

Figure B-2

RCRA Hazardous Waste Leachate Tank Inspection Form

Wheeler RDF RCRA Hazardous Waste Tank System Inspection Log

Date	Time	Inspection element	Acceptable	Not Acceptable	Comments
		Overspill Control			
Inspector signature		Corrosion			
		Leak Detection			
		Tank & Containment			
		Overspill Control			
Inspector signature		Corrosion			
		Leak Detection			
		Tank & Containment			
		Overspill Control			
Inspector signature		Corrosion			
		Leak Detection			
		Tank & Containment			
		Overspill Control			
Inspector signature		Corrosion			
		Leak Detection			
		Tank & Containment			
		Overspill Control			
Inspector signature		Corrosion			
		Leak Detection			
		Tank & Containment			
		Overspill Control			
Inspector signature		Corrosion			
		Leak Detection			
		Tank & Containment			
		Overspill Control			
Inspector signature		Corrosion			
		Leak Detection			
		Tank & Containment			

Attachment C – Extended Post-Closure Plan

40 CFR 270.14(b)(13) and (14), 264.110 through 264.120, 265.110 through 265.120

This attachment constitutes the Extended Post-Closure Plan and cost estimate for the Wheeler RDF as required under 40 CFR 270.14(b)(13) and 270.14(b)(14). The plan identifies the activities which will continue throughout the extended post-closure care of the facility.

The completed land disposal unit will be inspected to check the integrity of the waste containment system on a routine basis. In addition, a groundwater monitoring system as described in Attachment D of this Extended Post-Closure Permit will continue to be sampled and analyzed throughout extended post-closure care. The post-closure period for the Hazardous Waste Cell (Area 1) began on the date IDEM accepted the closure plan certification, December 20, 1989. The post-closure period for the solid waste portion (Areas 2 through 4) began on the date of final closure certification, February 9, 1995.

WMIN will continue to conduct custodial care for the solid waste portion (Areas 2 through 4) throughout the extended post-closure care period. The custodial care consists of the following:

- Collect and dispose of leachate from Areas 2 through 4;
- Operate and maintain the gas collection and control system (GCCS) in accordance with the IDEM Office of Air Quality permit;
- Inspect and maintain the cover system on Areas 2 through 4;
- Mow and maintain the cover on Areas 2 through 4; and
- Inspect the facility semiannually.

C-1 Extended Post-Closure Contact

40 CFR 264.118(b)(3)

See Table C-1.

C-2 Extended Post-Closure Security

40 CFR 264.14, 270.14(b)(4)

Wheeler RDF is enclosed by a six-foot high security fence that has three strands of barbed wire on the top. There is only one entrance to the site. It is locked at the close of each working day.

C-3 Request for Waiver of Preparedness and Prevention Requirements

40 CFR 264, Subpart C

Not Applicable

C-4 Landfill Maintenance Plan

C-4a List of Wastes

40 CFR 270.21(a), 264.309

The following wastes have been disposed at the Hazardous Waste Cell at the Wheeler RDF:

<u>Waste Code</u>	<u>Description</u>	<u>Volume</u>
D008	TCLP for Lead	265 yd ³
F001	Spent halogenated solvents used in degreasing	7376.4 yd ³
K051	API separator sludge from the petroleum refining industry	7560.8 yd ³
K087	Decanter tar sludge from coking operations	3961.9 yd ³

Hazardous wastes were disposed of in the Wheeler RDF from May 1981 through January 1983.

Municipal solid wastes were disposed of in Area 1, as well as Areas 2 through 4.

C-4b Liner and Cap System Description

40 CFR 270.21(b)(1), 264.301, 264.310(b)(1)

The Hazardous Waste Cell (Area 1) has the following design components to provide control of contaminant migration to the environment:

- More than 10 feet of in-situ, undisturbed clay soils exhibiting low permeabilities;
- Leachate collection and removal system;
- Leachate barrier 4 feet wide above grade and 10 feet wide below grade; and
- Compacted interim and final clay cover.

A four (4) foot leachate barrier of clay with a maximum hydraulic conductivity of 10^{-7} cm/sec was constructed to separate the hazardous waste portion of the facility from the nonhazardous portions. The barrier was constructed on the slopes of the hazardous waste portion adjacent to the non-hazardous portion.

Figure A-3 provides cross-sections of the landfill cap. The leachate barrier can be seen separating the hazardous wastes from the municipal solid waste portion of the site. This drawing also shows that the northern, eastern, and western portions of Area 1 have conventional refuse over the hazardous waste (separated by the leachate barrier). All of Area 1 is covered with a final cover.

The final cover for Area 1 consists of a minimum of 3.5 feet of compacted, fine textured soil maximum hydraulic conductivity of 10^{-7} cm/sec, a minimum of 6 inches of topsoil, and vegetation. The cover was sloped to provide for surface water runoff.

C-4b(1) Liner System Foundation Description

40 CFR 270.21(b)(1), 264.301(a) or (b), 264.310(b)(1)

The natural liner of Wheeler RDF consists of 15-50 feet of undisturbed clay soils (Valparaiso till) having a hydraulic conductivity of 10^{-6} cm/sec or less. The geologic formation extends completely under Area 1. Information concerning the geology of the area is presented in Attachment D of this Extended Post-Closure Permit.

A clay side seal was installed on the Northern Indiana Public Service Company Right of Way to protect against potential gas migration. Clay seals have also been constructed along the northern boundary of the landfill property.

C-4b(2) Leachate Collection/Detection System Operation and Design

40 CFR 270.21(b)(1), 264.75, 264.301(a) or (b), 264.310(b)(2)

The leachate collection system for Area 1 consists of two leachate collection trenches installed in the base of the unit, each equipped with a six-inch perforated poly vinyl chloride (PVC) pipe and backfilled with $\frac{3}{4}$ - to 1 $\frac{2}{3}$ -inch aggregate. The PVC pipes flow into two 48-inch concrete collection sumps, identified as LCS1 and LCS2.

The automatic leachate collection system employs electric high-head chemically-resistant submersible pumps to recover leachate. The pumps are hung within one-foot of the bottom of the sump. The pumps are located in 8-inch PVC well screen conduits strapped to the side of the leachate collection sumps. A high-density polyethylene (HDPE) discharge pipe runs from the pumps to the top of the sumps, where there are camlock connections. Recovered leachate is pumped through double-wall piping to a 5,000-gallon above ground storage tank.

The leachate collection system must be operated to prevent leachate from exiting the landfill. Since the groundwater table is elevated above the base of the landfill, the maximum level of leachate allowed within the leachate sumps will not be based upon maintaining a maximum leachate elevation of 611 ft msl (one foot above the base of the landfill, 610 ft msl). The leachate level within the sumps will be based upon maintaining an inward gradient of the groundwater into the landfill.

Based upon historical data, maintaining the leachate level at 627 ft msl, with a maximum level of 628 ft msl should result in an inward gradient of the groundwater into the landfill during the life of the permit. Groundwater elevation at the downgradient witness wells G02BR and G07BR has fluctuated between 631.5 ft msl and 637.5 ft msl throughout the last 10 years. If, however, the groundwater elevation in the downgradient witness wells G02BR or G07BR falls below 629 ft msl, the leachate maintenance level and the leachate maximum level must be adjusted. If adjustment is necessary, the leachate maintenance level shall be two (2) feet below the minimum groundwater elevation in downgradient wells G02BR and G07BR, and the leachate maximum level shall be one (1) foot below the minimum groundwater elevation in the downgradient wells G02BR and G07BR.

The pumps are controlled by a liquid level management system that monitors both the liquid level in each sump to within 1/100th of a foot, and the remaining capacity in above ground leachate storage tank. The liquid level in the sump (and in the landfill through hydraulic connection) is monitored by the liquid level management system through the use of a pressure transducer sensor. The liquid level management system includes an Oracle Crystal Ball messaging system to notify a landfill technician when the leachate recovery tank contains approximately 90% of available capacity. The system is designed to automatically shut off at 90% tank capacity to prevent an overflow. The 5,000-gallon above-ground leachate storage tank is a double-wall fiberglass round tank and includes a system to contain any potential spills. The containment system includes a concrete floor, 3.3-foot high concrete walls lined with a waterproof cement-based chemical-resistant coating, and a collection sump.

The leachate sumps will be inspected during the semi-annual facility inspection. Damage or wear, which may impact the operation of the system, will be repaired as soon as possible, weather permitting, after discovery of the damage or wear. Repairs or improvements made to the leachate collection system during extended post-closure which may disturb the cap and require excavation of landfilled material will require a modification of the permit, and will be subject to the modification requirements of 40 CFR 270.42, Appendix I. In these situations, any excavated material will be returned to the landfill and the cap will be repaired and restored to a condition equivalent or better than the cap condition upon closure certification.

All hazardous leachate storage tank systems storing on-site generated hazardous leachate shall comply with 40 CFR 261. Throughout extended post-closure, the collected leachate will be manifested (as required) and transported to a permitted treatment facility at less than ninety (90) day intervals as a hazardous waste (Waste Code F039, multi-source leachate). The shipments shall comply with 40 CFR Part 263 and 40 CFR Part 268.

The leachate will be sampled and analyzed biennially for the parameters listed in the Quality Assurance Project Plan (QAPP) (Exhibit D-3) Table 3 (Leachate Monitoring Parameters). Sampling of the leachate will be performed in accordance with the *Waste Management Environmental Media Sampling Standard* (Exhibit D-1). Samples will be prepared using a volume-weighted composite from leachate sumps LCS1 and LCS2. Analysis of the leachate will be performed in accordance with the methods and expected practical quantitation limits (PQLs) listed in the QAPP developed and utilized by the laboratory (Exhibit D-3).

The analytical report for the biennial leachate samples will include sample data and quality assurance/quality control (QA/QC) data in accordance with IDEM's guidance document entitled *Solid & Hazardous Waste Programs Analytical Data Deliverable Requirements: Supplemental Guidance*. This guidance document is included in the QAPP (Exhibit D-3) Appendix C. The biennial leachate analysis report and QA/QC data will be submitted to IDEM within ninety (90) days of receipt of the analytical report by the facility. Additional information on leachate removal will also be provided to IDEM with this report, including the annual or monthly volumes of leachate recovered during the last 24 months.

Additional reporting for the leachate listed as hazardous waste F039 is done on a biennial basis

to IDEM, in accordance with 40 CFR 264.75. All reports are to be filed before March 1 of each even numbered year. Included is a description of the actual volume of the hazardous waste (leachate) generated over the past two years. These reports are signed by the generator or authorized representative.

C-4c Run-on Control System

40 CFR 270.21(b)(2) and (4), 264.301(f) and (h), 264.310(b)(4)

Not Applicable

C-4d Run-off Control System

40 CFR 270.21(b)(3) and (4), 264.301(g) and (h), 264.310(b)(4)

A cover maintenance program has been established for the clay cap over the landfill. The cap design allows for surface water to sheet flow off site. The facility was previously regulated under a General Stormwater National Pollution Discharge Elimination System (NPDES) permit. This permit was terminated in February 2003 since the facility is no longer in operation and has no point source discharges of storm water associated with industrial activity. A copy of this letter is provided as Exhibit C-1.

C-4e Cap Maintenance

40 CFR 264.310(b)

The vegetative cover on the final cover will be mowed biannually and fertilized as necessary. Additionally, Waste Management of Indiana, LLC must perform a biennial survey of the cap, provide a copy to IDEM, and maintain a copy on site. This survey is to be completed by October 1 of odd-numbered years. The purpose of the survey is to determine whether differential settlement of the landfill is occurring. If the survey shows that run-off is channel flowing rather than sheet flowing over the cap, repairs must be performed in accordance with the procedures outlined below.

Since hazardous waste was co-disposed with solid waste in Area 1, overall subsidence of the landfill is expected to occur.

Some flow over the cap occurs in Area 1 from the surrounding solid waste portion of the landfill. Damage to the cap from run-off will be repaired accordingly. If run-off is causing repeated significant damage in the same location, controls may be required.

Any item requiring repair or maintenance will be serviced or replaced to provide performance equal to a new item. Any repair to the cap due to settlement or subsidence, or any repair requiring disturbance of the clay cap will involve the following activities in the area of the repair:

1. Removal of the cover vegetative layer;
2. Addition of clay soil to the clay layer to bring it back to the grade (inclination of the slope) certified in the closure plan. The additional soil shall meet the specifications of the clay cap soil in the closure plan. The soil shall be placed in compacted lifts no greater

than 6 inches and compacted to achieve a hydraulic conductivity of no greater than 1×10^{-7} cm/sec.

3. Replacement of the vegetative cover and vegetation to meet the specifications of the closure plan.

C-5 Extended Post-Closure Cost Estimate

329 IAC 3.1-15-5

The costs for each component of the extended post-closure care and maintenance are presented in Table C-2 which summarizes the total costs for the remaining extended post-closure period. Extended post-closure care estimates are based on a third party performing the work.

The costs presented in Table C-2 are based on a 10-year extended post-closure care period. Waste Management of Indiana, LLC will review, update and submit the cost estimate annually within 60 days of the anniversary of the Financial Assurance Mechanism.. The costs will be adjusted for price changes, inflation, and reduced number of years remaining of the closure period.

C-6 Financial Assurance for Extended Post-Closure Care

329 IAC 3.1-15-6

Waste Management of Indiana, LLC has obtained a continuous surety bond as financial assurance for extended post-closure care. Renewals for this mechanism are not required. A copy of the verification certificate showing that the bond is in force is provided in Exhibit C-2. WMIN will submit a new certificate for the new amount within 90 days of the issuance of the renewal permit.

Table C-1

Extended Post-Closure Contact Information

Table C-1
Extended Post-Closure Contact

Phillip M. Mazor
District Manager, Environmental Legacy Management Group
Waste Management of Indiana, LLC
700 56th Avenue
Zeeland, MI 49464-9328

Telephone: (616) 953-5909
Email: pmazor@wm.com

Table C-2

Extended Post Closure Cost Estimate

Table C-2
Wheeler RDF Extended Post-Closure Cost Estimate

All costs are based on using third party personnel

ITEM and Annual Cost	COST for 10 Yrs
Mow Twice and Fertilize Once 11 Acres Annually (mowing \$75/acre; fertilizing \$40/acre)	\$ 20,900
Fencing Repair and Replacement (\$1,000/yr)	\$ 10,000
Topsoil Replacement (2% Annual Replacement; \$2,670/yr)	\$ 26,700
Re-establish Vegetative Cover (2% Annual Replacement; \$500/yr)	\$ 5,000
Inspection of Landfill Cover Semi-Annually (4 hours @ \$100/hr)	\$ 8,000
Biennial Survey for Settlement (\$3,000/Survey-Holland Eng.)	\$ 15,000
Semiannual Groundwater Monitoring (Sampling \$4,600/event; Analytical \$1,800/event; Reporting \$5,000/event)	\$ 228,000
Well Annual Repairs and Maintenance (\$1,000/yr)	\$ 10,000
Leachate Collection and Disposal @ \$0.045/gal D; \$0.039/gal T: 98,000 Gallons per Year	\$ 82,320
Inspection and Repair of System (\$1,000/year)	\$ 10,000
Subtotal	\$415,920
Contingencies (10%)	<u>\$ 42,000</u>
TOTAL	\$457,920

Extended Post-Closure Cost Estimate Notes

Mowing/Fertilizing

- The current contract rate for mowing is \$75/acre, which includes any surcharge for fuel. Fertilizing is conducted as needed at an estimated rate of \$40/acre.

Fencing Repair/Replacement

- Pursuant to recent inspection, the fencing is in good repair. To cover unknown fence repairs, \$1,000/year is included in the cost estimate.

Topsoil Replacement

- No change in cost estimate except for an increase in years from 5 to 10.

Reestablish Vegetative Cover

- No change in cost estimate except for an increase in years from 5 to 10.

Inspection of Landfill Cover

- Cost estimate is based on inspections/reporting being completed in 4 hours by personnel from Brown and Caldwell at \$100/hour.

Biennial Survey of Settlement

- Cost is based on current contract rate of \$3,000/ per aerial flyover by Holland Engineering in Holland, Michigan. A topographic map is prepared on a biennial basis.

Semiannual Groundwater Monitoring

- Cost estimates are based on actual costs for sampling by Brown and Caldwell at \$4,600/event; actual costs for analysis by Test America at \$1,800/event; and reporting by Brown and Caldwell at \$5,000/event. (\$11,400/event total)

Leachate Collection and Disposal

- Leachate collection and disposal is based on actual costs of \$0.045/gallon for transport by Advanced Waste (West Allis, Wisconsin) and \$0.039/gallon for disposal at the CID Biotreatment Plant in Chicago. The average annual generation rate is 98,000 gallons/year.

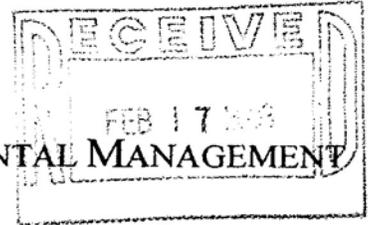
Inspection/Repair of Leachate System

- No change in cost estimate except for an increase in years from 5 to 10.

Exhibit C-1

NPDES Permit Termination Letter

cc Keith Neuhart
Shouya Gao
~~File~~



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Make Indiana a cleaner, healthier place to live.

Frank O'Bannon
Governor

Lori F. Kaplan

February 12, 2003

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603

Mr. Mike Peterson
WHEELER RECYCLING AND DISPOSAL FACILITY
N96 W13600 County Line Rd
Germantown, WI 53022

Dear Sir or Madam:

Re: Applicability of Federal and State Storm Water
Regulations to Industrial Activity for:
WHEELER RECYCLING AND
DISPOSAL FACILITY
Permit # INR00W051
WHEELER, IN

This letter is in response to your letter requesting concurrence with your interpretation of the applicability of the federal and state storm water regulations to your facility.

According to your letter, your facility does not meet the regulatory criteria which would require you to submit a NPDES storm water permit application (or continue coverage) for the following reason(s):

- (4) The facility is no longer in operation and has no point source discharges of storm water associated with industrial activity, i.e., no significant materials remain on site.

In accordance with state and federal regulations, only those facilities described in 327 IAC 15-6-4 which have discharges of storm water associated with industrial activity that enter municipal separate storm sewer systems or result in point source discharges to surface waters of the state are required to submit applications for storm water discharge permits. Facilities with existing NPDES permits that cover outfalls that receive storm water associated with industrial activity shall maintain their existing permits.

Please note that the definition of "point source" is very broad. According to 327 IAC 5-1-2(33), "point source" means "any discernable, 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, landfill leachate collection system, vessel, or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture, or agricultural storm runoff. See 327 IAC 5-2-4(a)(4) for exclusions."

If your facility does not meet the applicability requirements of 40 CFR 122.26, or 327 IAC 15-6, it is not necessary to apply for a storm water discharge permit at this time. The general permit number INR00W051 assigned to your facility will be void in 10 days from the date of this letter. **Please be advised that this letter does not relieve you from complying with other federal or state water regulations or future storm water regulations.** If you have any questions regarding this letter, please contact Ms. Donna Palmer, at 317/233-0571 or Craig Lawson at 317/233-0202.

Sincerely,



Reggie Baker Jr., Chief
Urban Wet Weather Section
Office of Water Quality

CL:dp

cc: Mr. Paul Troy
Troy Risk, Inc.
8673 Bash Street
Indianapolis, IN 46256

Exhibit C-2

Financial Assurance Mechanism

LEXON Insurance Company
10002 Shelbyville Road, Suite 100
Louisville, KY 40223

May 12, 2015

Indiana Department of Environmental Management
100 North Senate Avenue
Room IGVM 1101
Indianapolis, IN 46204

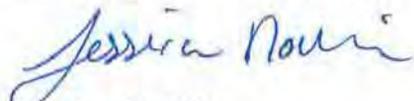
RE: Waste Management of Indiana, L.L.C.
Bond Number: 1033710

To Whom It May Concern:

This letter is our written confirmation that the above referenced bond in the amount of \$492,186.00 is continuous in nature. And that the said bond remains in effect, subject to all its agreements, conditions and limitations, and ends only with the cancellation of said bonds or other legal termination.

If you require additional information, please do not hesitate to contact me at (800) 235-9347.

Regards,
LEXON Insurance Company



Jessica Nowlin
Attorney-in-Fact

Lexon Insurance Company

KNOW ALL MEN BY THESE PRESENTS, that **LEXON INSURANCE COMPANY**, a Texas Corporation, with its principal office in Louisville, Kentucky, does hereby constitute and appoint: Brook T. Smith, Raymond M. Hundley, Jason D. Cromwell, James H. Martin, Barbara Duncan, Sandra L. Fusinetti, Mark A. Guidry, Jill Kemp, Jackie C. Koestel, Lynnette Long, Amy Meredith, Deborah Neichter, Jessica Nowlin, Theresa Pickerrell, Sheryon Quinn, Bonnie J. Wortham its true and lawful Attorney(s)-In-Fact to make, execute, seal and deliver for, and on its behalf as surety, any and all bonds, undertakings or other writings obligatory in nature of a bond.

This authority is made under and by the authority of a resolution which was passed by the Board of Directors of **LEXON INSURANCE COMPANY** on the 1st day of July, 2003 as follows:

Resolved, that the President of the Company is hereby authorized to appoint and empower any representative of the Company or other person or persons as Attorney-In-Fact to execute on behalf of the Company any bonds, undertakings, policies, contracts of indemnity or other writings obligatory in nature of a bond not to exceed \$ 4,000,000.00, Four Million dollars, which the Company might execute through its duly elected officers, and affix the seal of the Company thereto. Any said execution of such documents by an Attorney-In-Fact shall be as binding upon the Company as if they had been duly executed and acknowledged by the regularly elected officers of the Company. Any Attorney-In-Fact, so appointed, may be removed for good cause and the authority so granted may be revoked as specified in the Power of Attorney.

Resolved, that the signature of the President and the seal of the Company may be affixed by facsimile on any power of attorney granted, and the signature of the Assistant Secretary, and the seal of the Company may be affixed by facsimile to any certificate of any such power and any such power or certificate bearing such facsimile signature and seal shall be valid and binding on the Company. Any such power so executed and sealed and certificate so executed and sealed shall, with respect to any bond of undertaking to which it is attached, continue to be valid and binding on the Company.

IN WITNESS THEREOF, **LEXON INSURANCE COMPANY** has caused this instrument to be signed by its President, and its Corporate Seal to be affixed this 21st day of September, 2009.

LEXON INSURANCE COMPANY



BY _____

David E. Campbell
David E. Campbell
President

ACKNOWLEDGEMENT

On this 21st day of September, 2009, before me, personally came David E. Campbell to me known, who be duly sworn, did depose and say that he is the President of **LEXON INSURANCE COMPANY**, the corporation described in and which executed the above instrument; that he executed said instrument on behalf of the corporation by authority of his office under the By-laws of said corporation.



AMY L. TAYLOR
Notary Public- State of Tennessee
Davidson County
Mv Commission Expires 01-09-16

BY _____

Amy L. Taylor
Amy L. Taylor
Notary Public

CERTIFICATE

I, the undersigned, Assistant Secretary of **LEXON INSURANCE COMPANY**, A Texas Insurance Company, DO HEREBY CERTIFY that the original Power of Attorney of which the forgoing is a true and correct copy, is in full force and effect and has not been revoked and the resolutions as set forth are now in force.

Signed and Seal at Mount Juliet, Tennessee this 12th Day of May, 2015.



BY _____

Andrew Smith
Andrew Smith
Assistant Secretary

"WARNING: Any person who knowingly and with intent to defraud any insurance company or other person, files and application for insurance of claim containing any materially false information, or conceals for the purpose of misleading, information concerning any fact material thereto, commits a fraudulent insurance act, which is a crime and subjects such person to criminal and civil penalties."

Attachment D – Groundwater Monitoring

D-1 Interim Status Period Groundwater Monitoring Data

40 CFR 270.14(c)(1), 265.90 through 265.94

Not Applicable

D-2 Aquifer Identification

40 CFR 270.14(c)(2)

Wheeler RDF is located near the northern border of the Valparaiso Morainal Area. The area is a series of gently rolling hills arranged in an arc that parallels the southern shore of Lake Michigan. The system is the result of the retreating glacial ice front of the Lake Michigan Lobe. The Calumet Lacustrine Plain deposits, which consist of lake, beach and dune sands, lake silts and clays, and slack-water sands and silt deposits of shallow post-glacial lakes, lie just north of the facility. The primary aquifer in the vicinity of the facility is the Valparaiso Aquifer. The aquifer consists of intermixed sand, silt and gravel and is confined by overlying clayey soils.

The site is underlain by unconsolidated glacial sediments of the Valparaiso Morainal System, which lie above shale bedrock. The uppermost geologic unit is designated as the A Zone. The A Zone is 60 to 100 feet thick and is comprised primarily of silty clay and silt with seams of sand, silty sand and gravelly silt.

Below the A Zone is stratified sand and silt with some gravel and clay layers, designated the B Zone. The B Zone consists of up to four distinct horizons. These four horizons are the 1) Upper B Zone Member, 2) Shale Gravel, 3) Lake Sediment, and 4) Basal Sand. The Upper B Zone Member is a glacial-fluvial to glacial-lacustrine unit that varies in composition but is typically a fine- to medium-grained silty sand to sandy silt. The Shale Gravel unit, which is not present everywhere under the site, reaches a thickness of up to 25 feet. The Lake Sediments are generally absent or less than five feet thick. The Basal Sand is fine- to medium-grained and well-sorted. The Basal Sand lies atop shale bedrock of Devonian age. The bedrock surface is approximately 130 to 180 feet below ground surface and slopes towards the south/southwest.

Historically, horizontal groundwater flow in the base of the A Zone and the B Zone has been to the west/northwest. In addition, an upward vertical flow component within the B Zone has been noted in the western portion of the site. Site specific observations of flow direction are consistent with the regional groundwater flow regime in the Valparaiso Aquifer System.

D-3 Contaminant Plume Description

40 CFR 270.14(c)(4); 264 Appendix IX

Not Applicable

D-4 Detection Monitoring Program

40 CFR 270.14(c)(6); 264.98

D-4a Indicator Parameters, Waste Constituents, Reaction Products to be Monitored

40 CFR 270.14(c)(6)(i); 264.98(a)

The Wheeler RDF will monitor groundwater samples collected from the monitoring wells described in Section D-4b(1) for the routine detection monitoring parameters presented in the Groundwater Sampling and Analysis Plan (GWSAP) (Exhibit D-2) Table 4.

In addition to the routine detection monitoring parameters in the GWSAP (Exhibit D-2) Table 4, the Wheeler RDF will analyze for the 40 CFR 264 Appendix IX parameters (excluding dioxins and furans), during the first sampling event for any new, non-replacement wells installed. Analytical methods are specified in the GWSAP (Exhibit D-2) Table 5. Calibration procedures for field tests are described in the GWSAP (Exhibit D-2), Section 4.5 Field Measurements.

D-4a(1) Hazardous Waste Characterization

40 CFR 264.98(a)(1)

The constituents found in the wastes disposed in the landfill are listed in Attachment C, Section C-4a.

D-4a(2) Behavior of Constituents

40 CFR 264.98(a)(2)

The behavior of waste constituents is discussed in Section 5.3.2.1 of the November 22, 1991 Post-Closure Permit Application.

D-4a(3) Detectability

40 CFR 264.98(a)(3)

The detectability of the selected indicator parameters is shown in the GWSAP (Exhibit D-2), Table 4 and discussed in the Detection Monitoring Parameters and Statistical Evaluation Plan (StEP) (Exhibit D-4).

D-4b Groundwater Monitoring Program

40 CFR 270.14(c)(6)(ii), 264.97

Wheeler RDF will sample for the parameters specified in Section D-4a semiannually during the first and third quarters of the calendar year.

D-4b(1) Description of Wells

40 CFR 264.97(a) and (c)

Wheeler RDF will maintain a groundwater monitoring system at the point of compliance. Based on the data generated and interpretations made during the hydrogeological study (included as Appendix 11 of the November 22, 1991 permit application), a RCRA Part B Post-Closure detection monitoring system has been installed which consists of a total of thirteen (13) monitoring wells placed at the locations on the point of compliance. Figures D-1 and D-2 are cross sections which show the location of the Upper Member of the B Zone A - A' and B - B' respectively. Figures D-3 and D-4 show flow direction in the base of the A Zone and the Upper Member of the B Zone, respectively.

The detection monitoring system consists of the following monitoring wells:

G01BR	G12B
G02BR	G13
G03BR	G14
G05BR	G14D
G07A	G15
G07BR	G16
G11B	

Wheeler RDF shall submit a proposal for any additional wells and piezometers needed if and when the groundwater flow direction evaluation detailed in Section D-4d(6) indicates that the monitoring wells are no longer adequately monitoring the compliance point. This proposal will be submitted to the Commissioner along with the report required in Section D-4d(6).

This proposal shall contain:

1. Representative potentiometric maps (with all piezometers and well water level readings displayed) of each hydrostratigraphic unit under the facility from which sufficient water level data can be obtained semi-annually (two times/year). Potentiometric maps will be developed semi-annually.
2. A table of water levels for all wells and piezometers.
3. Representative groundwater flow rates for each hydrostratigraphic unit.

Any of these requirements may be modified or waived upon approval of the Commissioner.

New or replacement wells will be constructed in accordance with the specifications of

the existing wells. For new monitoring wells, continuous sampling will be performed unless the boring is within ten (10) feet of an existing boring or well which was sampled continuously. Continuous sampling is required for the interval below which no continuous samples have been collected. Boring and construction logs will be completed for all new wells, borings and replacement wells. USDA soil descriptions will be used. Boring and construction logs for all new wells, borings and replacement wells will be submitted to the Commissioner within ninety (90) days of completion of well installation.

Abandonment of damaged and/or obsolete wells will be done as per applicable State and Local regulations.

D-4b(2) Representative Samples

40 CFR 264.97(a)(1) and (2)

The monitoring wells were installed at locations and depths to include the significant aquifer zones lying beneath the site. Evaluation of analytical data from the monitoring system is performed on an intra-well basis (i.e., analytical results from each well are compared to its own historical data). Appendix IX (40 CFR Part 264) analyses were performed on groundwater from each of the existing monitoring wells during the January 1993 sampling event to verify no prior impacts from the landfill. The monitoring wells are screened in the lower and upper portion of the B Zone, the base of the A Zone, and in a localized aquifer within the A Zone near the western edge of the landfill (monitoring well G07A).

D-4b(3) Locations of Background Monitoring Wells Not Upgradient

40 CFR 264.97(a)(1)

Not Applicable

D-4c Background Values

40 CFR 270.14(c)(6)(iii), 264.98(c)

Background values and calculation procedures for detection monitoring parameters for each well are presented in the attached StEP, Exhibit D-4.

D-4c(1) Data Currently Available

40 CFR 264.98(c)

Wheeler RDF has established background intrawell prediction limits for each of the laboratory hazardous waste parameters monitored at the site at each of the thirteen detection monitoring wells at the site. These background values are shown in the StEP (Exhibit D-4) of this permit.

D-4c(1)(a) Background Groundwater Quality Data

40 CFR 264.98(a)(4), 264.98(c)

The calculated intrawell prediction limits are included in the StEP (Exhibit D-4) Appendix A.

D-4c(1)(b) Sampling Frequency

40 CFR 264.97(g)(1)

Background groundwater quality for each parameter or constituent is discussed in the StEP (Exhibit D-4).

D-4c(1)(c) Sampling Quantity

40 CFR 264.98(d)

A minimum of one sample from each well and a minimum of four samples from the entire system are taken each time the system is sampled.

D-4c(1)(d) Background Values

40 CFR 264.98(c)

Wheeler RDF shall express the groundwater quality data in a form necessary for the determination of statistically significant increases, as described in Section D-4d(7).

D-4c(2) Plan for Establishing Groundwater Quality Data

40 CFR 270.14(c)(6), 264.98

Not Applicable

D-4d Sampling Analysis and Statistical Procedures

40 CFR 270.14(c)(6)(iv), 264.97(d), (e), and (h), 264.98(d), (e), (f) and (g)

Wheeler RDF shall obtain and analyze samples from the groundwater monitoring wells specified in Section D-4b(1) using the techniques and procedures specified below for sample collection, preservation, analysis, and chain-of-custody.

The plan for sampling groundwater at the Wheeler RDF includes procedures and techniques for collection, preservation, shipment and chain-of-custody control. An instructional description of the procedures is provided in the *Waste Management Environmental Media Sampling Standard* (Exhibit D-1). A site-specific groundwater sampling plan (GWSAP) is included as Exhibit D-2. Note that if there are any discrepancies between the Waste Management Environmental Media Sampling Standard and the site-specific GWSAP in Exhibit D-2, the site-specific plan takes precedent. A copy of these manuals is kept at the facility and the sampling teams follow these procedures during sample events.

D-4d(1) Sample Collection

40 CFR 264.97(d)(1)

General procedures will be followed prior to sample collection at each well. Upon arrival at each well, any problems with the condition of the well, the well identification sign, the lock, cap or key, or condition of the well footing or protective casing, will be recorded on a Monitoring Well Integrity Form [see example in the GWSAP (Exhibit D-2) Appendix B]. The weather conditions and any unusual conditions or activities nearby will be noted on the Field Information Form in the GWSAP (Exhibit D-2) Appendix C. Prior to groundwater purging and sample withdrawal, an accurate water level measurement will be taken and recorded on the Field Information Form.

The sampling system consists of dedicated purging and sampling equipment for each well, thus preventing any potential cross contamination between wells. Groundwater samples are extracted using dedicated bladder pumps with Teflon or Teflon-lined sample tubing. All non-dedicated sampling equipment (e.g. water level indicator) will be decontaminated before use and between wells utilizing deionized water.

Micro-purging techniques will be used as described in the GWSAP (Exhibit D-2) to assure that samples are drawn from the aquifer, not from stagnant water left in the well between sampling events. If a monitoring well does not recharge within a reasonable time-period (24 hours) after purging, the well will be considered "dry" for the sampling event. Pumping rates for sample extraction will be dependent upon recharge rates of the wells. Stabilization parameters include pH, specific conductance and dissolved oxygen. Stabilization criteria are provided in the GWSAP (Exhibit D-2). In addition, specific conductance, pH, and groundwater temperature measurements, which are included on the detection monitoring parameter list, will be taken subsequent to well evacuation and the results will be recorded on the field information forms.

Wheeler RDF will determine and evaluate the groundwater surface elevation referenced to msl at each monitoring well each time groundwater is sampled. The site will report the surveyed elevation of the primary (inner) well casing, referenced to ft msl, when a monitoring well is installed and every two (2) years. Elevation, as referenced to msl, of the bottom of each monitoring well will be determined if performance problems with a well are determined. Well and groundwater elevations will be measured and reported to the nearest 0.01 foot.

Laboratory blanks will be collected and prepared in accordance with the laboratory's QAPP (Exhibit D-3). The blank samples are used to determine, after laboratory analyses, whether there was a container, sample equipment or field source of contamination. Each time samples are collected for organics analyses, Wheeler RDF will prepare trip blanks. Blank samples are sample bottles containing organic free water generated by reverse osmosis or filtration systems. Trip blank water for volatile organics is specially prepared by the laboratory. A trip blank is prepared and never exposed. If non-dedicated sampling equipment is used, a field blank shall be prepared. The field blank should be

uncapped and exposed to the air during the sampling procedure. Field blank water is used to rinse the field equipment by filling the bailer or other sampling equipment, and then pouring the water back into the field blank container.

D-4d(2) Sample Preservation and Shipment

40 CFR 264.97(d)(2)

Sample containers will be supplied by the laboratory for each sampling point. The appropriate preservatives will be included with the sample bottles or will have been added to each container (as required) during sample bottle preparation by the analytical laboratory. Immediately after collection, bottles will be placed in insulated shuttles or coolers with ice packs. Also placed in the shuttles are field information forms and signed chain-of-custody forms. Sample shuttles will be secured to thwart tampering and will be provided with a custody seal such that the analytical laboratory will be aware of unauthorized entry. All arrivals are scheduled for next day delivery.

The sample bottles, volumes, preservatives and holding times for the Wheeler RDF routine detection monitoring parameters are identified in the GWSAP (Exhibit D-2) Table 4.

D-4d(3) Analytical Procedure

40 CFR 264.97(d)(3)

Samples will be analyzed utilizing the methods specified in GWSAP (Exhibit D-2) Table 4.

D-4d(4) Chain-of-Custody

40 CFR 264.97(d)(4)

At the time each sample is taken, a field chain-of-custody record will be completed and placed in the sample shuttle. Upon transfer of sample possession to subsequent custodians, the field chain-of-custody record will be signed by the person taking custody of the sample shuttle. Upon receipt of the samples at the laboratory, the sample shuttle seal will be broken and the conditions of the samples will be recorded by the receiver. The chain-of-custody records will be included with the analytical report prepared by the laboratory. As part of the chain-of custody procedure, each sample container will be labeled with the sample number and the parameter or analytical group to be sampled. An example of a chain-of-custody form is provided in the GWSAP (Exhibit D-2) Appendix D.

D-4d(5) Additional Requirements for Compliance Point Monitoring

40 CFR 264.98(d)

D-4d(5)(a) Sampling Frequency

40 CFR 264.98(d)

Wheeler RDF shall sample for the parameters specified in the GWSAP (Exhibit D-2) Table 4 semiannually throughout the life of the extended post-closure period, during the first and third quarters of each calendar year.

D-4d(5)(b) Compliance Point Groundwater Quality Values

40 CFR 264.98(d)

Groundwater quality values will be expressed in a form that uses the same units (e.g., mg/L) as that used in the predicted concentration value for each parameter so as to facilitate determination of statistically significant increases.

D-4d(6) Annual Determination

40 CFR 264.98(e)

Wheeler RDF will determine the horizontal and vertical groundwater flow rate and direction within the Upper B Zone Member at least annually and submit the results of these determinations to the Commissioner by August 1st of the following year per 40 CFR 264.98(e) and 40 CFR 264.77(c). Groundwater elevations recorded during the previous calendar year will be used in this determination.

Flow rate and direction will be determined by mapping two potentiometric surfaces for each sampling event. One potentiometric surface map will be constructed for wells completed at the base of the A Zone. Another potentiometric surface map will be constructed for wells completed at the base of the Upper B Zone Member. The contour interval for the potentiometric surface maps will be no greater than 1 foot.

If strong horizontal to slightly upward gradients within the Upper B Zone Member cannot be demonstrated, the groundwater monitoring system will be modified, as per Section D-4b(1), to provide an effective means of early detection should a release occur.

Wheeler RDF shall submit a proposal for any additional wells and piezometers needed if and when the groundwater flow direction evaluation indicates that the monitoring wells are no longer adequately monitoring the compliance point. This proposal shall be submitted to the Commissioner along with the submittal required above.

D-4d(7) Statistical Determination

40 CFR 264.98(f)

Groundwater quality at each well will be determined by analyzing a sample from the well for the constituents identified in the GWSAP (Exhibit D-2) Table 4. Replicate measurements will not be necessary.

After determination of background groundwater quality, Wheeler RDF will determine whether there is a statistically significant increase over the background values for each constituent listed in the GWSAP (Exhibit D-2) Table 4 each time groundwater quality is determined at the compliance point. In determining whether such an increase has occurred, Wheeler RDF will compare the groundwater quality at each monitoring well specified in Section D-4b(1) to the background value (for each well) specified in the StEP (Exhibit D-4) Appendix A, in accordance with the statistical procedures specified in the StEP.

D-4d(7)(a) Statistical Procedure

40 CFR 264.97(h)

The intrawell prediction interval test will be used to establish statistical limits for each parameter at each monitoring well. These statistical limits will be used for comparison with future data at each well, to determine potential facility impacts.

For those parameters identified in the GWSAP (Exhibit D-2) Table 4, which have statistical limits established in accordance with Section D-4c(1), Wheeler RDF will perform the statistical comparison outlined in the StEP (Exhibit D-4).

D-4d(7)(b) Results

40 CFR 264.98(f)(2)

Data collected for the groundwater monitoring program and analytical statistical results of the program will be submitted to IDEM's Office of Land Quality (OLQ) within 120 days of the sampling event. The submittal will include the QA/QC documentation identified in the newest version of the IDEM guidance document entitled, *Solid & Hazardous Waste Programs Analytical Data Deliverable Requirements: Supplemental Guidance*. This guidance document is included in the QAPP (Exhibit D-3) as Appendix C.

Pursuant to 329 IAC 3.1-9-2(9), analytical results and field parameters from required groundwater sampling must be submitted to OLQ in two formats. One (1) original unbound laboratory certified report with field sheets and chain of custody forms, and one (1) electronic version of the analytical results with the field parameters (pH, specific conductance, temperature, well depth, depth to water, and static water elevation) must be submitted to OLQ.

The electronic version must be submitted in a format and with a delivery method prescribed by the department on IDEM's website (see <http://www.in.gov/idem/landquality/2369.htm>). Digital media will be clearly marked to indicate the facility name, regulatory ID number and a brief description of the file contents. When delivering the electronic version via email to OLQDATA@idem.in.gov, the facility name, regulatory ID number and a brief description of the file contents should be clearly typed in the subject heading of the e-mail.

D-5 Compliance Monitoring Program

40 CFR 270.14(c)(7), 264.99

Not Applicable

D-6 Corrective Action Program

40 CFR 270.14(c)(8)

Not Applicable

Figure D-1

B Zone A – A' Cross Section

