

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

In the Matter of:)	
)	
MAHOMET VALLEY WATER AUTHORITY,)	
CITY OF CHAMPAIGN, ILLINOIS, a municipal)	
corporation, DON GERARD, CITY OF URBANA,)	
ILLINOIS, a municipal corporation,)	
LAUREL LUNT PRUSSING,)	
CITY OF BLOOMINGTON, ILLINOIS,)	
a municipal corporation, COUNTY OF CHAMPAIGN,)	
ILLINOIS, COUNTY OF PIATT, ILLINOIS,)	
TOWN OF NORMAL, ILLINOIS, a municipal)	
corporation, VILLAGE OF SAVOY, ILLINOIS,)	
a municipal corporation, and CITY OF DECATUR,)	
ILLINOIS, a municipal corporation,)	
)	
Complainants,)	
)	
v.	)	PCB 20 -
)	
CLINTON LANDFILL, INC.,	)	(Enforcement - Land)
an Illinois corporation,)	
)	
Respondent.)	

EXHIBIT A

Agency Permit No. 2005-070-LF
including the June 22, 2007 Permit Modification No. 1



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 - (217) 782-3397

JAMES R. THOMPSON CENTER, 100 WEST RANDOLPH, SUITE 11-300, CHICAGO, IL 60601 - (312) 814-6026

ROD R. BLAGOJEVICH, GOVERNOR

DOUGLAS P. SCOTT, DIRECTOR

217/524-3300

June 22, 2007

Certified Mail

7004 2510 0001 8617 0956

Clinton Landfill, Inc.

Attn: Mr. Ron L. Edwards

P.O. Box 9071

Peoria, Illinois 61612-9071

Re: 0390055036 - DeWitt County

Clinton Landfill 3

Permit No. 2005-070-LF

Log Nos. 2007-119 and 2007-182

Modification No. 1

Expiration Date: February 15, 2012

Permit File

Dear Mr. Edwards:

Permit is hereby granted to Clinton Landfill, Inc. as owner and operator, approving the development of a new municipal solid waste and non-hazardous special waste landfill all in accordance with the application and plans prepared by George L. Armstrong, P.E. of PDC Technical Services, Inc. Final plans, specifications, application, and supporting documents, as submitted and approved, shall constitute part of this permit and are identified in the records of the Illinois Environmental Protection Agency (Illinois EPA), Bureau of Land, Division of Land Pollution Control by the permit number and log number designated in the heading above.

Specifically, Permit No. 2005-070-LF issued March 2, 2007 approved:

- a. The development of this landfill so as to comply with the applicable requirements of Title 35, Illinois Administrative Code (hereinafter 35 Ill. Adm. Code), Subtitle G, Parts 811 and 812, pursuant to 35 Ill. Adm. Code, Section 813.104;
- b. The development of a new Municipal Solid Waste Landfill (MSWLF) unit consisting of a 266.533 acre facility with a single waste disposal unit of approximately 157.451 acres with a gross airspace of approximately 32,014,225 cubic yards, including daily cover and intermediate cover; and excluding leachate sand drainage layer, sidewall liner protective soils and final cover. The maximum final elevation shall be approximately 870 feet above mean sea level. Based on the anticipated waste acceptance rate of 426,000 tons per year (compacted in

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place density of 1,200 lbs/cubic yard) the facility is estimated to have an operating life of 45 years;

- c. The lower waste boundaries and the waste footprint approved by this permit are shown on Drawing No. P-LCS1 entitled "Leachate Drainage and Collection Plan". The lower waste boundaries approved by this permit are defined by the top of liner grades shown on Drawing No. P-LCS1 plus 1-foot for the leachate sand drainage layer on the floor liner and 1.5-feet for the protective soils on the sidewall liner. The final contours approved by this permit are shown on Drawing No. P-FG4 entitled "Final Waste Grade Plan". Both Drawings are in the addendum dated June 9, 2006; and
- d. Acceptance of special waste streams without individual special waste stream authorizations, in accordance with the special conditions listed in Part III of this permit.

Permit Modification No. 1 is hereby granted to Clinton Landfill, Inc. as owner and operator, allowing modification of an existing municipal solid waste and non-hazardous special waste landfill all in accordance with the application and plans provided in application Log Nos. 2007-119 and 2007-182. Application Log No. 2007-119 was prepared by Jerrel L. Shaffer, P.E., of SKS Engineers, Inc., and was signed and sealed by Mr. Shaffer on March 23, 2007. Application Log No. 2007-182 was prepared by William N. Bicher and George L. Armstrong, P.E., both of PDC Technical Services, Inc., and was signed and sealed by Mr. Armstrong on April 27, 2007.

The permit application approved by Modification No.1 consists of the following documents:

Permit Application Log No. 2007-119

<u>DOCUMENT</u>	<u>DATED</u>	<u>DATE RECEIVED</u>
Original Permit Application	March 2007	March 26, 2007
Additional Information	June 12, 2007	June 14, 2007

Permit Application Log No. 2007-182

Original Permit Application	April 27, 2007	May 1, 2007
Additional Information	May 7, 2007	May 14, 2007

Modification No. 1 to Permit No. 2005-070-LF approves the following:

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1. The construction acceptance report for a test liner (Log No. 2007-119);
2. Reconfiguration of leachate collection sump L301 to allow the sideslope riser from this sump to run up the north face of the sideslope as opposed to the northwest corner (Log No. 2007-182); and
3. Revised gradation specifications for washed gravel used for envelopment of the leachate collection pipe (Log No. 2007-182).

Except for the differences described in the table below, the special conditions in Modification No. 1 are identical to the special conditions of Permit No. 2005-070-LF, issued March 2, 2007.

Special Condition No. in Permit No. 2005-070-LF	Special Condition No. in Modification No. 1	Description of Modification
III.A.2	III.A.2	Revised to reference the enclosure in Permit No. 2005-070-LF.
III.A.8	III.A.8	Revised to reference the enclosure in Permit No. 2005-070-LF.

Pursuant to Section 39(a) of Illinois Environmental Protection Act (Act) [415 ILCS 5/39(a)] and 35 Ill. Adm. Code, 813.104(b), this permit is issued subject to the development, operating and reporting requirements for non-hazardous waste landfills in 35 Ill. Adm. Code, Parts 810, 811, 812 and 813, the standard conditions attached hereto, and the following special conditions. In case of conflict between the permit application and these conditions (both standard and special), the conditions of this permit shall govern.

I. CONSTRUCTION QUALITY ASSURANCE

1. All necessary surface drainage control facilities shall be constructed prior to other disturbance in any area.
2. No part of the unit shall be placed into service or accept waste until an acceptance report for all the activities listed below has been submitted to and approved by the Illinois EPA as a significant modification pursuant to 35 Ill. Adm. Code, Sections 811.505(d) and 813.203.
 - a. Preparation of the subgrade and foundation to design parameters;
 - b. Installation of the compacted earth/synthetic liner;
 - c. Installation of the leachate drainage, collection and management systems;

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- d. Placement of final cover;
 - e. Installation of leachate re-circulation system;
 - f. Installation of gas control facilities; and
 - g. Construction of ponds, ditches, lagoons and berms.
3. The permittee shall designate an independent third party contractor as the Construction Quality Assurance (CQA) Officer(s). The CQA Officer(s) shall be an Illinois Certified Professional Engineer who is independent from and not under the control or influence of the operator, any employee of the operator, or any other corporation, company or legal entity that is a subsidiary, affiliate, parent corporation or holding corporation associated with the operator.
4. Except as provided below, the CQA Officer(s) designated pursuant to Condition 1.3. shall personally be present during all construction and testing that is subject to CQA certification pursuant to 35 Ill. Adm. Code, Section 811.503(a). If the CQA Officer(s) is unable to be present as required, then a written explanation and signed statement must be provided for each absence pursuant to 35 Ill. Adm. Code, Section 811.503(b).
5. The clay liner shall be tested for density and moisture content a minimum of five tests per lift per acre.
6. A minimum of one laboratory hydraulic conductivity test shall be performed for every 10,000 cubic yards of soil placed in the liner. Additionally, each lift of the soil liner shall be tested for hydraulic conductivity at least once for each phase of construction.
7. If the clay portion of the liner is exposed to freezing conditions, it must be recertified. The designated CQA Officer(s) shall then certify that the clay portion of the liner and all necessary repairs to the liner geomembrane and leachate drainage layer meet the required design standards. This certification must be provided to the Illinois EPA prior to disposal of waste on the subject portion of the liner. If operating authorization has not yet been issued for that area, the recertification shall be included in the application for Significant Modification of Permit to obtain Operating Authorization for that area.
8. Pursuant to 35 Ill. Adm. Code, Section 811.505(d), upon completion of construction of each major phase, the CQA Officer(s) shall submit an acceptance

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report to the Illinois EPA. The acceptance report shall be submitted before the structure is placed into service and shall contain the following:

- a. A certification by the CQA Officer(s) that the construction has been prepared and constructed in accordance with the engineering design;
- b. As-built drawings; and
- c. All daily summary reports.

9. Construction of Sidewall Liner:

- a. The operator shall maintain a minimum "freeboard" of one (1) foot between the top of the sidewall liner and the top of the waste;
- b. Prior to installing an increment of the sidewall liner, the sidewall liner in that area shall be inspected. Any areas damaged by desiccation, frost action, etc. shall be excavated and reconstructed in accordance with the Construction Quality Assurance program approved by this permit;
- c. After each increment of the composite liner up the sidewall is completed, the operator shall provide written notification of its completion to the Illinois EPA's Champaign Regional Office. Upon receipt of the notification, the inspector shall be allowed fifteen working days to examine the construction. The Illinois EPA is not obligated to approve the construction or certification. The operator may dispose of refuse in the subphase after the fifteen day period if, having complied with the terms of this condition, the operator is not informed of a problem by the Illinois EPA or its agents; and
- d. At the same time the Champaign Regional Office or delegated government is given notification that an increment of the sidewall liner has been completed, the Permit Section shall be provided with the information required in an Acceptance Report pursuant to 35 Ill. Adm. Code, 811.505(d) on its construction.

10. Applications for operating authorization shall not be made for areas of less than 1.5 acre increments of constructed liner.

11. All stakes and monuments marking the facility boundary and the permitted disposal area shall be maintained, inspected annually and surveyed no less

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frequently than once in five years by a professional land surveyor. Any lost or damaged monuments shall be replaced.

12. All standards for testing the characteristics and performance of materials, products, systems and services shall be those established by the American Society for Testing and Materials (ASTM) unless otherwise stated in the permit application.
13. Sixty-mil geomembranes used at this facility for bottom liner systems in compliance with 35 Ill. Adm. Code, Section 811.306(d)(5)(A) shall have a minimum thickness no less than 57 mil and an average thickness no less than 60 mil. The thickness of the geomembranes shall be determined using an approved ASTM method, other than ASTM D 1593.

II. OPERATING CONDITIONS

1. This permit is for development only. No waste may be accepted at this facility until operating authorization to commence waste disposal operations is granted by the Illinois EPA in the form of a significant modification of the permit.
2. Pursuant to 35 Ill. Adm. Code, Sections 811.107(a) and 811.107(b), throughout the operating life of this landfill, waste shall not be placed in a manner or at a rate which results in unstable internal or external slopes or interference with construction, operation or monitoring activities.
3. The operator of this solid waste facility shall not conduct the operation in a manner which results in any of the following:
 - a. refuse in standing or flowing waters;
 - b. leachate flows entering waters of the State;
 - c. leachate flows exiting the landfill confines (i.e., the facility boundaries established for the landfill in a permit or permits issued by the Illinois EPA);
 - d. open burning of refuse in violation of Section 9 of the Act;
 - e. uncovered refuse remaining from any previous operating day or at the conclusion of any operating day, unless authorized by permit;

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- f. failure to provide final cover within time limits established by Board regulations;
 - g. acceptance of wastes without necessary permits;
 - h. scavenging as defined by Board regulations;
 - i. deposition of refuse in any unpermitted (i.e., without an Illinois EPA approved significant modification authorizing operation) portion of the landfill;
 - j. acceptance of a special waste without a required manifest and identification record;
 - k. failure to submit reports required by permits or Board regulations;
 - l. failure to collect and contain litter from the site by the end of each operating day; and
 - m. failure to submit any cost estimate or any financial assurance mechanism for the facility as required by Section 21.o.13 of the Act.
3. Moveable, temporary fencing shall be used to prevent blowing litter when the refuse is above the natural ground line.
4. At the end of each day of operation, all exposed waste shall be covered with:
- a. Clean soil at least six (6) inches thick (i.e., conventional daily cover); or
 - b. An alternate cover as described below.
5. Polypropylene non-woven and woven geotextile such as Fabrisoil, Typar 3601, Amoco 2002 or their equivalents are approved as alternate daily cover pursuant to 35 Ill. Adm. Code, Sections 811.106(b) and 812.111(b). Use of alternate materials as daily cover shall be subject to the following conditions:
- a. If any alternate daily cover other than those approved by this permit are to be used, their use must be approved by the Illinois EPA through the permit process;
 - b. At any one time, the total area, using alternate daily cover, shall be no more than 2,500 square yards. Beyond this maximum, daily cover soil

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shall be used on all areas where waste has been disposed and to which intermediate or final cover has not been applied;

- c. Areas upon which alternate daily cover has been used must be covered with either conventional cover or additional waste within six days;
 - d. Conventional daily cover in accordance with 35 Ill. Adm. Code 811.106(a) shall be used if weather or other conditions adversely affect the ability of the alternate daily cover to prevent problems with blowing litter, fire, odors, or vectors;
 - e. ~~Geotextile fabric shall be anchored adequately to prevent wind damage. If the alternate daily cover is torn during or after placement, it must be repaired immediately or the damaged area must be covered with six inches of daily cover soil;~~
 - f. When an alternate daily cover is applied, the operator shall keep a record including a description of the weather conditions, the type of alternate daily cover used and its performance. A summary of this information shall be provided with this facility's annual reports; and
 - g. Any alternate daily cover which has been used for daily cover may not be reused for any purpose (including road underlayment and erosion control) outside of permitted disposal boundaries.
6. No later than 60 days after placement of the final lift of waste in any area, the area shall receive a final cover system meeting the design specifications approved in this permit application. The final cover system for the entire facility consists of the following layers from bottom of cover to top of cover:
- 12-inches of soil foundation layer
 - 12-inches of compacted clay with hydraulic conductivity no greater than 1×10^{-7} cm/sec.
 - 40-mil HDPE geomembrane (textured on the sideslopes)
 - Drainage layer consisting of a geotextile and HDPE geonet. [Alternatively, a geocomposite drainage layer can be used.]
 - 3-foot thick protective cover capable of supporting vegetation.
7. All waste not covered within sixty days of placement with additional waste or final cover shall have an intermediate cover of compacted clean soil with a minimum thickness of one foot applied to it.

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8. The operator shall implement a load checking program that meets the requirements of 35 Ill. Adm. Code, Section 811.323. If regulated hazardous waste is discovered, the Illinois EPA shall be notified no later than 5:00 p.m. the next business day after the day it is detected. The load checker shall prepare a report describing the results of each inspection. A summary of these reports shall be submitted to the Illinois EPA as part of this facility's annual report.
9. Asbestos containing wastes shall not be accepted until a revised operating plan including appropriate National Emission Standards for Hazardous Air Pollutants (NESHAPS) requirements has been submitted to and approved by the Illinois EPA. The revised operating plan shall be submitted to the Illinois EPA in the form of an application for significant modification.
10. **Management of Unauthorized Waste**
 - a. Landscape waste found to be mixed with municipal waste will be removed the same day and transported to a facility that is operating in accordance with the Act, Title V, Section 21;
 - b. Lead-acid batteries will be removed the same day and transported either to a drop-off center handling such waste, or to a lead-acid battery retailer;
 - c. Potentially infectious medical waste (PIMW) found to be mixed with municipal waste shall be managed in accordance with 35 Ill. Adm. Code, Subtitle M;
 - d. Tires found to be mixed with municipal waste shall be removed and managed in accordance with 35 Ill. Adm. Code, Part 848;
 - e. White good components mixed with municipal waste shall be removed and managed in accordance with Section 22.28 of the Act;
 - f. This facility is prohibited from disposing any waste containing polychlorinated biphenyls (PCBs) in concentration greater than allowed, pursuant to the Toxic Substance Control Act (TSCA);
 - g. No liquid waste (special or non-special) as determined by the Paint Filter Test shall be disposed unless the waste is from a household or is in a small container similar in size to that normally found in household waste and the container was designed for use other than storage. The prohibition applies to on-site generated wastes except for leachate or gas condensate that is specifically approved by permit for recirculation into the landfill.

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However, minor amounts of liquid resulting from precipitation (rain, sleet, hail or snow) during transport and disposal operations shall not be construed as a violation of this condition;

- h. In accordance with Section 21.6 of the Act, beginning July 1, 1996, no owner or operator of a sanitary landfill shall accept liquid used oil for final disposal that is discernable in the course of prudent business operation; and
 - i. After the unauthorized waste has been removed, a thorough cleanup of the affected area will be made according to the type of unauthorized waste managed. Records shall be kept for three (3) years and will be made available to the Illinois EPA.
- 11. Operating hours are those hours during which waste may be accepted. For this facility, the operating hours shall be limited to 6:00 a.m. to 6:00 p.m., Monday through Friday, and 6:00 a.m. to 3:00 p.m. on Saturday. Adequate lighting shall be provided for outdoor activities at the landfill occurring before sunrise or after sunset.
- 12. If it is required for the facility to be open beyond normal operating hours to respond to emergency situations, a written record of the date(s), times and reason the facility was open shall be made part of the operating record for the facility. The Illinois EPA-Champaign Regional Office and, when applicable, the county authority responsible for inspections of this facility per a delegation agreement with the Illinois EPA shall be notified no later than 5:00 p.m. the next business day following the acceptance of waste outside the specified operating hours.
- 13. Road building materials used to construct roads at the facility that are not solid waste may be stockpiled on-site in the amount estimated to be needed within the next construction season provided they are managed in accordance with 35 Ill. Adm. Code, Section 811.108(c)(1).
- 14. Equipment shall be maintained and available for use at the facility during all hours of operation to allow proper operation of the landfill. If breakdowns occur that would prevent proper facility operation, back-up equipment shall be brought onto the site.
- 15. All utilities, including but not limited to heat, lights, power, communications equipment and sanitary facilities necessary for safe, efficient and proper operation of the landfill shall be available at the facility at all times.

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16. Waste shall be deposited at the fill face and compacted upward into the fill face unless precluded by extreme weather conditions or for reasons of safety.
17. The operator shall implement methods for controlling dust so as to prevent wind dispersal of particulate matter off-site.
18. The facility shall be constructed and operated to minimize the level of equipment noise audible outside the facility. The facility shall not cause or contribute to a violation of 35 Ill. Adm. Code, Parts 900 through 905.
19. The operator shall implement measures to control the population of disease and nuisance vectors.
20. The operator shall institute fire protection measures in accordance with the proposed Hazard Protection and Emergency Response Plan.
21. The operator shall implement methods to prevent tracking of mud by hauling vehicles onto public roadways.
22. Access to the active area and all other areas within the boundaries of the facility shall be controlled by use of fences, gates and natural barriers to prevent unauthorized entry at all times.
23. A permanent sign shall be maintained at the facility entrance containing the information required under 35 Ill. Adm. Code, Section 811.109(b)(1) through (5).

III. SPECIAL WASTE

A. DISPOSAL OF SPECIAL WASTE

1. The permittee is authorized to accept non-hazardous special waste that meets the definition of industrial process waste or pollution control waste as found in Sections 3.235 and 3.335, respectively, of the Illinois Environmental Protection Act, in accordance with the following requirements:
 - a. The waste is analyzed in accordance with the requirements described below and complies with the acceptance criteria in the approved waste analysis plan;
 - b. The waste is delivered by an Illinois licensed special waste hauler or an exempt hauler as defined in 35 Ill. Adm. Code, Section 809.211; and

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c. The waste is accompanied by a manifest, if required.

2. The permittee shall obtain a completed Special Waste Preacceptance Form (enclosed along with Permit No. 2005-070-LF) and a preacceptance analysis from each generator for each waste to be accepted. In addition, the Annual Generator Special Waste and Recertification for Disposal of Special Waste form (enclosed along with Permit No. 2005-070-LF), which certifies the waste has not changed since the last analysis, must be completed and included in the operating record. A complete laboratory analysis must be provided with the exceptions listed below.

Analysis shall be conducted using SW-846 test methods. The waste shall be reanalyzed at least every five years and must identify the actual concentration of each chemical constituent and state of each physical parameter. In all cases, a copy of the lab analysis (on lab letterhead and signed by a responsible party such as the person conducting the analysis or his/her supervisor) must be included in the operating record with the Special Waste Preacceptance Form (Profile Identification Sheet). The analysis may not be greater than one year old at the time. A new analysis is required if the composition of the waste changes (normal variations in waste composition are expected and are not included in this requirement). All waste must be analyzed as follows:

- a. The permittee shall obtain the following lab analyses to determine the concentrations of the following parameters.

Paint Filter Test
Flash point
Sulfide (reactive)
Cyanide (reactive)
Phenol (total)
pH
Toxicity Characteristic Constituents

- b. The permittee shall obtain analysis for reactive sulfides (H_2S) and cyanides (HCN). Waste containing 250 ppm or greater reactive cyanide or 500 ppm or greater reactive sulfide is presumed to be hazardous waste pursuant to 35 Ill. Adm. Code, Section 721.123(a)(5) unless specific information to show it does not present a danger to human health or the environment is provided. Analysis for total sulfide and/or cyanide may be substituted for reactive concentrations if they are equal to or less than 10 ppm. For wastes containing greater than 10 ppm reactive cyanide or reactive sulfide, the permittee shall not accept the waste unless the generator provides a signed and dated statement indicating the following:

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- i. The waste has never caused injury to a worker because of H₂S and/or HCN generation;
 - ii. That the OSHA work place air concentration limits for H₂S and/or HCN have not been exceeded in areas where the waste is generated, stored or otherwise handled; and
 - iii. That air concentrations of H₂S and/or HCN above 10 ppm have not been encountered in areas where the waste is generated, stored or otherwise handled.
- c. The permittee shall obtain analysis for phenols. If the total phenol concentration is greater than 1000 ppm, the waste will be required to be drummed and labeled, unless justification that this precaution is not necessary is provided. The justification must demonstrate skin contact is unlikely during transport or disposal.
- d. The permittee shall obtain metals and organics analysis. Either procedure may be utilized (i.e., total or TCLP), but any constituent whose total concentration exceeds the TCLP limit specified in 35 Ill. Adm. Code, Section 721.124 must be analyzed using the TCLP test and the results reported, unless an alternative test has been approved by the Illinois EPA. TCLP test methods must be in accordance with SW 846-1311.
- e. EXCEPTIONS:
- i. The generator may certify that the eight pesticides (D012, D013, D014, D015, D016, D017, D020 and D031) would not reasonably be expected to be present in the waste based on the nature of the process generating the waste.
 - ii. Petroleum contaminated media and debris from LUST sites subject to corrective action regulation under 35 Ill. Adm. Code, Parts 731 and 732 are temporarily exempt from complete TCLP analysis and the generator may limit analyses to flashpoint, paint filter test and TCLP lead.
 - iii. For off-specification, unused or discarded commercial or chemical products, an MSDS to determine the hazardous constituents present may be provided in lieu of analytical results.

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f. CLARIFICATIONS:

Notwithstanding the exception for manufactured gas plant waste contained in 35 Ill. Adm. Code 721.124(a), no manufactured gas plant waste shall be disposed in a non-hazardous waste landfill, unless: i) the waste has been tested in accordance with subsection (d) of this special condition, and ii) the analysis has demonstrated that the waste does not exceed the regulatory levels for any contaminant given in the table contained in 35 Ill. Adm. Code 721.124(b).

- g. Pursuant to 35 Ill. Adm. Code 722.111, the generator of a solid waste is required to determine if the waste is hazardous and comply with all applicable hazardous waste regulations. For any waste that has been determined to be hazardous, the results of quality assurance testing for the treatment program, taken at an appropriate frequency to demonstrate the waste is no longer hazardous, must be obtained. Verification that the waste meets the land disposal restrictions must also be documented. These requirements are in addition to the other standard special waste test requirements.

3. An individual waste stream permit is no longer required by the Illinois EPA for this facility. Therefore, a waste stream permit number will no longer be required on the manifest when shipping waste to this facility as authorized by this permit.
4. Special waste generated due to an emergency situation may be disposed without complete TCLP analysis if:
 - a. The permittee receives authorization from the Emergency Response Unit of the Illinois EPA at 1-217-782-3637;
 - b. The permittee ensures that the generator has received an incident number from the Illinois Emergency Management Agency at 1-800-782-7860 within Illinois, or 1-217-782-7860 outside of Illinois; and
 - c. The waste is analyzed for the chemical constituents required by the Emergency Response Unit.
5. The permittee shall conduct the following analyses for waste received in labeled containers in lab packs, including commingled wastes:
 - a. Compatibility review in accordance with the procedures identified in USEPA document EPA-600/2-80-076; and

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- b. MSDS review to determine the hazardous constituents present and appropriate USEPA hazardous waste class.
- 6. RCRA empty containers received as a special waste are subject to the following conditions:
 - a. Containers have a rated capacity of less than 110 gallons only.
 - b. Containers which formerly held 'P' listed hazardous waste or TSCA regulated quantities of PCBs or empty compressed gas cylinders are not included under this permit.
 - c. All containers must meet the definition of empty as described in 35 Ill. Adm. Code, Section 721.107(b).
 - d. Additionally, where possible, a copy of the material safety data sheets for products last present in the container shall be obtained and kept on file.
 - e. For drums, at least one end must be removed and the drums must be crushed flat.
- 7. The Special Waste Preacceptance Form shall be utilized for the special waste profile identification requirements of 35 Ill. Adm. Code, Section 811.404(a).
- 8. The Annual Generator Special Waste Recertification for Disposal Special Waste form (enclosed along with Permit No. 2005-070-LF) shall be utilized for the special waste recertification requirements of 35 Ill. Adm. Code, Section 811.404(b).
- 9. The operator shall retain all special waste records until the end of the post-closure period in accordance with 35 Ill. Adm. Code, Section 811.405.

B. SOLIDIFICATION OF SPECIAL WASTE

- 1. Waste solidification shall take place in liquid tight and structurally sound inspectable containers like steel drums and roll-off containers placed over an area that has both a certified liner and an operating leachate collection system that meet the standards of 35 Ill. Adm. Code 811.306, 811.307 and 811.308. The solidification area shall be at least 10-feet above the landfill floor, and at least 30-feet from the landfill sidewall liner. Berms shall be constructed around the solidification area to prevent run-off from the area.

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2. Solidification containers shall be adequately spaced to allow inspections and equipment access. No more than 10 drums and 10 roll-off containers shall be used at any one time.
3. All special waste generators which send liquid waste to this facility for solidification and disposal must have an Illinois EPA generator number.
4. Only non-hazardous wastes as defined in 35 Ill. Adm. Code 722.111 may be received for solidification at this facility.
5. This permit approves the use of the following reagents and absorbents in the solidification process:
 - a. Reagents
 - i. Lime
 - ii. Pozzalime
 - iii. Fly ash from coal combustion
 - iv. Bottom ash from coal combustion
 - b. Absorbents
 - i. Soil
 - ii. Oil Dry
 - iii. Sawdust
 - iv. Corn cobs

All reagents and absorbents used must not exhibit any characteristic which would classify it as a hazardous waste. Use of other materials or wastes other than those listed above shall be subject to approval by the Illinois EPA permit process.

6. Absorbents and reagents will be stockpiled on site in accordance with the facility's Storm Water Pollution Prevention Plan. Absorbent stockpiles shall not contain more than 500 cubic yards of absorbent materials. Reagent stockpiles shall be covered to protect the reagents from precipitation and wind. Reagent stockpiles shall not contain more than 120 cubic yards of reagents. Storage of

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reagents and absorbents shall not contribute to a violation of Section 21(a), Section 12, or Section 9 of the Act.

7. The solidification unit must be operated so as to minimize spilling reagents/absorbents and waste. Any spilled reagents/absorbents and waste shall be removed on a daily basis.
8. The following conditions are applicable to any waste containing a liquid phase(s) (fails paint filter):
 - a. Each phase must be analyzed for total organic halogen (TOX) using the test method specified in 35 Ill. Adm. Code, Part 729. Any waste containing 10,000 ppm or greater of TOX must be analyzed to determine the specific constituents, and their concentrations, that make up TOX. These constituents and their concentration should be reported on the lab analysis report. Any liquid containing multiple phases must include individual analyses for each phase;
 - b. The preacceptance documentation must include a description of the solidification method used at the generating site (or off-site permitted treatment facility) with test results demonstrating that the solidified waste passes the paint filter test; and
 - c. If a waste is used to solidify the liquid (i.e., two or more wastes are mixed) all required testing must be performed on the solidified waste. Otherwise, all testing (except paint filter) may be performed on the waste before solidification and a statement from the generator may be accepted certifying that the additives used have been evaluated and there is no reason to believe they would cause the waste to become hazardous.
9. The permittee shall not perform solidification if the bench-scale reactivity test(s) determines incompatibility of the waste and reagent.
10. The following information shall be documented in the facility's operating record for each load of waste received for solidification:
 - a. Date the load was received;
 - b. Manifest number associated with the waste load;
 - c. Waste name;

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- d. Volume of waste received;
 - e. Generator name, location and Illinois EPA generator number or hauler number, if not a special waste;
 - f. Results of all analyses conducted on the waste load;
 - g. Type of reagent and/or absorbent used to solidify the waste; and
 - h. Documentation that the solidified waste does not exhibit hazardous characteristics as defined in 35 Ill. Adm. Code 721 Subpart C, e.g., result of the compatibility test done in accordance with the facility's waste analysis plan.
11. Each load of the solidified waste shall be sampled and tested by the paint filter test described in 35 Ill. Adm. Code 729.320 prior to disposal. Waste that yields fluid may not be disposed.
12. A complete TCLP analysis shall be performed on solidified waste resulting from a liquid waste with a pH ≤ 5 to demonstrate that no hazardous waste has been produced.
13. By the end of each day of the operation, all waste received for treatment shall be solidified. Solidified wastes shall be removed from the solidification unit and disposed of at the active disposal face of the landfill no later than the end of next business day.
14. All wash water generated from the solidification unit shall be managed in the same manner as leachate.
15. The solidification unit may be operated from 6:00 a.m. to 6:00 p.m. Monday through Friday and 6:00 a.m. to 3:00 p.m. on Saturday.
16. In the event of a spill, such materials and equipment necessary must be available on site in order to prevent leachate migration from the contaminated area.

IV. RECORDKEEPING

1. Information developed by the operator but not yet forwarded to the Illinois EPA in a quarterly or annual report shall be kept at or near the facility for inspection by the Illinois EPA upon request during normal working hours.

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2. Information and observations derived from load checking inspections shall be recorded in writing and retained at the facility for at least three years.
3. Every person who delivers special waste to a special waste hauler, every person who accepts special waste from a special waste hauler and every special waste hauler shall retain a copy of the special waste transportation record as a record of each special waste transaction. These copies shall be retained for three years and shall be made available at reasonable times for inspection and photocopying by the Illinois EPA pursuant to Section 4(d) of the Act.
4. The operator shall retain copies of any special waste profile identification sheets, special waste recertifications, certifications of representative samples, special waste laboratory analyses, special waste analysis plans, and any waivers of requirements, at the facility until the end of the closure period and thereafter at the site office until the end of the post-closure care period.
5. Inspections of the closed landfill shall be conducted in accordance with the approved post-closure care plan. Records of field investigations, inspections, sampling and corrective action taken are to be maintained at the site and made available to Illinois EPA personnel. During the post-closure care period, those records are to be maintained at the office of the site operator.
6. The owner or operator shall record and retain near the facility in an operating record or in some alternative location specified by the Illinois EPA, the information submitted to the Illinois EPA pursuant to 35 Ill. Adm. Code, Parts 812 and 813, as it becomes available. At a minimum, the operating record shall contain the following information, even if such information is not required by 35 Ill. Adm. Code, Part 812 or 813:
 - a. Any location restriction demonstration required by 35 Ill. Adm. Code, Sections 811.302, 812.109, and 812.303;
 - b. Inspection records, training procedures, and notification procedures required by 35 Ill. Adm. Code, Section 811.323;
 - c. Gas monitoring results and any remediation plans required by 35 Ill. Adm. Code, Sections 811.310 and 811.311;
 - d. Any MSWLF unit design documentation for placement of leachate or gas condensate in a MSWLF unit required by 35 Ill. Adm. Code, Section 811.107(m);

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- e. Any demonstration, certification, monitoring results, testing, or analytical data relating to the groundwater monitoring program required by 35 Ill. Adm. Code, Sections 811.319, 811.324, 811.325, 811.326, 812.317, 813.501 and 813.502;
- f. Closure and post-closure care plans and any monitoring, testing, or analytical data required by 35 Ill. Adm. Code, Sections 811.110, 811.111, 812.114(h), 812.115 and 812.313; and
- g. Any cost estimates and financial assurance documentation required by 35 Ill. Adm. Code Part 811, Subpart G.

V. GENERAL CONDITIONS

- 1. This permit is issued with the expressed understanding that no process discharge to Waters of the State or to a sanitary sewer will occur from these facilities except as authorized by a permit issued by the Bureau of Water. Additionally, all stormwater discharges from the facility shall be authorized by appropriate permit issued by Bureau of Water.
- 2. This permit does not relieve the permittee of the responsibility of complying with the provisions of the State of Illinois Rules and Regulations, 35 Ill. Adm. Code Subtitle B, Air Pollution Control, Chapter 1. The permittee may be required to file reports and/or obtain applicable permits through the Illinois EPA's Bureau of Air (BOA) – Division of Air Pollution Control.

Based upon the information submitted in this application and consultations with BOA – Permit Section, this project requires an Air Pollution Control Construction Permit, pursuant to 35 Ill. Adm. Code 201.142, prior to the construction of the Municipal Solid Waste Landfill. Further, this project may be subject to the New Source Performance Standards (NSPS) for new Municipal Solid Waste Landfills (61 Fed. Reg. 9905 et seq.) that USEPA promulgated on March 12, 1996, i.e., 40 CFR Part 60, Subpart WWW – Standards of Performance for Municipal Solid Waste Landfills. The Illinois EPA's BOA is implementing NSPS, for landfills classified as new Municipal Solid Waste Landfill, pursuant to a delegation agreement between Illinois EPA and USEPA.

Please contact the Illinois EPA's BOA – Division of Air Pollution Control – Permit Section at 217/782-2113, if you have any questions regarding these requirements.

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3. If changes occur which modify any of the information the permittee has used in obtaining a permit for this facility, the permittee shall notify the Illinois EPA. Such changes would include but not be limited to any changes in the names or addresses of both beneficial and legal titleholders to the herein-permitted site. The notification shall be submitted to the Illinois EPA within fifteen days of the change and shall include the name or names of any parties in interest and the address of their place of abode; or, if a corporation, the name and address of its registered agent.
4. Pursuant to 35 Ill. Adm. Code, Section 813.201(a), any modifications to this permit shall be proposed in the form of a permit application and submitted to the Illinois EPA.
5. Pursuant to 35 Ill. Adm. Code, Section 813.301, an application for permit renewal shall be filed with the Illinois EPA at least ninety days prior to the expiration date of this permit.
6. Current, valid Prior Conduct Certification pursuant to 35 Ill. Adm. Code Part 745 is required for all operators of landfills that require a permit.
7. Landfill Operator Certification pursuant to 68 Ill. Adm. Code Part 870 is required for operation of a landfill.

VI. SURFACE WATER CONTROL

1. Runoff from disturbed areas to Waters of the State shall be permitted by the Illinois EPA in accordance with 35 Ill. Adm. Code, Part 309, and meet the requirements of 35 Ill. Adm. Code, Part 304 unless permitted otherwise.
2. All surface water control structures other than temporary diversions for intermediate phases shall be operated until the final cover is placed and erosional stability is provided by the final protective layer of the final cover system.
3. Runoff from undisturbed areas resulting from precipitation events less than or equal to the 25-year, 24-hour precipitation event shall be diverted around disturbed areas where possible and not commingled with runoff from disturbed areas.
4. Site surface drainage, during development, during operation and after the site is closed, shall be managed in accordance with the approved drainage control plan detailed in Permit Application Log No. 2005-070. Stormwater management structures shall be constructed prior to disturbing any portion of a drainage area in

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accordance with the sequence shown on the phasing plans, Drawing Nos. P-PP1 through P-PP12 (addendum dated January 11, 2007) and Appendix 812.110-D of Application Log No. 2005-070.

VII. LEACHATE MANAGEMENT/MONITORING

1. Pursuant to 35 Ill. Adm. Code, Section 811.309(h)(3), leachate from this MSWLF landfill shall be collected and disposed beginning as soon as it is first produced and continuing for at least 30 years after closure except as otherwise provided by 35 Ill. Adm. Code, Sections 811.309(h)(4) and (h)(5). Collection and disposal of leachate may cease only when the conditions described in 35 Ill. Adm. Code, Section 811.309(h)(2) have been achieved. Leachate removed from this landfill shall be treated at an Illinois EPA permitted facility in accordance with the leachate management plan proposed in Permit Application Log No. 2005-070.
2. Pursuant to 35 Ill. Adm. Code, Sections 811.307(a) and (b), 811.308(a) and (h), and 811.309(a), leachate shall be pumped from the side slope riser sump(s) before the level of leachate rises above the invert of the collection pipe(s) at its lowest point(s). Leachate removal as such shall be performed throughout the period that the leachate collection/management system must be operated in accordance with Permit Application Log No. 2005-070.
3. In the event that the leachate monitoring program detects a constituent in the leachate that is not already in the parameter lists for the groundwater monitoring program, the operator shall, within 90 days of such detection, submit to the Illinois EPA a permit application which either:
 - a. Proposes to add the constituent to the groundwater monitoring program; or
 - b. Demonstrates why adding the constituent to the groundwater monitoring program is not necessary or appropriate.
4. The following monitoring points (leachate collection sumps) are to be used in the Leachate Monitoring Program for this facility:

Leachate Monitoring Points

<u>Applicant Designation</u>	<u>Illinois EPA Designation</u>
L301	L301
L302	L302
L303	L303

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L304	L304
L305	L305
L306	L306
L307	L307
L308	L308
L309	L309
L310	L310
L311	L311
L312	L312
L313	L313

5. Pursuant to 35 Ill. Adm. Code, Sections 811.309(g), 811.319(a)(1)(C)(ii), 810.103, 722.111 and 721, Subpart C, leachate monitoring (i.e., sampling, measurements and analysis) must be implemented at each leachate monitoring point when that device accumulates a measurable quantity of leachate for the first time. The concentrations or values for the parameters contained in List L1 (below) shall be determined on a quarterly basis for each "producing" monitoring point and submitted with the quarterly groundwater reports. The concentrations for the parameters contained in List L2 (also below) shall be determined annually.

Each year, the permittee shall collect a representative leachate sample and have it tested for the parameters contained in List L3.

Condition VII.6. presents the sampling, testing and reporting schedules in tabular form. Leachate monitoring at each monitoring point shall continue as long as groundwater monitoring at this landfill is necessary pursuant to 35 Ill. Adm. Code, Section 811.319(a)(1)(C).

LIST L1

<u>Routine Leachate Monitoring Parameters</u>	<u>STORET</u>
Temp. of Leachate Sample (°F)	00011
Specific Conductance	00094
pH	00400
Elevation Leachate Surface (ft. AMSL)	71993
BTM of Well Elevation (ft. AMSL)	72020
Leachate Level from Measuring Point ft.	72109
Arsenic (total)	01002
Barium (total)	01007
Cadmium (total) mg/l	01027
Chromium (total)	01034

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LIST L1 (cont.)

<u>Routine Leachate Monitoring Parameters</u>	<u>STORET</u>
Copper (total)	01042
Cyanide	00720
Fluoride	00951
Iron (total)	01045
Lead (total)	01051
Manganese (total)	01055
Nickel (total)	01067
Oils (hexane soluble or equivalent)	00550
Phenols	32730
Silver (total)	01077
Zinc (total)	01092
Total Dissolved Solids (TDS) mg/l	70300
Total Suspended Solids	00530
Ammonia Nitrogen - N	00610
Bacteria (Fecal Coliform)	31616
Biochemical Oxygen Demand (BOD ₅)	00310
Mercury (total)	71900
Phosphorous	00665
Chemical Oxygen Demand (COD)	00335

LIST L2

<u>Annual Leachate Monitoring Parameters</u>	<u>STORET</u>
1,1,1,2-Tetrachloroethane	77562
1,1,1-Trichloroethane	34506
1,1,2,2-Tetrachloroethane	34516
1,1,2-Trichloroethane	34511
1,1-Dichloroethane	34496
1,1-Dichloroethylene	34501
1,1-Dichloropropene	77168
1,2,3-Trichlorobenzene	77613
1,2,3-Trichloropropane	77443
1,2,4-Trichlorobenzene	34551
1,2,4-Trimethylbenzene	77222
1,2-Dibromo-3-Chloropropane	38760
1,2-Dichloroethane	34531
1,2-Dichloropropane	34541

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LIST L2 (cont.)

<u>Annual Leachate Monitoring Parameters</u>	<u>STORET</u>
1,3,5-Trimethylbenzene	77226
1,3-Dichloropropane	77173
1,3-Dichloropropene	34561
1,4-Dichloro-2-Butene	73547
1-Propanol	77018
2,2-Dichloropropane	77170
2,4,5-tp (Silvex)	39760
2,4,6-Trichlorophenol	34621
2,4-Dichlorophenol	34601
2,4-Dichlorophenoxyacetic Acid (2,4-D)	39730
2,4-Dimethylphenol	34606
2,4-Dinitrotoluene	34611
2,4-Dinitrophenol	34616
2,6-Dinitrotoluene	34626
2-Chloroethyl Vinyl Ether	34576
2-Chloronaphthalene	34581
2-Chlorophenol	34586
2-Hexanone	77103
2-Propanol (Isopropyl Alcohol)	81310
3,3-Dichlorobenzidine	34631
4,4-DDD	39310
4,4-DDE	39320
4,6-Dinitro-O-Cresol	34657
4-Bromophenyl Phenyl Ether	34636
4-Chlorophenyl Phenyl Ether	34641
4-Methyl-2-Pentanone	78133
4-Nitrophenol	34646
Acenaphthene	34205
Acetone	81552
Alachlor	77825
Aldicarb	39053
Aldrin	39330
Alpha - BHC	39337
Aluminum	01105
Anthracene	34220
Antimony	01097
Atrazine	39033
Benzene	34030

LIST L2 (cont.)

<u>Annual Leachate Monitoring Parameters</u>	<u>STORET</u>
Benzo (a) Anthracene	34526
Benzo (a) Pyrene	34247
Benzo (b) Fluoranthene	34230
Benzo (g,h,i) Perylene	34521
Benzo (k) Fluoranthene	34242
Beryllium (total)	01012
Beta - BHC	39338
Bicarbonate	00425
Bis (2-Chloro-1-Methylethyl) Ether	73522
Bis (2-Chloroethoxy) Methane	34278
Bis (2-Chloroethyl) Ether	34273
Bis (2-Ethylhexyl) Phthalate	39100
Bis(Chloromethyl)Ether	34268
Boron	01022
Bromobenzene	81555
Bromochloromethane	77297
Bromodichloromethane	32101
Bromoform	32104
Bromomethane	34413
Butanol	45265
Butyl Benzyl Phthalate	34292
Calcium mg/l	00916
Carbofuran	81405
Carbon Disulfide	77041
Carbon Tetrachloride	32101
Chlordane	39350
Chloride mg/l	00940
Chlorobenzene	34301
Chloroethane	34311
Chloroform	32106
Chloromethane	34418
Chrysene	34320
Cis-1,2-Dichloroethylene	77093
Cobalt	01037
DDT	39370
Delta - BHC	46323
Di-N-Butyl Phthalate	39110
Di-N-Octyl Phthalate	34596

LIST L2 (cont.)

<u>Annual Leachate Monitoring Parameters</u>	<u>STORET</u>
Dibenzo (a,h) Anthracene	34556
Dibromochloromethane	32105
Dibromomethane	77596
Dichlorodifluoromethane	34668
Dieldrin	39380
Diethyl Phthalate	34336
Dimethyl Phthalate	34341
Endosulfan I	34361
Endosulfan II	34356
Endosulfan Sulfate	34351
Endrin	39390
Endrin Aldehyde	34366
Ethyl Acetate	81585
Ethylbenzene	78113
Ethylene Dibromide (EDB)	77651
Fluoranthene	34376
Fluorene	34381
Heptachlor Epoxide	39420
Heptachlor	39410
Hexachlorobenzene	39700
Hexachlorobutadiene	39702
Hexachlorocyclopentadiene	34386
Hexachloroethane	34396
Ideno (1,2,3-cd) Pyrene	34403
Iodomethane	77424
Isopropylbenzene	77223
Lindane	39782
Magnesium	00927
Methoxychlor	39480
Methyl Ethyl Ketone	81595
Methylene Chloride	34423
Naphthalene	34696
Nitrate-Nitrogen	00620
Nitrobenzene	34447
Parathion	39540
Pentachlorophenol	39032
Phenanthrene	34461
Polychlorinated Biphenyls	39516

LIST L2 (cont.)

<u>Annual Leachate Monitoring Parameters</u>	<u>STORET</u>
Potassium	00937
Pyrene	34469
Selenium	01147
Sodium	00929
Styrene	77128
Sulfate	00945
Tert-Butylbenzene	77353
Tetrachlorodibenzo-p-Dioxins	34675
Tetrachloroethylene	34475
Tetrahydrofuran	81607
Thallium	01059
Tin	01102
Toluene	34010
Total Organic Carbon (TOC)	00680
Toxaphene	39400
Trans-1,2-Dichloroethylene	34546
Trans-1,3-Dichloropropene	34699
Trichloroethylene	39180
Trichlorofluoromethane	34488
Vinyl Acetate	77057
Vinyl Chloride	39175
Xylene	81551
m-Dichlorobenzene	34566
m-Xylene	77134
n-Butylbenzene	77342
n-Nitrosodimethylamine	34438
n-Nitrosodiphenylamine	34433
n-Nitrosodipropylamine	34428
n-Propylbenzene	77224
o-Chlorotoluene	77275
o-Dichlorobenzene	34536
o-Nitrophenol	34591
o-Xylene	77135
p-Chlorotoluene	77277
p-Cresol	77146
p-Dichlorobenzene	34571
p-Isopropyltoluene	77356
p-Xylene	77133
sec-Butylbenzene	77350

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LIST L3
RCRA Parameters for Leachate and Condensate

<u>Ignitability</u>	<u>STORET</u>
Flashpoint, Pensky-Martens Closed Cup (°F)	00497
<u>Corrosivity</u>	
pH	00400
<u>Reactivity</u>	
Reactive Cyanide	99040
Reactive Sulfide	99042
<u>Toxicity (TCLP)</u>	
Arsenic	99012
Barium	99014
Cadmium	99016
Chromium	99018
Chromium, Hexavalent	99019
Lead	99020
Mercury	99022
Selenium	99024
Silver	99026
Endrin	99028
Lindane	99030
Methoxychlor	99032
Toxaphene	99034
2,4-D	99036
2,4,5-TP Silvex	99038
Benzene	99128
Carbon tetrachloride	99050
Chlordane	99148
Chlorobenzene	99096
Chloroform	99149
o-Cresol	99150
m-Cresol	99151
p-Cresol	99152
Cresol	99153
1,4-Dichlorobenzene	99154
1,2-Dichloroethane	99155
1,1-Dichloroethylene	99156

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LIST L3 (cont.)

RCRA Parameters for Leachate and Condensate

<u>Toxicity (TCLP)</u>	
2,4-Dinitrotoluene	99157
Heptachlor (and its epoxide)	99158
Hexachlorobenzene	99159
Hexachloro-1,3-Butadiene	99160
Hexachloroethane	99161
Methyl Ethyl Ketone	99060
Nitrobenzene	99062
Pentachlorophenol	99064
Pyridine	99066
Tetrachloroethylene	99068
Trichloroethylene	99076
2,4,5-Trichlorophenol	99078
2,4,6-Trichlorophenol	99080
Vinyl Chloride	99162

Notes for all leachate monitoring parameters:

- a. Flashpoint shall be reported in degrees Fahrenheit. The parameters for reactivity and toxicity shall be reported in parts per million.
- b. The permittee shall obtain metals and organics analysis. Either procedure may be utilized (i.e., total or TCLP), but any constituent whose total concentration exceeds the TCLP limit specified in 35 Ill. Adm. Code, Section 721.124 must be analyzed using the TCLP test and the results reported, unless an alternative test has been approved by the Illinois EPA. TCLP test methods must be in accordance with SW 846-1311.
- c. The test methods for leachate monitoring shall be those approved in the USEPA's Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846), Third Edition or the equivalent thereof.
- d. All parameters shall be determined from unfiltered samples.
- e. The monitoring results should be reported in ug/l units unless otherwise indicated.
6. The schedule for leachate sample collection and submission of quarterly monitoring results is as follows:

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<u>Sampling Quarter</u>	<u>Sampling List and Points</u>	<u>Report Due Date</u>
Jan-Feb (1st)	All leachate points List L1	April 15
April-May (2nd)	All leachate points List L1	July 15
	All leachate points List L2	July 15
	LREP List L3	July 15
July-Aug (3rd)	All leachate points List L1	October 15
Oct-Nov (4th)	All leachate points List L1	January 15

L1 - Routine Leachate Parameters

L2 - Annual Leachate Parameters

LREP - Reporting Label for Representative Leachate Sample

The leachate monitoring data must be submitted in an electronic format. The information is to be submitted as fixed-width text files formatted as found at www.epa.state.il.us/land/waste-mgmt/groundwater-monitoring.html.

7. Leachate Monitoring Frequency

- a. Pursuant to 35 Ill. Adm. Code 811.309(g)(1), initially, representative samples of leachate shall be collected from each established leachate monitoring location and tested in accordance with sub-Sections 811.309(g)(2)(G) and (g)(3)(D) at a frequency of once per quarter.
- b. The permittee may submit an application for significant modification of permit after leachate samples have been obtained and tested for at least eight quarters requesting reduction of sampling frequency to semi-annual monitoring in accordance with 35 Ill. Adm. Code 811.309(g)(1). If for any reason, insufficient leachate is obtained to yield a sample for testing during a given quarterly monitoring attempt, such attempt shall not count toward the eight quarters leachate monitoring requirement.

8. The development of the leachate re-circulation as proposed in application Log No. 2005-070 is hereby approved. Operation of the leachate re-circulation shall not be initiated until an acceptance report has been submitted to and approved by the Illinois EPA as a significant modification pursuant to 35 Ill. Adm. Code, Sections 811.505(d) and 813.203.

VIII. GROUNDWATER MONITORING

1. The groundwater monitoring program must be capable of determining background groundwater quality hydraulically upgradient of and unaffected by the units and to detect,

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from all potential sources of discharge, any releases to groundwater within the facility. The Illinois EPA reserves the right to require installation of additional monitoring wells as may be necessary to satisfy the requirements of this permit.

2. The groundwater monitoring wells shall be constructed and maintained in accordance with the requirements of 35 Ill. Adm. Code, 811.318(d) and designs approved by the Illinois EPA.
3. Groundwater monitoring wells shall be installed in the locations shown in Drawing P-GWMP, of the January 11, 2007 addendum of the permit application, Log No. 2005-070 and screened in the hydrogeologic unit(s) identified as potential contaminant pathway(s) within the zone of attenuation. All wells as listed in Condition VIII.9 must be installed so that samples may be taken during the months of July – August, 2007 and the results submitted to the Illinois EPA by October 15, 2007.
4. Within 60 days of installation of any groundwater monitoring well, boring logs compiled by a qualified geologist, well development data and as-built diagrams shall be submitted to the Illinois EPA utilizing the enclosed "Well Completion Report" form. For each well installed pursuant to this permit, one form must be completed.
5. Groundwater monitoring wells shall be easily visible, labeled with the Illinois EPA monitoring point designations and fitted with padlocked protective covers.
6. In the event that any well becomes consistently dry or unserviceable and therefore requires replacement, a replacement well shall be installed within ten (10) feet of the existing well. The Illinois EPA shall be notified in writing at least 15 days prior to the installation of all replacement wells. A replacement well that is more than ten feet from the existing well or which does not monitor the same geologic zone is considered to be a new well and must be approved via a significant modification permit.
7. All borings, wells and piezometers not used as monitoring points shall be abandoned in accordance with the standards in 35 Ill. Adm. Code 811.316, and the decommissioning and reporting procedures contained in the Illinois Department of Public Health's (IDPH) Water Well Construction Code, 77 Ill. Adm. Code, Part 920 (effective 1/1/92). In the event specific guidance is not provided by IDPH procedures, the enclosed Illinois EPA monitoring well plugging procedures shall be followed.
8. Groundwater sampling and analysis shall be performed in accordance with the requirements of 35 Ill. Adm. Code 811.318(e) and the specific procedures and methods approved by the Illinois EPA.

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9. The following monitoring points are to be used in the groundwater detection monitoring program for this facility:

Lower Radnor Till Sand Wells

Upgradient Wells

Applicant DesignationIllinois EPA Designation

G01M

G01M

Wells Within Zone of Attenuation

Applicant DesignationIllinois EPA Designation

G08M

G08M

G09M

G09M

G10M

G10M

G11M

G11M

G12M

G12M

Organic Soil Wells

Upgradient Wells

Applicant DesignationIllinois EPA Designation

G02D

G02D

Wells Within Zone of Attenuation

Applicant DesignationIllinois EPA Designation

G01D

G01D

G08D

G08D

G09D

G09D

G10D

G10D

G11D

G11D

G12D

G12D

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Roxana Silt-Robein Member Wells

Wells Within Zone of Attenuation

Applicant DesignationIllinois EPA Designation

G08R

G08R

G09R

G09R

G10R

G10R

G11R

G11R

G12R

G12R

NOTES:

- a. Upgradient wells screened in the Roxana Silt-Robein Member shall be installed if a downgradient well screened in that zone contains sufficient water and is able to be monitored.
- b. Wells are to be phased in according to the schedule provided in Table 812.317-1 of January 11, 2007 addendum to Application Log No. 2005-070. The following table shows this schedule:

Operating
Phase

Monitoring Wells to be Installed

- 1 G01M¹, G01D, G02D¹, G08M, G08D, G08R, G09M, G09D, G09R, G10M, G10D, G10R, G11M, G11D, G11R, G12M, G12D, G12R
- 2 G03D¹, G04M¹, G05M¹, G13M, G13D, G13R, G14M, G14D, G14R, G15M, G15D, G15R
- 3 G16M, G16D, G16R, G17M, G17D, G17R, G18M, G18D, G18R, G19M, G19D, G19R, G20M, G20D, G20R
- 4 G06D¹, G21M, G21D, G21R, G22M, G22D, G22R, G23M, G23D, G23R
- 5 G24M, G24R, G24D, G25M, G25D, G25R, G26M, G26D, G26R, G27M, G27D, G27R
- 6 G28M, G28D, G28R, G29M, G29D, G29R, G30S, G30M, G30D, G30R
- 7 G31M, G31D, G31R, G32M, G32D, G32R, G33M, G33D, G33R, G34M, G34D, G34R, G35M, G35D, G35R
- 8 G07S¹, G07D¹, G07R, G36S, G36M, G36D, G36R, G37S, G37M, G37D, G37R, G38S, G38M, G38D, G38R
- 9 G39M², G39D², G39R², G40M, G40D, G40R, G41M, G41D, G41R,

- 10 G42M, G42D, G42R, G43S, G43M, G43D, G43R
G44S, G44M, G44D, G44R, G45S, G45M, G45D, G45R, G46S, G46M,
G46D, G46R
- 11 G47M, G47D, G47R, G48M, G48D, G48R, G49M, G49D, G49R,
G50D, G50R, G51M, G51D, G51R
- 12 G52S, G52M, G52D, G52R, G53S, G53D, G53R, G54S², G54M²,
G54D², G54R², G55S, G55M, G55D, G55R, G56S, G56M, G56D,
G56R, G57S, G57D, G57R

Wells noted with a (1) are upgradient wells. Wells noted with a (2) are compliance boundary wells.

10. The monitoring program, approved by Permit No. 2005-070, shall continue for a minimum period of 30 years after closure and shall not cease until the conditions described in 35 Ill. Adm. Code, 811.319(a)(1)(C) have been achieved. The operator shall collect samples from all of the monitoring points listed in Condition VIII.9, test the samples for the parameters listed in Condition VIII.12 (Lists G1 and G2), and report the results to the Illinois EPA, all in accordance with the schedule in Condition VIII.17.
11. The applicable groundwater quality standards (AGQS) and the maximum allowable predicted concentrations (MAPC), as listed in Attachment 1, are subject to the following conditions:
 - a. Temperature and the field parameters involving depth or elevation are not considered groundwater constituents and do not need AGQS.
 - b. For constituents which have not been detected in the groundwater, the practical quantitation limit (PQL) shall be used as the AGQS.
 - c. MAPCs are only applicable to those wells within the zone of attenuation.
 - d. AGQS are only applicable to upgradient/background and compliance boundary wells.
12. AGQS and MAPC values must be determined for all of the parameters which appear in either Lists G1 or G2 (not including groundwater depth or elevations). The AGQS values shall be calculated using four (4) consecutive quarters of groundwater monitoring data and employing the statistical method described in the January 11, 2007 addendum to the application, Log No. 2005-070.

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LIST G1 (Groundwater - Quarterly)

(See Attachment 1 for Interwell Values for Each Parameter in Each Monitored Unit)

<u>FIELD PARAMETERS</u>	<u>STORETS</u>	<u>MAPC</u>	<u>AGQS</u>
pH	00400		
Specific Conductance 00094			
Temperature of Water Sample (° F)	00011	----	----
Depth to Water (ft. below land surface)	72019	----	----
Depth to Water (ft. below measuring point)	72109	----	----
Elevation of Measuring Point (Top of casing ft. MSL)	72110	----	----
Elevation of Groundwater Surface (ft. MSL)	71993	----	----
Elevation of Bottom of Well (ft. MSL)	72020	----	----
<u>INDICATOR PARAMETERS</u>	<u>STORETS</u>	<u>MAPC</u>	<u>AGQS</u>
Ammonia (as Nitrogen; Dissolved) mg/L	00608		
Arsenic (Dissolved) ug/L	01000		
Boron (Dissolved) ug/L	01020		
Cadmium (Dissolved) ug/L	01025		
Chloride (Dissolved) mg/L	00941		
Cyanide (Total) mg/L	00720		
Iron (Dissolved) ug/L	01046		
Lead (Dissolved) ug/L	01049		
Manganese (Dissolved) ug/L	01056		
Mercury (Dissolved) ug/L	71890		
Nitrate (as Nitrogen, Dissolved) mg/L	00618		
Phenols (Total Recoverable) ug/L	32730		
Sulfate (Dissolved) mg/L	00946		
Total Dissolved Solids (TDS, 180°C; Dissolved) mg/L	70300		
Total Organic Carbon (TOC; Total) mg/L	00680		
Zinc (Dissolved) ug/L	01090		

NOTE:

- i. All parameters with the "(Dissolved)" label to the right shall be determined using groundwater samples which have been filtered through a 0.45 micron filter. All other parameters shall be determined from unfiltered samples.

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- ii. Maximum allowable predicted concentrations (MAPCs) and applicable groundwater quality standards (AGQS) are given in ug/L except as otherwise noted. Also, the monitoring results should be reported in ug/L units unless otherwise indicated.

LIST G2 (Groundwater - Annual)

(See Attachment 1 for Interwell Values for Each Parameter in Each Monitored Unit)

<u>PARAMETERS</u> (ug/L)	<u>STORETS</u>	<u>MAPC</u>	<u>AGQS</u>
<u>UNFILTERED (totals)</u>			
Acetone	81552		
Acrolein	34210		
Acrylonitrile	34215		
# Alachlor	77825		
# Aldicarb	39053		
@ Aldrin	39330		
Aluminum	01105		
Ammonia (as N) (mg/L)	00610		
# Antimony	01097		
# Arsenic	01002		
# Atrazine	39033		
# Barium	01007		
# Benzene	34030		
# Benzo(a)Pyrene	34247		
# Beryllium	01012		
BOD (mg/L)	00310		
# Boron	01022		
*Bromobenzene	81555		
*Bromochloromethane (chlorobromomethane)	77297		
*Bromodichloromethane	32101		
*Bromoform (Tribromomethane)	32104		
*Bromomethane (Methyl Bromide)	34413		
*n-Butylbenzene	77342		
*sec-Butylbenzene	77350		
*tert-Butylbenzene	77353		
# Cadmium	01027		
Calcium (mg/L)	00916		
# Carbofuran	81405		
Carbon Disulfide	77041		
# Carbon Tetrachloride	32102		
Chemical Oxygen Demand (COD) (mg/L)	00335		

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LIST G2 (Groundwater - Annual) (cont.)

(See Attachment 1 for Interwell Values for Each Parameter in Each Monitored Unit)

<u>PARAMETERS</u> (ug/L)	<u>STORETS</u>	<u>MAPC</u>	<u>AGQS</u>
<u>UNFILTERED</u> (totals)			
# Chlordane	39350		
# Chloride (mg/L)	00940		
#*Chlorobenzene	34301		
*Chloroethane (Ethyl Chloride)	34311		
*Chloroform (Trichloromethane)	32106		
*Chloromethane (Methyl Chloride)	34418		
*o-Chlorotoluene	77275		
*p-Chlorotoluene	77277		
# Chromium	01034		
*Chlorodibromomethane (Dibromochloromethane)	32105		
# Cobalt	01037		
# Copper	01042		
p-Cresol	77146		
# Cyanide (mg/L)	00720		
# Dalapon	38432		
@ DDT	39370		
*Dibromomethane (Methylene Bromide)	77596		
*m-Dichlorobenzene (1,3 Dichlorobenzene)	34566		
#*o-Dichlorobenzene (1,2 Dichlorobenzene)	34536		
# p-Dichlorobenzene (1,4 Dichlorobenzene)	34571		
*Dichlorodifluoromethane	34668		
#*Dichloromethane (Methylene Chloride)	34423		
@ Dieldrin	39380		
Diethyl Phthalate	34336		
Dimethyl Phthalate	34341		
Di-N-Butyl Phthalate	39110		
# Dinoseb (DNBP)	81287		
# Endothall	38926		
# Endrin	39390		
# Di(2-Ethylhexyl)Phthalate	39100		
#*Ethylbenzene	78113		
#*Ethylene Dibromide (EDB)(1,2-Dibromo ethane)	77651		
# Fluoride (mg/L)	00951		
# Heptachlor	39410		
# Heptachlor Epoxide	39420		

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LIST G2 (Groundwater - Annual) (cont.)

(See Attachment 1 for Interwell Values for Each Parameter in Each Monitored Unit)

<u>PARAMETERS (ug/L)</u>	<u>STORETS</u>	<u>MAPC</u>	<u>AGQS</u>
<u>UNFILTERED (totals)</u>			
*Hexachlorobutadiene	39702		
# Hexachlorocyclopentadiene	34386		
Iodomethane (Methyl Iodide)	77424		
# Iron	01045		
Isophorone	34408		
*Isopropylbenzene	77223		
*p-Isopropyltoluene	77356		
# Lead	01051		
# Lindane	39782		
Magnesium (mg/L)	00927		
# Manganese	01055		
# Mercury	71900		
# Methoxychlor	39480		
*Naphthalene	34696		
# Nickel	01067		
# Nitrate-Nitrogen (mg/L)	00620		
@ Oil(Hexane-Soluble or Equivalent) (mg/L)	00550		
@ Parathion	39540		
# Pentachlorophenol	39032		
# pH	00400		
# Phenols	32730		
# Picloram	39720		
# Polychlorinated Biphenyls	39516		
Potassium (mg/L)	00937		
*n-Propylbenzene	77224		
# Selenium	01147		
# Silver	01077		
# Simazine	39055		
Sodium (mg/L)	00929		
#*Styrene	77128		
# Sulfate (mg/L)	00945		
TOC (mg/L)	00680		
#*Tetrachloroethylene (Perchloroethylene)	34475		
Tetrahydrofuran	81607		
# Thallium	01059		

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LIST G2 (Groundwater - Annual) (cont.)

(See Attachment 1 for Interwell Values for Each Parameter in Each Monitored Unit)

<u>PARAMETERS (ug/L)</u>	<u>STORETS</u>	<u>MAPC</u>	<u>AGQS</u>
<u>UNFILTERED (totals)</u>			
#*Toluene	34010		
# Toxaphene	39400		
# Trichloroethylene (Trichloroethene)	39180		
*Trichlorofluoromethane	34488		
Vanadium	01087		
# Vinyl Chloride	39175		
Vinyl Acetate	77057		
# Xylenes	81551		
*m-Xylene	77134		
*o-Xylene	77135		
*p-Xylene	77133		
# Zinc	01092		
*1,1,1,2-Tetrachloroethane	77562		
# 1,1,1-Trichloroethane (Methylchloroform)	34506		
*1,1,2,2-Tetrachloroethane	34516		
#*1,1,2-Trichloroethane	34511		
*1,1-Dichloroethane	34496		
# 1,1-Dichloroethylene	34501		
*1,1-Dichloropropene	77168		
*1,2,3-Trichlorobenzene	77613		
*1,2,3-Trichloropropene	77443		
#*1,2,4-Trichlorobenzene	34551		
*1,2,4-Trimethylbenzene	77222		
#*1,2-Dibromo-3-Chloropropane (DBCP)	38760		
#*cis-1,2-Dichloroethylene	77093		
#*trans-1,2-Dichloroethylene	34546		
# 1,2-Dichloroethane	34531		
#*1,2-Dichloropropane (Propylene Dichloride)	34541		
*1,3,5-Trimethylbenzene	77226		
*1,3-Dichloropropane	77173		
*1,3-Dichloropropene	34561		
cis-1,3-Dichloropropene	34704		
trans-1,3-Dichloropropene	34699		
trans-1,4-Dichloro-2-Butene	49263		
*2,2-Dichloropropane	77170		

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LIST G2 (Groundwater - Annual) (cont.)

(See Attachment 1 for Interwell Values for Each Parameter in Each Monitored Unit)

<u>PARAMETERS (ug/L)</u>	<u>STORETS</u>	<u>MAPC</u>	<u>AGQS</u>
<u>UNFILTERED (totals)</u>			
# 2,4,5-TP (Silvex)	39760		
# 2,4-Dichlorophenoxyacetic Acid (2,4-D)	39730		
2-Butanone(Methyl Ethyl Ketone)	81595		
2-Hexanone (Methyl Butyl Ketone)	77103		
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	78133		

NOTE:

- i. All parameters with the "(Dissolved)" label to the right shall be determined using groundwater samples which have been filtered through a 0.45 micron filter. All other parameters shall be determined from unfiltered samples.
- ii. Maximum allowable predicted concentrations (MAPCs) and applicable groundwater quality standards (AGQS) are given in ug/L except as otherwise noted. Also, the monitoring results should be reported in ug/L units unless otherwise indicated.
- iii. The preceding list of parameters (G2) includes all those found in Attachment 1 to Appendix C to LPC-PA2. The 51 constituents from 40 CFR 141.40 and the parameters from 35 Ill. Adm. Code 620.410 and the parameters from 35 Ill. Adm. Code 302, designated with (*), (#) and (@) respectively are required to be monitored annually and may not be deleted.
13. Pursuant to 35 Ill. Adm. Code, 811.319(a)(4)(A), any of the following events shall constitute an observed increase only if the concentrations of the constituents monitored can be measured at or above the practical quantitation limit (PQL):
 - a. The concentration of any constituent in List G1 of Condition VIII.12 shows a progressive increase over four (4) consecutive quarters.
 - b. The concentration of any constituent monitored in accordance with List G1 or List G2 of Condition VIII.12 exceeds the MAPC at an established monitoring point within the zone of attenuation.

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- c. The concentration of any organic constituent in List G2, monitored in accordance with Condition VIII.12 exceeds the preceding measured concentration at any established point.
 - d. The concentration of any constituent monitored at or beyond the edge of the zone of attenuation (compliance boundary) exceeds its AGQS, or pursuant to 811.320(d)(1) any constituent monitored at an upgradient well, exceeds its AGQS.
14. For each round of sampling described in Condition 10 of this Section, the operator must determine if an observed increase has occurred within 45 days of the date the samples were collected. If an observed increase is identified, the operator must also notify the Illinois EPA in writing within 10 days and follow the confirmation procedures of 35 Ill. Adm. Code, 811.319(a)(4)(B). Furthermore, the operator must complete the confirmation procedures within 90 days of the initial sampling event.
 15. Within 90 days of confirmation of any monitored increase, the operator shall submit a permit application for a significant modification to begin an assessment monitoring program in order to determine whether the solid waste disposal facility is the source of the contamination and to provide information needed to carry out a groundwater impact assessment in accordance with 35 Ill. Adm. Code 811.319(b).
 16. The first quarterly statistical evaluations shall be performed on groundwater samples taken during the months of July – August, 2007 and the results submitted to the Illinois EPA by October 15, 2007.
 17. The schedule for sample collection and submission of quarterly monitoring results is as follows:

<u>Sampling Quarter</u>	<u>Sampling Due</u>	<u>Report Due Date</u>
Jan-Feb (1st)	List G1	April 15
April-May (2nd)	List G1 and G2	July 15
July-Aug (3rd)	List G1	October 15
Oct-Nov (4th)	List G1	January 15

G1 - Routine Groundwater Parameters
 G2 - Annual Groundwater Parameters

18. Elevation of stick-up is to be surveyed and reported to the Illinois EPA:
 - a. When the well is installed (with the as-built diagrams),

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- b. Every two years thereafter, or
 - c. Whenever there is reason to believe that the elevation has changed.
19. Annually, the operator shall prepare an evaluation of the groundwater flow direction and the hydraulic gradients at the facility using the groundwater surface elevations (Storet #71993) determined for each monitoring event. This assessment shall be submitted with the monitoring results due on July 15.
20. All monitoring points shall be maintained in accordance with the approved permit application such that the required samples and measurements may be obtained.
21. Background concentrations which exhibit a statistically significant change shall be adjusted and updated in accordance with 35 Ill. Adm. Code 811.320(d)(1) and submitted to the Illinois EPA as a permit modification.
22. Information required by Conditions VIII.10 and VIII.17 must be submitted in an electronic format. The information is to be submitted, as fixed-width text files formatted as found at www.epa.state.il.us/land/waste-mgmt/groundwater-monitoring.html.
23. As proposed in Application Log No. 2005-070, wells screened within the Roxana Silt-Robein Member shall be installed at all proposed nested well locations. If any of the downgradient wells are able to be monitored, then upgradient wells shall be installed to monitor the Roxana Silt-Robein Member, and the operator shall submit an application for significant permit modification that contains contaminant transport modeling for this zone. If the Roxana Silt-Robein Member wells listed in Condition VIII.9 cannot be monitored, then the operator shall notify the Illinois EPA by submitting an application for significant permit modification.

IX. LANDFILL GAS MANAGEMENT/MONITORING

1. The landfill gas monitoring plan described in Application Log No. 2005-070 is approved. Monitoring devices shall be put into service in accordance with the following schedule:
- a. The gas monitoring probes within the waste boundary shall be installed and put into service within ninety days after final cover has been applied to the various areas where they are located.
 - b. Monitoring devices outside the waste boundary shall be put into service when waste has been disposed in the landfill near that monitoring location.

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- c. Monitoring devices within buildings shall be put into service when waste disposal begins and the building has been constructed.
- d. Ambient air monitoring devices shall be put into service downwind of the disposal unit after initial receipt of waste.
- e. Documentation that all the gas monitoring probes outside the waste boundary and the methane monitoring devices within the on-site buildings and ambient air monitoring devices have been installed shall be included with the application for a significant modification requesting authorization to place waste upon new liner.

2. The gas monitoring probes both inside and outside the waste boundary shall be monitored for the following parameters:

- a. Methane;
- b. Pressure;
- c. Nitrogen*;
- d. Oxygen; and
- e. Carbon Dioxide

*NOTE: For routine monitoring, Nitrogen may be reported as the net remaining volume fraction after the other measured constituents have been accounted for.

- 3. The ambient air monitoring devices described in the Application Log No. 2005-070 shall be used to test the air downwind of the landfill for methane.
- 4. All buildings within the facility boundaries shall be monitored continuously for methane.
- 5. Gas monitoring shall continue for at least 30 years after closure and may be discontinued only after the conditions described in 35 Ill. Adm. Code, Section 811.310(c)(4) have been achieved.
- 6. Sampling and testing of the gas monitoring probes and ambient air monitoring shall be performed at least monthly throughout the remaining operating life and during the first five years after closure of the waste disposal unit. During the remainder of the post-closure care period, monitoring may be reduced to quarterly.
- 7. In the event of any of the occurrences listed below, the operator shall: within two business days, notify the Illinois EPA in writing of an observed exceedance; implement the requirements of 35 Ill. Adm. Code 811.311 to ensure the protection of human health; and within 180 days of the occurrence, submit to the Illinois EPA an application for a

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significant modification either proposing a gas collection/management system or demonstrating that the facility is not the cause of the occurrence.

- a. A methane concentration greater than 50 percent of the lower explosive limit in air is detected in any of the below ground monitoring devices outside the waste boundary;
 - b. A methane concentration greater than 50 percent of the lower explosive limit in air is detected during ambient air monitoring;
 - c. A methane concentration greater than 25 percent of the lower explosive limit in air is detected in any building on or near the facility, or
 - d. Malodors attributed to the unit are detected beyond the property boundary.
8. The gas probes shall be inspected at least monthly for structural integrity and proper operation.
 9. The results from gas monitoring for each calendar year shall be submitted to the Illinois EPA in the annual report required by 35 Ill. Adm. Code, Section 813.504.
 10. At the end of the post-closure care period, the gas monitoring probes shall be decommissioned. The probes outside the waste boundary shall be decommissioned using the method described in the enclosed Illinois EPA monitoring well plugging procedure guidance. In decommissioning the probes within the waste disposal unit, the pipes shall be cut off at least two (2) feet below the low permeability layer and plugged. Then the low permeability layer, the protective layer and the vegetation shall be restored in the excavated areas.
 11. The development of the landfill gas collection and disposal system as proposed in application Log No. 2005-070 is hereby approved. Upon completion of each phase of the landfill gas collection and disposal system the operator:
 - a. May temporarily operate the subject phase of the landfill gas collection and disposal system for a period not exceeding 180-days as a part of a "shakedown period". The temporary operation shall not be in violation of Condition No. V.2 of this permit and/or any condition included in the permit issued by the Illinois EPA's Bureau of Air; and
 - b. Shall submit an acceptance report to the Illinois EPA pursuant to the requirements of 35 Ill. Adm. Code, Sections 811.505(d) and 813.203. The acceptance report shall be submitted in the form of a permit application for significant modification

and shall demonstrate that the construction of the subject phase of the landfill gas collection and disposal system has been completed in accordance with the approved designs. The permit application shall be submitted within 45-days of the commencement of the temporary operation referenced in item (a) above.

X. CLOSURE/POST CLOSURE CARE AND FINANCIAL ASSURANCE

1. The facility shall be closed in accordance with the closure plan in Application Log No. 2005-070. The closure plan includes a plan for temporary suspension of waste acceptance. Upon completion of closure activities, the operator shall notify the Illinois EPA that the site has been closed in accordance with the approved closure plan utilizing the Illinois EPA's "Affidavit for Certification of Closure of Solid Waste Landfills permitted under 35 Ill. Adm. Code Parts 813 and 814".
2. Inspections of the closed landfill shall be conducted in accordance with the approved post-closure care plan in Application Log No. 2005-070. Records of field investigations, inspections, sampling and corrective action taken are to be maintained at the site and made available to Illinois EPA personnel. During the post-closure care period, these records are to be maintained at the office of the site operator.
3. If necessary, the soil over the entire planting area shall be amended with lime, fertilizer and/or organic matter. On side slopes, mulch or some other form of stabilizing material is to be provided to hold seed in place and conserve moisture.
4. The minimum post-closure care period for this municipal solid waste landfill (MSWLF) is thirty years. When the post-closure care period has been completed, the operator shall notify the Illinois EPA utilizing the Illinois EPA's LPC-PA1 application form, entitled "General Application for Permit".
5. The owner or operator shall provide financial assurance for closure and post-closure care pursuant to 35 Ill. Adm. Code, Section 811.700(b). Financial assurance shall be required only for those areas for which authorization to operate has been obtained or is being requested.

As part of (or prior to) the application for the first significant modification seeking operation authorization for Phase 1 and pursuant to 35 Ill. Adm. Code, Section 813.203, the owner or operator shall revise this cost estimate to reflect any modifications entailed by the conditions of the permit. For example, there may be groundwater and leachate monitoring points and parameters required by the permit conditions which were not proposed in the permit application. The cost of sampling the additional points and analyzing for the additional parameters may increase the post-closure care cost estimate.

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6. The total cost estimate for closure and post closure care for entire facility approved by this permit is \$15,489,396.00. The total cost estimates include \$4,243,641 for routine closure and \$11,245,755.00 for post-closure care. The total cost estimate for the pre-mature closure of the facility during the first permit term is \$7,847,783.00. The total cost estimates include \$2,992,001.00 for pre-mature closure and \$4,855,781.00 for post-closure care. Pre-mature closure cost estimates account for the closure and post-closure care of Phase 1, 2 and 3.
7. The owner or operator shall increase the total amount of financial assurance so as to equal the current cost estimate within 90 days of an increase in the current cost estimate in accordance with 35 Ill. Adm. Code, Section 811.701(b).
8. The owner or operator shall adjust the cost estimates for closure, post-closure, and corrective action for inflation on an annual basis during the following time periods:
 - a. The active life of the unit for the closure cost;
 - b. The active life and post-closure care period for the post-closure cost; and
 - c. Until any corrective action program is completed in accordance with 35 Ill. Adm. Code Section 811.326, for the cost of corrective action.

Each year, no later than June 1 of that year, the owner or operator shall submit a revised cost estimate in the form of a permit application for significant modification. This application shall provide an update to the cost estimate or a certification that there are no changes to the current cost estimates.

XI. REPORTING REQUIREMENTS

1. Within ninety (90) days of issuance of this permit, the operator shall submit to the Illinois EPA one map of the facility with a scale no smaller than one (1) inch equals 200 feet. This map shall show:
 - a. The facility boundaries;
 - b. The permitted waste boundaries of the unit;
 - c. All on-site buildings; and
 - d. All groundwater, leachate and gas monitoring points for the unit.

Each monitoring point shall be labeled on the map with its Illinois EPA designation. The designations provided in this permit by the Illinois EPA shall be used for the leachate and groundwater monitoring points. The gas monitoring points shall be labeled using a logical nomenclature developed by the operator or the consultant.

2. The annual certification shall be submitted to the Illinois EPA during operation and for the entire post-closure monitoring period, pursuant to 35 Ill. Adm. Code 813.501. The certification shall be signed by the operator or duly authorized agent, shall be filed each year by May 1 of the following year, and shall state:
 - a. All records required to be submitted to the Illinois EPA pursuant to 35 Ill. Adm. Code 858.207 and 858.308 have been timely and accurately submitted; and
 - b. All applicable fees required by the Act have been paid in full.
3. The annual report for each calendar year shall be submitted to the Illinois EPA by May 1 of the following year pursuant to 35 Ill. Adm. Code 813.504. The annual report shall include:
 - a. Information relating to monitoring data from the leachate collection system, groundwater monitoring network, gas monitoring system and any other monitoring data specified in this permit, including:
 - i. Summary of monitoring data for the calendar year;
 - ii. Dates of submittal of comprehensive monitoring data to the Illinois EPA during the calendar year;
 - iii. Statistical summaries and analysis of trends;
 - iv. Changes to the monitoring program; and
 - v. Discussion of error analysis, detection limits and observed trends.
 - b. Proposed activities including:
 - i. Amount of waste expected in the next year;
 - ii. Structures to be built within the next year; and
 - iii. New monitoring stations to be installed within the next year.

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- c. Any modification or significant modification affecting operation of the facility;
and
 - d. The signature of the operator or duly authorized agent as specified in 35 Ill. Adm.
Code 815.102.
4. The permittee shall submit a completed "Solid Waste Landfill Groundwater, Leachate, Facility and Gas Reporting Form" (LPC 591) as a cover sheet for any notices or reports required by the facility's permit for identification purposes. One copy of the LPC 591 form must accompany each report; however, except for electronically formatted data, the permittee must submit one (1) original and a minimum of two (2) copies of each report you submit to the Illinois EPA. The form is not to be used for applications for supplemental permit or significant modification.
5. All certifications, logs, reports, plan sheets and groundwater and leachate monitoring data, required to be submitted to the Illinois EPA by the permittee shall be mailed to the following address:

Illinois Environmental Protection Agency
Permit Section
Bureau of Land -- #33
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

Except for electronic groundwater and leachate monitoring data, the operator shall provide the Illinois EPA with the original and two (2) copies of all certifications, logs, reports and plan sheets required by this permit.

Within 35 days of the date of mailing of the Illinois EPA's final decision, the applicant may petition for a hearing before the Illinois Pollution Control Board to contest the decision of the Illinois EPA, however, the 35-day period for petitioning for a hearing may be extended for a period of time not to exceed ninety days by written notice provided to the Board from the applicant and the Illinois EPA within the 35-day initial appeal period.

Work required by this permit, your application or the regulations may also be subject to other laws governing professional services, such as the Illinois Professional Land Surveyor Act of 1989, the Professional Engineering Practice Act of 1989, the Professional Geologist Licensing Act, and the Structural Engineering Licensing Act of 1989. This permit does not relieve anyone from compliance with these laws and the regulations adopted pursuant to these laws. All work that falls within the scope and definitions of these laws must be performed in compliance with

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them. The Illinois EPA may refer any discovered violation of these laws to the appropriate regulating authority.

Sincerely,



Stephen F. Nightingale, P.E.
Manager, Permit Section
Bureau of Land

CJL
SFN:IMS:bjh\071951s.doc
my

Attachments: Standard Conditions
AGQS/MAPC Values Interwell Values for Each Monitored Unit

cc: George L. Armstrong P.E., PDC Technical Services, Inc., w/Attachment
Jerrel L. Shaffer, P.E., SKS Engineers, Inc.

STANDARD CONDITIONS FOR CONSTRUCTION/DEVELOPMENT PERMITS
ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
BUREAU OF LAND

August 22, 2001

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) grants the Environmental Protection Agency authority to impose conditions on permits which it issues.

These standard conditions shall apply to all permits which the Agency issues for construction or development projects which require permits under the Bureau of Land. Special conditions may also be imposed in addition to these standard conditions.

1. Unless this permit has been extended or it has been voided by a newly issued permit, this permit will expire two years after date of issuance unless construction or development on this project has started on or prior to that date.
2. The construction or development of facilities covered by this permit shall be done in compliance with applicable provisions of Federal laws and regulations, the Illinois Environmental Protection Act, and Rules and Regulations adopted by the Illinois Pollution Control Board.
3. There shall be no deviations from the approved plans and specifications unless a written request for modification of the project, along with plans and specifications as required, shall have been submitted to the Agency and a supplemental written permit issued.
4. The permittee shall allow any agent duly authorized by the Agency upon the presentation of credentials:
 - a. to enter at reasonable times the permittee's premises where actual or potential effluent, emissions or noise sources are located or where any activity is to be conducted pursuant to this permit.
 - b. to have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit.
 - c. to inspect at reasonable times, including during any hours of operation of equipment constructed or operated under this permit, such equipment or monitoring methodology or equipment required to be kept, used, operated, calibrated and maintained under this permit.
 - d. to obtain and remove at reasonable times samples of any discharge or emission of pollutants.

- e. to enter at reasonable times and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring, or recording any activity, discharge, or emission authorized by this permit.
5. The issuance of this permit:
- a. shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are to be located;
 - b. does not release the permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the proposed facilities;
 - c. does not release the permittee from compliance with other applicable statutes and regulations of the United States, of the State of Illinois, or with applicable local laws, ordinances and regulations;
 - d. does not take into consideration or attest to the structural stability of any units or parts of the project;
 - e. in no manner implies or suggests that the Agency (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.
6. Unless a joint construction/operation permit has been issued, a permit for operating shall be obtained from the Agency before the facility or equipment covered by this permit is placed into operation.
7. These standard conditions shall prevail unless modified by special conditions.
8. The Agency may file a complaint with the Board for modification, suspension or revocation of a permit:
- a. upon discovery that the permit application contained misrepresentations, misinformation or false statements or that all relevant facts were not disclosed; or
 - b. upon finding that any standard or special conditions have been violated; or
 - c. upon any violation of the Environmental Protection Act or any Rule or Regulation effective thereunder as a result of the construction or development authorized by this permit.

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Attachment 1

AGQS/MAPC Interwell Values for Each Monitored Unit

LIST G1 (Groundwater - Quarterly)

<u>FIELD PARAMETERS</u>	<u>STORETS</u>	<u>Upper Radnor</u>	<u>Lower Radnor</u>	<u>Organic Soil</u>	<u>Roxana Silt-Robein</u>
pH	00400	6.24-7.75	6.09-7.51	6.32-7.48	
Specific Conductance	00094	1108.7	967.4	1199.2	
Temperature of Water Sample(° F)	00011	----	----	----	----
Depth to Water (ft. below land surface)	72019	----	----	----	----
Depth to Water(ft. below meas. point)	72109	----	----	----	----
Elev. of Meas. Pt.(Top of casing ft. MSL)	72110	----	----	----	----
Elev. of Groundwater Surface(ft. MSL)	71993	----	----	----	----
Elev. of Bottom of Well (ft. MSL)	72020	----	----	----	----

<u>INDICATOR PARAMETERS</u>	<u>STORETS</u>	<u>Upper Radnor</u>	<u>Lower Radnor</u>	<u>Organic Soil</u>	<u>Roxana Silt-Robein</u>
Ammonia (as N; Dissolved) mg/L	00608	23.5	16.8	17.0	
Arsenic (Dissolved) ug/L	01000	125.4	104.3	107.3	
Boron (Dissolved) ug/L	01020	575.5	729.0	564.1	
Cadmium (Dissolved) ug/L	01025	1.0	1.0	1.0	
Chloride (Dissolved) mg/L	00941	8.5	5.9	17.23	
Cyanide (Total) mg/L	00720	0.005	0.005	0.005	
Iron (Dissolved) ug/L	01046	8278	7600.0	12759.2	
Lead (Dissolved) ug/L	01049	1.0	1.0	2.5	
Manganese (Dissolved) ug/L	01056	241.4	105.9	272.9	
Mercury (Dissolved) ug/L	71890	0.2	0.2	0.20	
Nitrate (as N, Dissolved) mg/L	00618	0.02	0.031	0.5	
Phenols (Total Recoverable) ug/L	32730	5	5	5	
Sulfate (Dissolved) mg/L	00946	8.4	9.7	22.0	
TDS (180°C; Dissolved) mg/L	70300	692.7	643.3	875.1	
TOC (Total) mg/L	00680	11.0	14.2	46.0	
Zinc (Dissolved) ug/L	01090	36.52	15.0	49.32	

LIST G2 (Groundwater - Annual)

<u>PARAMETERS (ug/L)</u>	<u>STORETS</u>	<u>Upper Radnor</u>	<u>Lower Radnor</u>	<u>Organic Soil</u>	<u>Roxana Silt-Robein</u>
<u>UNFILTERED (totals)</u>					
Acetone	81552	10.0	10.0	10.0	
Acrolein	34210	50.0	50.0	50.0	
Acrylonitrile	34215	50.0	50.0	50.0	
# Alachlor	77825	0.4	0.4	0.4	
# Aldicarb	39053	0.4	0.4	0.4	
@ Aldrin	39330	0.05	0.05	0.05	
Aluminum	01105	454.413	220069	178253	
Ammonia (as N) (mg/L)	00610	22.0	17.0	18.0	
# Antimony	01097	3.0	3.0	3.0	
# Arsenic	01002	598.4	128.7	113.4	
Aroclor 1016	79683	0.5	0.5	0.5	
Aroclor 1221	79684	0.5	0.5	0.5	
Aroclor 1232	79685	0.5	0.5	0.5	
Aroclor 1242	79686	0.5	0.5	0.5	
Aroclor 1248	79687	0.5	0.5	0.5	
Aroclor 1254	79688	0.5	0.5	0.5	
Aroclor 1260	79689	0.5	0.5	0.5	

Clinton Landfill #3

1

Site No. 0390055036
Log No. 2005-070

LIST G2 (Groundwater - Annual) (cont.)

CONCENTRATIONS (ug/L)	STORETS	Upper Radnor	Lower Radnor	Organic Soil	Roxana Silt-Robem
<u>NFILTERED (totals)</u>					
# Atrazine	39033	0.2	0.2	0.2	
# Barium	01007	2203.2	1050	541.1	
# Benzene	34030	1.0	1.0	1.0	
# Benzo(a)Pyrene	34247	0.2	0.2	0.2	
# Beryllium	01012	27.0	15.5	2.6	
BOD (mg/L)	00310	67.0	42.6	45.4	
# Boron	01022	1198.7	736.2	564.1	
*Bromobenzene	81555	1.0	1.0	1.0	
*Bromochloromethane	77297	1.0	1.0	1.0	
*Bromodichloromethane	32101	1.0	1.0	1.0	
*Bromoform	32104	1.0	1.0	1.0	
*Bromomethane	34413	2.0	2.0	2.0	
*n-Butylbenzene	77342	1.0	1.0	1.0	
*sec-Butylbenzene	77350	1.0	1.0	1.0	
*tert-Butylbenzene	77353	1.0	1.0	1.0	
# Cadmium	01027	1.0	1.3	1.0	
Calcium (mg/L)	00916	1516.3	774.1	256.3	
# Carbofuran	81405	1.5	1.5	1.5	
Carbon Disulfide	77041	4.0	8.0	26.0	
# Carbon Tetrachloride	32102	1.0	1.0	1.0	
COD (mg/L)	00335	7.0	36.3	109.5	
# Chlordane	39350	0.5	0.5	0.5	
# Chloride (mg/L)	00940	7.8	5.7	13.0	
#*Chlorobenzene	34301	1.0	1.0	1.0	
Chloroethane	34311	2.0	2.0	2.0	
Chloroform	32106	1.0	1.0	1.0	
*Chloromethane	34418	2.0	2.0	2.0	
*o-Chlorotoluene	77275	1.0	1.0	1.0	
*p-Chlorotoluene	77277	1.0	1.0	1.0	
# Chromium	01034	810.2	508.9	345.8	
*Chlorodibromomethane	32105	1.0	1.0	1.0	
# Cobalt	01037	330.6	158.3	26.0	
# Copper	01042	959.3	324.9	351.1	
p-Cresol	77146	10.0	10.0	10.0	
# Cyanide (mg/L)	00720	0.005	0.005	0.005	
# Dalapon	38432	1.5	1.5	1.5	
@ DDT	39370	0.1	0.1	0.1	
*Dibromomethane	77596	1.0	1.0	1.0	
*m-Dichlorobenzene	34566	1.0	1.0	1.0	
#*o-Dichlorobenzene	34536	1.0	1.0	1.0	
# p-Dichlorobenzene	34571	1.0	1.0	1.0	
*Dichlorodifluoromethane	34668	2.0	2.0	2.0	
#*Dichloromethane	34423	7.0	7.0	7.0	
@ Dieldrin	39380	0.1	0.1	0.1	
Diethyl Phthalate	34336	10.0	10.0	10.0	
Dimethyl Phthalate	34341	10.0	10.0	10.0	
Di-N-Butyl Phthalate	39110	10.0	10.0	10.0	
# Dinoseb (DNBP)	81287	0.2	0.2	0.2	
# Endothall	38926	40.0	40.0	40.0	
# Endrin	39390	0.1	0.1	0.1	
*Di(2-Ethylhexyl)Phthalate	39100	22.0	7.6	7.4	
Ethylbenzene	78113	1.0	1.0	1.0	
Ethylene Dibromide (EDB)	77651	0.05	0.05	0.05	

LIST G2 (Groundwater - Annual) (cont.)

PARAMETERS (ug/L)	STORETS	Upper Radnor	Lower Radnor	Organic Soil	Roxana Silt-Robin
UNFILTERED (totals)					
# Fluoride (mg/L)	00951	0.80	0.60	0.58	
# Heptachlor	39410	0.05	0.05	0.05	
# Heptachlor Epoxide	39420	0.05	0.05	0.05	
*Hexachlorobutadiene	39702	10.0	10.0	10.0	
# Hexachlorocyclopentadiene	34386	10.0	10.0	10.0	
Iodomethane	77424	1.0	1.0	1.0	
# Iron	01045	825948	475695	110816	
Isophorone	34408	10.0	10.0	10.0	
*Isopropylbenzene	77223	1.0	1.0	1.0	
*p-Isopropyltoluene	77356	1.0	1.0	1.0	
# Lead	01051	910.6	309.7	46.0	
# Lindane	39782	0.05	0.05	0.05	
Magnesium (mg/L)	00927	706.6	1300	125.7	
# Manganese	01055	13939.0	7858	2013	
# Mercury	71900	0.2	0.2	0.2	
# Methoxychlor	39480	0.5	0.5	0.5	
*Naphthalene	34696	10.0	10.0	10.0	
# Nickel	01067	885.6	1400	284	
# Nitrate-Nitrogen (mg/L)	00620	0.02	0.02	0.4	
@ Oil(Hexane-Soluble) (mg/L)	00550	5.0	25.0	19.0	
@ Parathion	39540	0.2	0.2	0.2	
# Pentachlorophenol	39032	0.05	0.05	0.05	
# pH	00400	6.24-7.75	6.09-7.51	6.32-7.48	
# Phenols	32730	0.005	0.005	0.005	
Chloram.	39720	0.2	0.2	0.2	
Polychlorinated Biphenyls	39516	0.5	0.5	0.5	
Potassium (mg/L)	00937	141.7	2300.0	19.8	
*n-Propylbenzene	77224	1.0	1.0	1.0	
# Selenium	01147	17.9	10.8	2.2	
# Silver	01077	5.0	5.0	5.0	
# Simazine	39055	0.2	0.2	0.2	
Sodium (mg/L)	00929	25.0	7700.0	61.7	
*Styrene	77128	1.0	1.0	1.0	
# Sulfate (mg/L)	00945	6.4	6.5	38.2	
TOC (mg/L)	00680	11.0	14.2	46.0	
*Tetrachloroethylene	34475	1.0	1.0	1.0	
Tetrahydrofuran	81607	20.0	20.0	20.0	
# Thallium	01059	1.7	2.5	1.0	
*Toluene	34010	1.0	1.0	1.0	
# Toxaphene	39400	1.5	1.5	1.5	
# Trichloroethylene	39180	1.0	1.0	1.0	
*Trichlorofluoromethane	34488	1.0	1.0	1.0	
Vanadium	01087	1196.74	486.4	75.0	
# Vinyl Chloride	39175	2.0	2.0	2.0	
Vinyl Acetate	77057	5.0	5.0	5.0	
# Xylenes	81551	3.0	3.0	3.0	
*m,p-Xylene	85795	1.0	1.0	1.0	
*o-Xylene	77135	1.0	1.0	1.0	
# Zinc	01092	1808.2	1100	188.7	
*1,1,1,2-Tetrachloroethane	77562	1.0	1.0	1.0	
# 1,1,1-Trichloroethane	34506	1.0	1.0	1.0	
1,2,2-Tetrachloroethane	34516	1.0	1.0	1.0	
1,1,2-Trichloroethane	34511	1.0	1.0	1.0	

LIST G2 (Groundwater - Annual) (cont.)

PARAMETERS (ug/L)	STORETS	Upper Radnor	Lower Radnor	Organic Soil	Roxana Silt-Robein
UNFILTERED (totals)					
*1,1-Dichloroethane	34496	1.0	1.0	1.0	
# 1,1-Dichloroethylene	34501	1.0	1.0	1.0	
*1,1-Dichloropropene	77168	1.0	1.0	1.0	
*1,2,3-Trichlorobenzene	77613	1.0	1.0	1.0	
*1,2,3-Trichloropropane	77443	1.0	1.0	1.0	
#*1,2,4-Trichlorobenzene	34551	1.0	1.0	1.0	
*1,2,4-Trimethylbenzene	77222	1.0	1.0	1.0	
#*1,2-Dibromo-3-Chloropropane	38760	0.05	0.05	0.05	
#*cis-1,2-Dichloroethylene	77093	1.0	1.0	1.0	
#*trans-1,2-Dichloroethylene	34546	1.0	1.0	1.0	
# 1,2-Dichloroethane	34531	1.0	1.0	1.0	
#*1,2-Dichloropropane	34541	1.0	1.0	1.0	
*1,3,5-Trimethylbenzene	77226	1.0	1.0	1.0	
*1,3-Dichloropropane	77173	1.0	1.0	1.0	
*1,3-Dichloropropene	34561	1.0	1.0	1.0	
cis-1,3-Dichloropropene	34704	1.0	1.0	1.0	
trans-1,3-Dichloropropene	34699	1.0	1.0	1.0	
trans-1,4-Dichloro-2-Butene	49263	1.0	1.0	1.0	
*2,2-Dichloropropane	77170	1.0	1.0	1.0	
# 2,4,5-TP (Silvex)	39760	0.05	0.05	0.05	
# 2,4-D 39730	0.1	0.1	0.1	1.0	
2-Butanone	81595	5.0	5.0	5.0	
2-Hexanone	77103	5.0	5.0	5.0	
4-Methyl-2-Pentanone	78133	5.0	5.0	5.0	

NOTE:

- i. The preceding list of parameters (G2) includes all those found in Attachment 1 to Appendix C to LPC-PA2. The 51 constituents from 40 CFR 141.40 and the parameters from 35 Ill. Adm. Code 620.410 and the parameters from 35 Ill. Adm. Code 302, designated with (*), (#) and (@) respectively are required to be monitored annually and may not be deleted.

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BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

In the Matter of:)	
)	
MAHOMET VALLEY WATER AUTHORITY,)	
CITY OF CHAMPAIGN, ILLINOIS, a municipal)	
corporation, DON GERARD, CITY OF URBANA,)	
ILLINOIS, a municipal corporation,)	
LAUREL LUNT PRUSSING,)	
CITY OF BLOOMINGTON, ILLINOIS,)	
a municipal corporation, COUNTY OF CHAMPAIGN,)	
ILLINOIS, COUNTY OF PIATT, ILLINOIS,)	
TOWN OF NORMAL, ILLINOIS, a municipal)	
corporation, VILLAGE OF SAVOY, ILLINOIS,)	
a municipal corporation, and CITY OF DECATUR,)	
ILLINOIS, a municipal corporation,)	
)	
Complainants,)	
)	
v.	)	PCB 20 -
)	
CLINTON LANDFILL, INC.,	)	(Enforcement - Land)
an Illinois corporation,)	
)	
Respondent.)	

EXHIBIT B

Certification of Siting Approval dated October 17, 2002



State of Illinois

ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

CERTIFICATION OF SITING APPROVAL (LPC-PA8)

Name of Applicant: Clinton Landfill, Inc
 Address of Applicant: 4700 North Sterling Avenue, Peoria, Illinois 61612-9071
 Name of Site: Clinton Landfill No. 3
 Site Information: Nearest City: Clinton County: DeWitt

1. On September 12, 2002, the County Board of
 (governing body of county or municipality)

DeWitt County approved the site location suitability of Clinton Landfill, No. 3
 (county or municipality) (name of site)
 as a new pollution control facility in accordance with Section 39.2 of the Illinois Environmental Protection Act, Ill. Rev. Stat.,
 ch. 111 1/2, Section 1039.2.

2. The facility was approved for the following activities:

waste storage (☒) , landfill (☒) , waste disposal (☒) , waste transfer station (☐) ,
 waste treatment (☒) , waste incinerator (☐) .

Attached to this certification is a true and correct statement of the legal description of the site as it was approved by the
 aforementioned local governing body.

4. Attached to this certification is a true and accurate statement of conditions, if any, under which the approval was provided.
 (Note: These conditions are provided for information only to the IEPA. The IEPA is not obligated to monitor or enforce local
 conditions.)

5. The undersigned has been authorized by the County Board of
 (governing body of county or municipality)

DeWitt County to execute this certification on behalf of DeWitt County
 (county or municipality) (county or municipality)

NAME

TITLE: COUNTY BOARD CHAIRMAN

SUBSCRIBED AND SWORN TO BEFORE ME

his 17 day of Oct, 2002

Jayne A. Usher
 Notary Public



LEGAL DESCRIPTION OF SITE
(Clinton Landfill No. 3)

The approximately 269 acre site is located approximately 2 miles south of Clinton, Illinois east of U.S. Highway 51, in Texas Township, DeWitt County, Illinois. The site is legally described as follows:

Part of the Northeast Quarter and the Southeast Quarter of Section 10, Township Nineteen (19) North, Range Two (2) East; the Northwest Quarter and the Southwest Quarter of Section 11, Township Nineteen (19) North, Range Two (2) East; and the Northwest Quarter of the Northeast Quarter and the North Half of the Northwest Quarter of Section 14, Township Nineteen (19) North, Range Two (2) East, all situated in DeWitt County, Illinois and more particularly described as follows;

Commencing at the Southwest corner of the Northeast Quarter of said Section 10; thence N.88°36'34"E., 345.56 feet along the South line of the Northeast Quarter of said Section 10 to the Point of Beginning; thence N.0°00'05"W., 63.49 feet to the Northerly Right of Way line of a township road; thence S.89°59'55"W., 60.00 feet along the said Northerly Right of Way line; thence S.17°16'48" W., 47.13 feet along the said Northerly Right of Way line; thence N.87°43'00"W., 124.87 feet along said Northerly Right of way to the Easterly Right of Way line of F.A. Route 412 (US Route 51); thence N.0°19'42"E., 82.61 feet along said Easterly Right of Way line; thence N.5°22'57"W., 100.50 feet along said Easterly Right of Way line; thence N.0°19'42"E., 88.93 feet along said Easterly Right of Way line; thence N.88°36'34"E., 2530.01 feet to the East line of the Northeast Quarter of said Section 10; thence N.88°25'40"E., 204.15 feet to the East Right of Way line of the now abandoned Illinois Central Gulf Railroad; thence S.0°20'22"E., 300.05 feet along the said East Right of Way to the North line of the Southwest Quarter of said Section 11; thence N.88°25'40"E., 2444.08 feet along the North line of the Southwest Quarter of said Section 11 to the iron pin at the Northeast corner of the Southwest Quarter of said Section 11; thence S.0°11'27"W., 1319.68 feet along the East line of the Northeast Quarter of the Southwest Quarter of said Section 11 to the iron pin at the Southeast corner of the Northeast Quarter of the Southwest Quarter of said Section 11; thence S.0°20'57"W., 1336.42 feet along the East line of the Southeast Quarter of the Southwest Quarter of said Section 11 to the iron pin at the Southeast Corner of the Southwest Quarter of said Section 11; thence S.0°29'23"W., 196.82 feet along the West line of the Northwest Quarter of the Northeast Quarter of said Section 14; thence S.37°48'15"E., 884.21 feet; thence South, 427.15 feet to the South line of the Northwest

Quarter of the Northeast Quarter of said Section 14; thence S.88°41'09"W., 549.84 feet along the South line of the Northwest Quarter of the Northeast Quarter of said Section 14 to the iron pin at the Southwest Corner of the Northwest Quarter of the Northeast Quarter of said Section 14; thence S.88°34'49"W., 1167.00 feet along the South line of the North Half of the Northwest Quarter of said Section 14; thence N.65°24'32"W., 1454.56 feet; thence West, 143.42 feet; thence N.0°20'22"W., 298.81 feet; thence N.0°20'22"W., 2805.20 feet; thence N.45°45'22"W., 222.93 feet; thence S.88°23'08"W., 950.46 feet; thence S.12°26'12"W., 316.59 feet; thence N.76°33'13"W., 1149.56 feet; thence N.0°00'05"W., 96.51 feet to the Point of Beginning and containing 268.804 acres more or less.

102-1663

RESOLUTION NO. _____**A RESOLUTION CONDITIONALLY APPROVING THE APPLICATION FOR LOCAL SITING APPROVAL OF A POLLUTION CONTROL FACILITY FILED BY CLINTON LANDFILL, INC.**

WHEREAS, CLINTON LANDFILL, INC. filed an application for siting approval of a pollution control facility within DeWitt County for the expansion of its municipal solid waste landfill, pursuant to Section 39.2 of the Illinois Environmental Protection Act (415 ILCS 5/39.2)(ACT); and

WHEREAS, Chapter 153 of the County's Code of Ordinances establishes a procedure for review of pollution control facility site requests in DeWitt County, Illinois; and

WHEREAS, the County Pollution Control Site Hearing Committee held public hearings on July 11th and July 15th, 2002, pursuant to the Act and the County's Siting Ordinance; and

WHEREAS, a quorum of the County Pollution Control Site Hearing Committee attended all hearings; and

WHEREAS, the County Pollution Control Site Hearing Committee has made its recommendations for conditional siting approval to the County Board, which includes the determination that all applicable requirements of Section 39.2 and the County's Siting Ordinance have been met based upon the siting application, notifications, hearings, public comment and the record.

NOW, THEREFORE BE IT RESOLVED that the Findings of Fact and Recommendation of the County Pollution Control Site Hearing Committee, attached hereto as Exhibit A, are adopted by the County Board with amendments to Conditions 1 and 17; and

BE IT FURTHER RESOLVED, that the DeWitt County Board has jurisdiction and hereby determines that Clinton Landfill, Inc. has satisfied the applicable criteria, subject to the conditions in the attached Findings of Fact and Recommendation; and

BE IT FURTHER RESOLVED, that DeWitt County Board conditionally approves the request of Clinton Landfill, Inc. for site approval for the proposed expansion, provided that the conditions are not inconsistent with regulations of the Pollution Control Board or the terms of any development or operating permits approved by the Illinois Environmental Protection Agency.

FILED

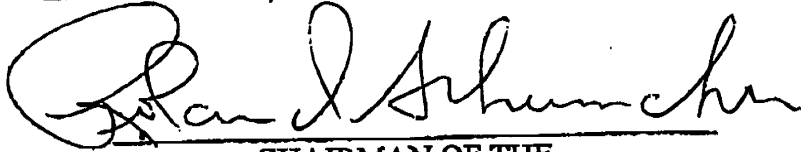
SEP 23 2002

Gayle Walker

County Clerk, DeWitt County


Resolution No. _____

PASSED and APPROVED this 12th day of September, 2002.



CHAIRMAN OF THE
DEWITT COUNTY BOARD

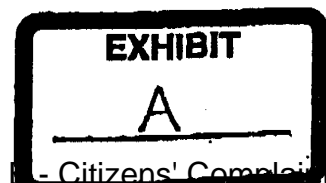
ATTEST:


COUNTY CLERK OF THE
DEWITT COUNTY BOARD

**FINDINGS OF FACT AND RECOMMENDATION OF
THE POLLUTION CONTROL SITE HEARING COMMITTEE
TO THE DEWITT COUNTY BOARD TO CONDITIONALLY
APPROVE THE SITING APPLICATION OF CLINTON LANDFILL, INC.**

Clinton Landfill, Inc. filed an Application for Local Siting Approval of a Pollution Control Facility with the DeWitt County ("the County") Clerk on April 11, 2002, requesting approval to expand its existing municipal solid waste landfill located within the County. The County's review is governed by Section 39.2 of the Illinois Environmental Protection Act ("Act"), which requires that the County Board determine whether the applicant has submitted sufficient detail to demonstrate that the proposed facility meets the Act's criteria. The County's review is also governed by Chapter 153 of the DeWitt County Code of Ordinances regarding Pollution Control Facilities ("Siting Ordinance"), which establishes, among other requirements, that the public hearing required by Section 39.2 of the Act be conducted by the County Pollution Control Site Hearing Committee ("Committee") and that this Committee establish for the County Board findings of fact and a recommendation.

Following the issuance of the pre-filing notices by Clinton Landfill, Inc. and notices of hearing consistent with Section 39.2 of the Act and the County's Siting Ordinance, public hearings were held before this Committee on July 11, 2002, and July 15, 2002, in the County Board room of the County Courthouse. A quorum of the Committee attended these hearings. Based on the record in this siting proceeding maintained by the County Clerk, including, but not limited to, the Application, the exhibits, the testimony presented, the transcript of the public hearing and public comments (both written and oral), this Committee finds that the County has jurisdiction. This Committee further finds that the applicant, Clinton Landfill, Inc., has satisfactorily demonstrated compliance with the criteria set forth in Section 39.2 of the Act and



the Siting Ordinance, subject to the conditions set forth below. This Committee further finds that the conditions set forth are reasonable and necessary and are supported by the record. Therefore, this Committee recommends that the County Board approve the Application of Clinton Landfill, Inc. subject to the conditions set forth below, through the adoption of the draft Resolution attached to this Committee's Findings and Recommendation.

Criterion No.1: the facility is necessary to accommodate the waste needs of the area it is intended to serve.

This Committee finds that Clinton Landfill, Inc. has met this Criterion, including through the needs report in Section 1 of the Application and testimony of Sheryl Smith of Environmental Marketing & Management, L.L.C. Ms. Smith's analysis was based on receipt of an average of 1400 tons per day of total waste. Therefore, the following condition is necessary.

Condition No.1: Clinton Landfill, Inc. shall not exceed an average of 3000 tons per day in any calendar year without written permission of the County Board.

Criterion No.2: the facility is so designed, located and proposed to be operated that the public health, safety and welfare will be protected.

This Committee finds that Clinton Landfill, Inc. has met this Criterion, including through the report in Section 2 of the Application and testimony of Ron L. Edwards and George Armstrong, subject to the following conditions. Based on the record, which demonstrated that the proposed facility design is based on certain factors, the following conditions are necessary.

Condition No. 1 above as to "need", Condition No. 9 as to minimizing incompatibility, and General Conditions No. 12 and 13 below are also necessary based on the information in the record supporting Criterion No. 2 regarding facility design, construction and operation.

Condition No. 2: Clinton Landfill, Inc. shall only accept liquid waste for "solidification" consistent with the procedures identified in the siting application and as approved by the Illinois Environmental Protection Agency ("Illinois EPA").

Condition No. 3: Clinton Landfill, Inc. shall limit the final waste contours as shown on Figure S-FG4 dated July 16, 2002, filed by the applicant in the post-hearing comment period. Additionally, Clinton Landfill, Inc. shall not exceed the final grade contours as shown on Figure S-FG1 dated April 11, 2002, without permission of the County Board.

Condition No. 4: Clinton Landfill, Inc. shall retain all three sediment basins shown on Figure S-FG1, unless written approval from the County Board is provided to remove these structures.

Condition No. 5: Clinton Landfill, Inc. shall develop a stormwater management and stormwater pollution prevention plan for any and all soil stockpiles, both on and off-site, and shall submit each plan to the County Board for review and comment before developing the stockpile.

Condition No. 6: Clinton Landfill, Inc. shall develop a groundwater monitoring program as approved by the Illinois EPA in general accordance with the minimum standards identified in the application. Additionally, a minimum of one permanent down gradient well shall be installed prior to operations in Cell 1.

Condition No. 7: Clinton Landfill, Inc. shall conduct leachate recirculation in accordance with the procedures identified in the siting application and as approved by the Illinois

EPA. Additionally, Clinton Landfill, Inc. shall keep a daily log of the quantity of leachate collected, the method of disposal, and the general location of where leachate is re-circulated. Annually, Clinton Landfill, Inc. shall provide the County Board with a written summary of the leachate management system, unless the County Board in writing excuses Clinton Landfill, Inc. from this annual written summary requirement.

Criterion No. 3: the facility is located so as to minimize incompatibility with the character of the surrounding area and to minimize the effect on the value of the surrounding property.

This Committee finds that Clinton Landfill, Inc. has met this Criterion, including through the reports in Section 3 and testimony of Peter Poletti, principal with Poletti and Associates, Inc., and Christopher Lannert, principal with The Lannert Group, Inc., subject to the requirement for screening consistent with the report, the testimony of Mr. Lannert and the waste management regulations of the State of Illinois.

Condition No. 8: Clinton Landfill, Inc. shall construct a visual barrier eight feet tall along Township Road 1050 East (Ethal Road), prior to adjacent waste placement operation expansion.

Condition No. 9: Clinton Landfill, Inc. shall not relocate the proposed location of the leachate storage tanks without providing screening from all adjacent property owners and shall secure written approval from the County Board before relocating the proposed location of the leachate storage tanks.

Criterion No. 4: (A) for a facility other than a sanitary landfill or waste disposal site, the facility is located outside the boundary of the 100 year floodplain or the site is flood-proofed; (B) for a facility that is a sanitary landfill or waste disposal site, the facility is located outside the boundary of the 100-year floodplain, or

if the facility is a facility described in subsection
(b)(3) of Section 22.19a, the site is flood-proofed.

This Committee finds that Clinton Landfill, Inc. has demonstrated that the proposed expansion is located outside the boundary of the 100-year flood plan through the report and testimony of George Armstrong.

Criterion No. 5: the plan of operations for the facility is designed to minimize the danger to the surrounding area from fire, spills, or other operational accidents.

This Committee finds that Clinton Landfill, Inc. has demonstrated compliance with this Criterion, including through the report at Section 5 of the Application and the testimony of Ron L. Edwards and George Armstrong.

Criterion No. 6: the traffic patterns to or from the facility are so designed as to minimize the impact on existing traffic flows.

This Committee finds that the report of Crawford, Bunte, Brammier at Section 6 of the Application and the testimony of Lee Cannon was adequate to meet this Criterion, subject to the condition that Clinton Landfill, Inc. shall incorporate in its operational plan the recommendation of the applicant's expert regarding minimizing impact of traffic during the transport of site soils and shall plan to address the potential for increased litter on Route 51 from the additional transfer trailers expected with the increased volume of waste.

Condition No. 10: Clinton Landfill, Inc. shall suspend off-site hauling during construction of the cells when granular material would also be transported unless otherwise authorized in writing by the County Board. In the alternative, Clinton Landfill, Inc. shall employ

back hauling, whereby the vehicles bringing in the granular material for cell construction haul out site soils.

Condition No. 11: Clinton Landfill, Inc. shall periodically employ sufficient personnel so as to collect litter daily along Route 51 for a distance of one mile North and South of the landfill's entrance when requested by the County Board.

Criterion No. 7: if the facility will be treating, storing or disposing of hazardous waste, an emergency response plan exists for the facility which includes notification, containment and evacuation procedures to be used in case of an accidental release.

This Committee finds that Clinton Landfill, Inc. has demonstrated in Section 7 of the Application and in the testimony of Ron L. Edwards that this Criterion does not apply.

Criterion No. 8: if the facility is to be located in a county where the county board has adopted a solid waste management plan consistent with the planning requirements of the Local Solid Waste Disposal Act or the Solid Waste Planning and Recycling Act, the facility is consistent with that plan.

This Committee finds the Clinton Landfill, Inc. has met this Criterion through the report at Section 8 of the Application and testimony of Sheryl Smith of Environmental Marketing & Management, L.L.C.

Criterion No. 9: if the facility will be located within a regulated recharge area, any applicable requirements specified by the Board for such areas have been met.

This Committee finds that Clinton Landfill, Inc. has demonstrated that this Criterion does not apply through the report at Section 9 of the Application and in the testimony of Ron L. Edwards.

Additional consideration: This committee has also considered the previous operating experience and past record or admissions of the applicant (and any subsidiary or parent corporation) in the field of solid waste management when considering criteria 2 and 5 above, consistent with Section 39.2 of the Act and the Siting Ordinance.

General Conditions:

Condition No. 12: Siting approval is for a new landfill unit consisting of approximately 157.5 acres, with a gross airspace capacity of approximately 32,800,000 cubic yards. This siting approval does not approve any changes to existing permitted and developed pollution control facilities near the expansion.

Condition No. 13: Clinton Landfill, Inc. shall comply with all terms of the Host County Agreement previously executed by Clinton Landfill, Inc and the County on April 20, 2001, and as may be amended from time to time. All terms of the Agreement are enforceable as conditions of this siting approval, in addition to being enforceable under contract law.

Condition No. 14: All special conditions of the County Board's Siting Approval shall be contained in the application for permit filed with the Illinois EPA.

Condition No. 15: - If any approval or condition by this Committee or of the County Board conflicts with any requirement imposed by the Illinois EPA that has been imposed by the Illinois EPA independently of any request by Clinton Landfill, Inc. for such requirements, the decision of the Illinois EPA shall supercede the County's approval or its condition.

Condition No. 16: Clinton Landfill, Inc. shall notify the County Board within 10 days of filing the initial permit application for the landfill expansion with the Illinois EPA, and within 10 days of all subsequent submittals filed with the Illinois EPA for the landfill expansion.

Condition No. 17: Within Constitutional limitations and upon reasonable request by the County, Clinton Landfill, Inc. shall provide the County reasonable access to the landfill expansion approved pursuant to this siting proceeding and all records related to the operation of the landfill expansion so as to inspect for compliance with the terms of the siting application and with the special conditions of the County Board's siting approval.

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

In the Matter of:)	
)	
MAHOMET VALLEY WATER AUTHORITY,)	
CITY OF CHAMPAIGN, ILLINOIS, a municipal)	
corporation, DON GERARD, CITY OF URBANA,)	
ILLINOIS, a municipal corporation,)	
LAUREL LUNT PRUSSING,)	
CITY OF BLOOMINGTON, ILLINOIS,)	
a municipal corporation, COUNTY OF CHAMPAIGN,)	
ILLINOIS, COUNTY OF PIATT, ILLINOIS,)	
TOWN OF NORMAL, ILLINOIS, a municipal)	
corporation, VILLAGE OF SAVOY, ILLINOIS,)	
a municipal corporation, and CITY OF DECATUR,)	
ILLINOIS, a municipal corporation,)	
)	
Complainants,)	
)	
v.	)	PCB 20 -
)	
CLINTON LANDFILL, INC.,	)	(Enforcement - Land)
an Illinois corporation,)	
)	
Respondent.)	

EXHIBIT C

October 19, 2007 Application letter and Executive Summary portions of the
TSCA application to USEPA for Clinton Landfill No. 3



Clinton Landfill, Inc.

October 19, 2007

Ms. Mary Gade
c/o Mr. Tony Martig
Toxics Program Section Chief
USEPA Region V
M/C DT-8J
77 W. Jackson Blvd.
Chicago, IL 60604-3590

**RE: Application to Develop and
Operate a Chemical Waste Unit Within
the Permitted Clinton Landfill No. 3**

Dear Ms. Gade:

Pursuant to Section 6(e)(1) of the Toxic Substances Control Act (TSCA) of 1976, Public Law No. 94-469, 15 U.S.C. Section 2605(e)(1), and the federal PCB regulations promulgated thereunder (40 CFR Section 761.75), Clinton Landfill, Inc. (CLI) is submitting three copies of an Application to develop and operate a chemical waste landfill. The chemical waste landfill will be a separate unit, (known as the Chemical Waste Unit) located within the perimeter of the currently permitted Clinton Landfill No. 3 municipal solid waste landfill. This Application includes the Initial Report required by 40 CFR 761.75(c)(1) and other information demonstrating that all applicable State and Federal requirements are satisfied.

Each of the attached copies of the Application comprises 4 volumes bound in 3-ring binders, plus two rolled sets of 30" x 42" drawings (design and geologic). Reduced scale drawings are bound within Volume I of the Application.

If you have any questions regarding the Application or if you require any additional information, please do not hesitate to contact Ron Welk of my staff. He can be reached by telephone at (309)676-4893 x201 or by email at rwelk@pdcarearea.com.

Sincerely,

Clinton Landfill, Inc.

Ron L. Edwards
Vice President – Landfill Development and Operations

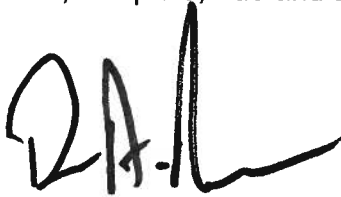
Attachments: 3 copies of the Application Text, Appendices, and Drawings

cc: Shaw Environmental, Inc.



CERTIFICATE OF DEVIN A. MOOSE, P.E., DEE

This permit application for the proposed Chemical Waste Unit at the Clinton Landfill No. 3 has been prepared under my direction. The application consists of four volumes, containing a Table of Contents, Executive Summary, Sections 1 through 8, reduced Geologic Drawings Nos. G1 through G21, reduced Design Drawings Nos. D1 through D22 and Appendices A through O. Additionally, full size (30" x 42") drawings of the Geologic and Design Drawings have been provided as part of this application. The information presented in this application is, to the best of my knowledge and belief, complete, true and accurate.



Devin A. Moose, P.E., DEE

10/5/07

Date

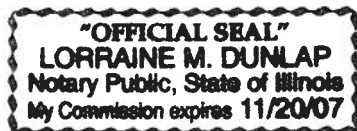
062-044472

Illinois Professional Engineering License Number
Expires November 30, 2007



SUBSCRIBED AND SWORN TO
before me this 5th day
of October (date). 2007


NOTARY PUBLIC



EXECUTIVE SUMMARY



EXECUTIVE SUMMARY

Introduction

Clinton Landfill, Inc. (CLI) owns and operates the Clinton Landfill No. 3, located in DeWitt County, Illinois. The Clinton Landfill No. 3 received a development permit from the Illinois Environmental Agency (IEPA) to develop an approximate 157.50 acre Municipal Solid Waste (MSW) landfill in March 2007 (Permit No. 2005-070-LF).

Pursuant to Section 6(e)(1) of the Toxic Substances Control Act (TSCA) of 1976, Public Law No. 94-469, 15 U.S.C. Section 2605(e)(1), and the federal PCB regulations promulgated thereunder (40 CFR Section 761.75), CLI has prepared the following Application to request approval to modify the design, Construction Quality Assurance (CQA) Plan, Operating Plan, Environmental Monitoring Plan, and other portions of the permitted Clinton Landfill No. 3 to include a Chemical Waste Unit. The reason for this request is to permit the safe acceptance of non-hazardous wastes, including PCB wastes that contain total PCB concentrations no greater than 500 ppm. The proposed Chemical Waste Unit would occupy approximately 22.50 acres of the currently permitted waste disposal area.

The design provided within this application includes the latest landfill design concepts which have been demonstrated to be protective of the environment. Unique to the proposed facility are the number and extent of safeguards employed. In many cases, the stringent design and performance standards contained in state and federal landfill regulations have been exceeded. Additionally, the proposed design works in conjunction with a suitable location and favorable site geology to assure that the public health, safety and welfare will be protected.

Location (Section 1)

The permitted Clinton Landfill No. 3 complies with all applicable federal, state and local site location standards. The proposed Chemical Waste Unit is located within the permitted waste boundary of the IEPA approved landfill and therefore will be in compliance with all applicable federal, state and local site location standards.

Hydrogeology (Section 2)

A succession of low-permeability cohesive soil units (Tiskilwa Formation, Roxana/Robein Silt, Berry Clay, Radnor Till, Vandalia Till, Smithboro Till, Yarmouth Soil, Tilton Till, and Hillary Till) are present beneath the site which will separate the footprint of the proposed Chemical Waste Unit from the regional aquifer. These low permeability cohesive soil units have an average thickness of approximately 200 feet at the site (approximately 170 feet of which will remain between the bottom of the proposed liner invert and the regional Mahomet Sand Aquifer). Field and laboratory test results and field observations indicate that these materials will effectively restrict vertical and horizontal movement of groundwater and will serve as an additional environmental safeguard beneath the proposed Chemical Waste Unit.

The natural clay that is present beneath the site will act as a Tertiary barrier in addition to the proposed robust engineered liner system which is described in detail within Section 3 of this Application.

The hydrogeologic conditions at the site and the landfill design allow a comprehensive groundwater monitoring system to be implemented which will be able to adequately verify, in advance, if groundwater resources are being threatened by the landfill.



Engineered Design (Section 3)

A number of engineered design features have been incorporated into the proposed Chemical Waste Unit in order to safely contain the waste materials placed in it. These containment systems are briefly summarized below:

Composite Liner. The proposed Chemical Waste Unit includes a multiple layer composite liner system. From the subgrade up across the entire unit, the liner will, at a minimum, consist of 3 feet of recompacted clay (1×10^{-7} cm/sec), a 60-mil geomembrane, a geocomposite drainage layer, a second 60-mil geomembrane. In addition, CLI has added a geosynthetic clay liner (GCL), and a third 60-mil HDPE geomembrane above the floor and lower portions of the landfill sidewalls. This liner system greatly exceeds the requirements of the United States Environmental Protection Agency (USEPA) and has been accepted by the Illinois IEPA and other experts in the landfill field as providing a high level of environmental safety. The multiple layer composite liner system will effectively prevent the release of potential hazards from the Chemical Waste Unit.

Leachate Collection. A leachate drainage/collection system will be constructed on the bottom of the landfill to quickly remove leachate from the landfill. The primary leachate drainage/collection system includes a highly permeable drainage layer (land on the floor and geonet on the sidewalls) to transmit leachate to a series of high-strength plastic pipes placed at intervals on the bottom liner. The permeability of the leachate drainage material is 30 times greater than applicable requirements thereby effectively minimizing the hydraulic head on the liner system. In addition, a redundant leachate drainage/collection system has also been included within the proposed liner system design directly beneath the primary liner system in order to provide additional leachate removal capabilities if necessary. The primary and redundant leachate drainage/collection systems will rapidly transmit leachate to collection sumps from which the leachate will be extracted from the landfill using automatically controlled pumps.

Final Cover. Upon the Chemical Waste Unit being filled to its intended height, it will be overlain by Municipal Solid Waste to achieve the final proposed grades and a final cover system will be constructed to cap the waste. The primary purpose of the final cover is to prevent rainwater from entering the landfill and coming into contact with waste and producing leachate. The final cover system that will cap the landfill consists of a low-permeability layer to prevent precipitation from entering the landfill, a subsurface drainage layer to ensure final cover stability and virtually eliminate hydraulic head on the low permeability layer, and a protective soil layer to prevent erosion and maintain the long-term integrity of the cap.

The low-permeability layer will include a 40-mil HDPE geomembrane (double-sided textured on slopes greater than 5H:1V) and a one foot thick compacted cohesive soil layer with a maximum permeability of 1×10^{-7} cm/sec. A geocomposite drainage layer will overlay the geomembrane to drain precipitation away from the low-permeability layer. The protective soil layer will be placed over the geocomposite and will include a minimum of three (3) feet of protective soil, with the upper six (6) inches being a vegetative layer. To facilitate drainage and minimize erosion, the slope of the final cover will be a maximum of 4H:1V and a minimum of 5 percent. The final slopes of the landfill will be vegetated and will incorporate drainage terraces to effectively control erosion.

Groundwater Impact Assessment (GIA). Extensive contaminant transport computer modeling was performed for the permitted landfill that was approved by the IEPA. The results of the computer model demonstrate that this site is protective of the public health, welfare, and



safety due to the excellent hydrogeologic characteristics of the site used in combination with the landfill liner design.

The GIA included many conservative assumptions in the analysis 10.7 feet of leachate head on the liner, and flaws (i.e. holes) in the geomembrane. Furthermore, a single-composite liner system was modeled. The proposed multiple-layer composite liner and leachate drainage/collection system will be even more protective as it will virtually eliminate any hydraulic head on, and thus impingement into, the liner system.

Stormwater Management (Section 4)

A stormwater management system has been permitted for the Clinton Landfill No. 3 and will be constructed to control and manage precipitation that falls onto the landfill. This system has been updated and calculations have been revised to include the proposed Chemical Waste Unit. The purpose of this system is to: protect the final cover against erosion; to divert rainwater away from waste materials in the active landfill areas; eliminate the potential for flooding; and to improve the water quality conditions of the site. All ditches and basins are adequately sized.

The stormwater management system includes:

- ☐ Perimeter ditches around the landfill to collect storm runoff,
- ☐ Interim ditches to collect storm runoff from the Chemical Waste Unit intermediate slope prior to filling of the separation area with Municipal Solid Waste,
- ☐ Detention basins to detain and control the release of the 100-year, 24-hour flood event which exceeds the state regulations to control the 25-year, 24-hour flood event, to facilitate sedimentation, and to improve water quality,
- ☐ A stage outlet structure with a restrictor to reduce the discharge rate to adjacent watersheds,
- ☐ A valved outlet structure that will only be opened once the detained stormwater has been cleared of sediment, and
- ☐ Terrace berming on the final landform slopes to reduce the potential for erosion.

Construction Quality Assurance Program (Section 5)

The purpose of the Construction Quality Assurance (CQA) program is to assure that landfill design features (such as the composite liner) are constructed as specified. The CQA program includes oversight during construction, testing of construction materials, and documentation of all inspection and testing activities. A third-party licensed professional engineer must certify that the constructed features at the landfill meet or exceed design standards. The CQA Plan is provided in Section 5.



Operating Plan (Section 6)

The purpose of the Operating Plan is to assure that the proper procedures are followed for waste disposal operations at the proposed Chemical Waste Unit, and for maintenance and monitoring of the engineered systems at the facility. The proposed Chemical Waste Unit would not except waste with total PCB concentrations greater than 500 ppm. Detailed testing of the proposed waste will occur prior to waste acceptance. Training and safety procedures will continue to be employed to make the landfill a safe workplace for employees and the community. Contingency plans exist at the site in order to halt or modify landfill operations in the event of natural disasters or other emergencies.

Environmental Monitoring (Section 7)

A comprehensive environmental monitoring program has been designed for the proposed Clinton Landfill No. 3 Chemical Waste Unit to serve as an additional safeguard in order to:

1. Monitor groundwater, surface water, and ambient air quality at the facility,
2. Verify that the landfill design is functioning as intended, and
3. Provide an early warning system in the unlikely event of a release.

The environmental monitoring program consists of the following systems: (1) groundwater monitoring, (2) leachate monitoring, (3) surface water monitoring, and (4) ambient air monitoring.

All monitoring will follow strict quality control, quality assurance and chain of custody procedures. This environmental monitoring program will verify that the facility design and construction are properly functioning to protect the public health, safety and welfare.

Closure and Post-Closure Care Plan (Section 8)

A Closure and Post-Closure Care Plan has been developed for the proposed Clinton Landfill No. 3 Chemical Waste Unit. The closure and post-closure care plan provides a list of steps that Clinton Landfill, Inc. will perform to ensure proper closure of the facility along with providing continued maintenance of the facility during the post-closure care period. A cost estimate was prepared utilizing conservative third party costs to ensure that proper funding is provided during the operating and closure periods of the unit.

Post-Closure Care of the Chemical Waste Unit will continue perpetually. Financial assurance will be provided to the USEPA prior to waste acceptance in the proposed Chemical Waste Unit. The amount of financial assurance will total the costs required to complete all remaining closure activities, and to properly monitor and maintain the facility for 30 years following closure. Following closure, financial assurance will be perpetually maintained to provide post-closure care for a 30 year period. The Closure and Post-Closure Care Plan is provided in Section 8.



Conclusion

This Application proposes a modern design that utilizes multiple back-up systems, an Operating Plan, an Environmental Monitoring Plan, and a Closure/Post-Closure Care Plan to properly manage TSCA-regulated PCB wastes with total PCB concentrations no greater than 500 ppm. The new Chemical Waste Unit would be located within the permitted boundaries of the previously permitted Clinton Landfill No. 3. The proposed Chemical Waste Unit would occupy approximately 22.50 acres of the currently permitted facility.

In addition to conforming with all applicable regulations, the modified design provided within this application includes the latest landfill design concepts with multiple redundant systems that has been demonstrated to be effective at other facilities and shown to be protective of the environment. Unique to the proposed facility, however, is the number and extent of safeguards employed. In many cases, the stringent design and performance standards contained in state and federal landfill regulations have been exceeded. Additionally, the facility design works in conjunction with a suitable location and favorable site geology to assure that the public health, safety and welfare will be protected.



BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

In the Matter of:)	
)	
MAHOMET VALLEY WATER AUTHORITY,)	
CITY OF CHAMPAIGN, ILLINOIS, a municipal)	
corporation, DON GERARD, CITY OF URBANA,)	
ILLINOIS, a municipal corporation,)	
LAUREL LUNT PRUSSING,)	
CITY OF BLOOMINGTON, ILLINOIS,)	
a municipal corporation, COUNTY OF CHAMPAIGN,)	
ILLINOIS, COUNTY OF PIATT, ILLINOIS,)	
TOWN OF NORMAL, ILLINOIS, a municipal)	
corporation, VILLAGE OF SAVOY, ILLINOIS,)	
a municipal corporation, and CITY OF DECATUR,)	
ILLINOIS, a municipal corporation,)	
)	
Complainants,)	
)	
v.	)	PCB 20 -
)	
CLINTON LANDFILL, INC.,	)	(Enforcement - Land)
an Illinois corporation,)	
)	
Respondent.)	

EXHIBIT D

Agency Permit Modification No. 9
Dated January 8, 2010



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 • (217) 782-2829
James R. Thompson Center, 100 West Randolph, Suite 11-300, Chicago, IL 60601 • (312) 814-6026

PAT QUINN, GOVERNOR

DOUGLAS P. SCOTT, DIRECTOR

217/524-3300

January 8, 2010

CERTIFIED MAIL

7004 2510 0001 8615 7834

Clinton Landfill, Inc.
Attn: Mr. Ron L. Edwards
P.O. Box 9071
Peoria, Illinois 61612-9071

Re: 0390055036 – DeWitt County
Clinton Landfill 3
Permit No. 2005-070-LF
Log No. 2008-054
Modification No. 9
Expiration Date: February 15, 2012
Permit Landfill 810-817 File
Permit Approval

Dear Mr. Edwards:

Permit is hereby granted to Clinton Landfill, Inc. as owner and operator, approving the development of a new municipal solid waste and non-hazardous special waste landfill all in accordance with the application and plans prepared by George L. Armstrong, P.E. of PDC Technical Services, Inc. Final plans, specifications, application, and supporting documents, as submitted and approved, shall constitute part of this permit and are identified in the records of the Illinois Environmental Protection Agency (Illinois EPA), Bureau of Land, Division of Land Pollution Control by the permit number and log number designated in the heading above.

Specifically, Permit No. 2005-070-LF issued March 2, 2007 approved:

- a. The development of this landfill so as to comply with the applicable requirements of Title 35, Illinois Administrative Code (hereinafter 35 Ill. Adm. Code), Subtitle G, Parts 811 and 812, pursuant to 35 Ill. Adm. Code, Section 813.104;
- b. The development of a new Municipal Solid Waste Landfill (MSWLF) unit consisting of a 266.533 acre facility with a single waste disposal unit of approximately 157.451 acres with a gross airspace of approximately 32,014,225 cubic yards, including daily cover and intermediate cover; and excluding leachate sand drainage layer, sidewall liner protective soils and final cover. The maximum final elevation shall be approximately 870 feet above mean sea level. Based on the anticipated waste acceptance rate of 426,000 tons

Page 2

per year (compacted in place density of 1,200 lbs/cubic yard) the facility is estimated to have an operating life of 45 years;

- c. The lower waste boundaries and the waste footprint approved by this permit are shown on Drawing No. P-LCS1 entitled "Leachate Drainage and Collection Plan". The lower waste boundaries approved by this permit are defined by the top of liner grades shown on Drawing No. P-LCS1 plus 1-foot for the leachate sand drainage layer on the floor liner and 1.5-feet for the protective soils on the sidewall liner. The final contours approved by this permit are shown on Drawing No. P-FG4 entitled "Final Waste Grade Plan". Both Drawings are in the addendum dated June 9, 2006; and
- d. Acceptance of special waste streams without individual special waste stream authorizations, in accordance with the special conditions listed in Part III of this permit.

Permit Modification No. 9 is hereby granted to Clinton Landfill, Inc. as owner and operator, allowing modification of an existing municipal solid waste and non-hazardous special waste landfill all in accordance with the application and plans prepared by George L. Armstrong, P.E., of PDC Technical Services, Inc.; and Devin A. Moose P.E., Jesse Varsho, P.E., and Dan Drommerhausen, P.G., all of Shaw Environmental, Inc. and signed and sealed Mr. Armstrong on February 1, 2008 and identified in the Illinois EPA records as Log No. 2008-054.

The application approved by Modification No. 9 consists of the following documents:

Permit Application Log No. 2008-054

<u>DOCUMENT</u>	<u>DATED</u>	<u>DATE RECEIVED</u>
Original Permit Application	February 1, 2008	February 5, 2008
Waiver	May 1, 2008	May 2, 2008
	July 2, 2008	July 3, 2008
	August 27, 2008	August 28, 2008
	October 29, 2008	October 30, 2008
Additional Information	January 13, 2009	January 14, 2009
	January 23, 2009	January 26, 2009
	February 20, 2009	February 23, 2009
Waiver	April 21, 2009	April 22, 2009
	May 20, 2009	May 21, 2009
Additional Information	June 10, 2009	June 11, 2009

Page 3

Additional Information	June 24, 2009	June 25, 2009
	July 28, 2009	July 29, 2009
	August 18, 2009	August 19, 2009
	August 27, 2009	August 28, 2009
	September 4, 2009	September 8, 2009
	September 14, 2009	September 15, 2009
	September 22, 2009	September 23, 2009
Waiver	December 7, 2009	December 9, 2009

Modification No. 9 to Permit No. 2005-070-LF approves the reconfiguration of Clinton Landfill 3 into a Municipal Solid Waste (MSW) unit and a Chemical Waste Unit (CWU) as described below:

- a. The CWU covers approximately 22.495 acres in the southwestern corner of landfill. The MSW unit comprises the remainder of Clinton Landfill 3. A portion of the MSW unit overlies (piggybacks) the CWU. The MSW unit and CWU are not independent landfill units. They share a common groundwater monitoring network, will be certified to have completed closure together, and will have the same post-closure care period.
- b. After the CWU has been constructed and has received operating authorization from the Illinois EPA allowing waste disposal to begin, it will be able to accept a variety of non-hazardous industrial process wastes, non-hazardous pollution control wastes, certified non-special wastes, chemical wastes, inert wastes and putrescible wastes. Manufactured Gas Plant waste exceeding the regulatory levels specified in 35 Ill. Adm. Code 721.124(b) is among the waste that may be accepted at the CWU. The CWU will be able to accept Polychlorinated Biphenyl (PCB) wastes, as defined in 40 Code of Federal Regulations (CFR) 761.3, if the U.S. Environmental Protection Agency (USEPA) permits the CWU as a "chemical waste landfill" as defined in 40 CFR 761.3.
- c. The CWU will have a gross airspace (inclusive of daily and intermediate cover and the separation layer between the CWU and Municipal Solid Waste Unit, and exclusive of protective soil on sidewall liner and leachate drainage layer) of 2,529,506 cubic yards. Based on the anticipated waste acceptance rate of 75,000 tons per year (compacted in place density of 2000 lbs/cubic yard) the CWU is estimated to have an operating life of 34 years. The MSW unit covers approximately 146.453 acres (including the piggyback over CWU) and will have a gross airspace of 29,259,566 cubic yards. The MSW unit is estimated to have an operating life of 41 years at the anticipated waste acceptance rate of 426,000 tons per year (compacted in place density of 1200 lbs/cubic yard).
- d. A composite liner system in the CWU consists of 3-foot thick compacted soil liner with a maximum permeability of 1×10^{-7} cm/sec, 60-mil high density polyethylene (HDPE) textured geomembrane, a geocomposite drainage layer and a second layer of 60-mil

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HDPE textured geomembrane throughout the CWU. The floor and the lower portions of the sidewall also include a geosynthetic clay liner and a third 60-mil HDPE textured geomembrane. The liner system in the MSW unit approved in Permit No. 2005-070-LF remains unchanged.

- e. The lower waste boundaries and waste footprint for the CWU are shown on the drawing No. D7 entitled "Proposed Leachate Collection Grades" provided in Attachment 6 of application Log No. 2008-054, addendum dated June 10, 2009. The final contours for the landfill are the same as those approved in Permit No. 2005-070-LF.
- f. Modification No. 9 also makes the following changes, associated with the CWU, to Permit No. 2005-070-LF:
 - i. An Operating Plan for CWU.
 - ii. Revised closure/post-closure care plan and cost estimates.
 - iii. Revised geomembrane and geocomposite drainage layer specifications; and
 - iv. Revision of the gas management system to exclude gas collection from within the CWU unless and until problems with gas from the CWU occur.

Except for the differences described in the table below, the special conditions in Modification No. 9 are identical to the special conditions in the permit letter for Modification No. 8 to Permit No. 2005-070-LF, issued October 1, 2009.

Special Condition No. in Modification No. 8	Special Condition No. in Modification No. 9	Description of Modification
None	I.2(h)	Added cutoff trench.
None	I.14	This condition regarding the installation of the cutoff trench was added.
II.4(b)	II.4(b)	Revised to make clarification.
II.10(f)	II.10(f)	Revised to state that acceptance of PCB wastes will have to be approved by USEPA.
None	II.24	Added condition regarding acceptance of wastes at the CWU.
None	II.25	Added condition regarding inspection of waste loads received at CWU.
None	II.26	Added in accordance with 35 Ill. Adm. Code 811.323(d).
II.24	II.27	Renumbered.

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III.A.2(f)	III.A.2(f)	Revised to state that MGP wastes can be disposed in CWU.
III.A.6(b)	III.A.6(b)	Revised to state that containers which formerly held PCBs will be subject to TSCA requirements.
None	III.B.2	Added condition stating that liquid wastes destined for disposal in CWU shall be solidified within limits of CWU.
III.B.2 through III.B.16	III.B.3 through III.B.17	Renumbered.
None	III.B.6(a)(v) and (vi)	Added cements and bentonite to the list of reagents.
None	III.B.9(b)	This condition requiring analysis of PCBs in wastes disposed in CWU was added.
VI.4	VI.4	Revised as a result of approval of this permit application.
VII.1	VII.1	Revised to include Log No. 2008-054.
VII.2	VII.2	Revised to include Log No. 2008-054.
VII.3	VII.3	Revised to include leachate monitoring points for CWU.
VII.4	VII.4	Added Acenaphthylene to Leachate List L1.
None	VII.8	Added condition requiring monthly monitoring of leachate from CWU for PCBs.
None	VII.9	This condition stating that leachate shall not be re-circulated in CWU was added.
None	VII.10	This condition regarding management of leachate from CWU was added.
None	VII.11	Added condition stating that leachate from the CWU and MSW unit shall not be comingled.
None	VII.12	Added condition requiring the submittal of construction documentation for the CWU leachate storage tank.
None	VII.13	Added condition requiring submittal of a monitoring plan for the CWU leachate monitoring points L309R and L311R.
VIII.3	VIII.3	Revised to reference Log No. 2008-054 and require installation of wells for CWU1 and CWU2 by September 1, 2010.
VIII.9	VIII.9	Revised to include monitoring well phasing plan approved in this permit.

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VIII.10	VIII.10	Revised to reference Log No. 2008-054.
VIII.12	VIII.12	List G3 was added.
VIII.13(b) and (c)	VIII.13(b) and (c)	Revised to reference List G3.
VIII.16	VIII.16	Revised to include assessment monitoring requirements.
VIII.18	VIII.18	Revised to state that CWU1 and CWU2 wells shall be monitored for List G3.
VIII.25	VIII.25	Revised to state that a permit application addressing the requirements of this condition is currently under review.
None	VIII.26	This condition regarding the investigation of the extent of Upper Radnor Till was added.
None	VIII.27	This condition requiring the installation of additional monitoring wells, based on the investigation of Upper Radnor Till, was added.
IX.11	IX.11	Modified to include reference to application Log No. 2008-054.
None	IX.12	This condition regarding gas management at CWU was added.
X.1	X.1	Replaced Log No. 2005-070 with Log No. 2008-054.
X.2	X.2	Replaced Log No. 2005-070 with Log No. 2008-054.
X.6	X.6	Revised to include cost estimates for CWU Cell CWU1. The cost estimates for the closure of the entire facility have been included as well.
X.7	X.7	Revised to reference Condition No. X.5.
XI.10	XI.10	Revised to reference Condition No. II.10.
XI.14	XI.14	Replaced Log No. 2007-459 with Log No. 2008-054.
XII.3	XII.3	Revised to state that processed dusty wastes shall be disposed in MSW unit.
None	XII.4	Added condition stating that Waste Processing Facility shall not be used to manage dusty wastes destined for disposal in CWU.
XII.4 through XII.20	XII.5 through XII.21	Renumbered.

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XII.9	XII.10	Revised to state that all wastes received at Waste Processing Facility shall be disposed in MSW unit and to reference Condition No. II.10.
XII.14	XII.15	Replaced Log No. 2007-509 with Log No. 2008-054.
XIII.1	XIII.1	Revised to specify that a new facility map must be submitted.
Attachment 1	Attachment 1	Revised to include AGQS values for several parameters.

Pursuant to Section 39(a) of Illinois Environmental Protection Act (Act) [415 ILCS 5/39(a)] and 35 Ill. Adm. Code, 813.104(b), this permit is issued subject to the development, operating and reporting requirements for non-hazardous waste landfills in 35 Ill. Adm. Code, Parts 810, 811, 812 and 813, the standard conditions attached hereto, and the following special conditions. In case of conflict between the permit application and these conditions (both standard and special), the conditions of this permit shall govern.

I. CONSTRUCTION QUALITY ASSURANCE

1. All necessary surface drainage control facilities shall be constructed prior to other disturbance in any area.
2. No part of the unit shall be placed into service or accept waste until an acceptance report for all the activities listed below has been submitted to and approved by the Illinois EPA as a significant modification pursuant to 35 Ill. Adm. Code, Sections 811.505(d) and 813.203.
 - a. Preparation of the subgrade and foundation to design parameters;
 - b. Installation of the compacted earth/synthetic liner;
 - c. Installation of the leachate drainage, collection and management systems;
 - d. Placement of final cover;
 - e. Installation of leachate re-circulation system;
 - f. Installation of gas control facilities, except as provided in Condition No. IX.11 of this permit;
 - g. Construction of ponds, ditches, lagoons and berms; and
 - h. Cutoff trench.

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3. The permittee shall designate an independent third party contractor as the Construction Quality Assurance (CQA) Officer(s). The CQA Officer(s) shall be an Illinois Certified Professional Engineer who is independent from and not under the control or influence of the operator, any employee of the operator, or any other corporation, company or legal entity that is a subsidiary, affiliate, parent corporation or holding corporation associated with the operator.
4. Except as provided below, the CQA Officer(s) designated pursuant to Condition I.3. shall personally be present during all construction and testing that is subject to CQA certification pursuant to 35 Ill. Adm. Code, Section 811.503(a). If the CQA Officer(s) is unable to be present as required, then a written explanation and signed statement must be provided for each absence pursuant to 35 Ill. Adm. Code, Section 811.503(b).
5. The clay liner shall be tested for density and moisture content a minimum of five tests per lift per acre.
6. A minimum of one laboratory hydraulic conductivity test shall be performed for every 10,000 cubic yards of soil placed in the liner. Additionally, each lift of the soil liner shall be tested for hydraulic conductivity at least once for each phase of construction.
7. If the clay portion of the liner is exposed to freezing conditions, it must be recertified. The designated CQA Officer(s) shall then certify that the clay portion of the liner and all necessary repairs to the liner geomembrane and leachate drainage layer meet the required design standards. This certification must be provided to the Illinois EPA prior to disposal of waste on the subject portion of the liner. If operating authorization has not yet been issued for that area, the recertification shall be included in the application for Significant Modification of Permit to obtain Operating Authorization for that area.
8. Pursuant to 35 Ill. Adm. Code, Section 811.505(d), upon completion of construction of each major phase, the CQA Officer(s) shall submit an acceptance report to the Illinois EPA. The acceptance report shall be submitted before the structure is placed into service and shall contain the following:
 - a. A certification by the CQA Officer(s) that the construction has been prepared and constructed in accordance with the engineering design;
 - b. As-built drawings; and
 - c. All daily summary reports.
9. Construction of Sidewall Liner:

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- a. The operator shall maintain a minimum "freeboard" of one (1) foot between the top of the sidewall liner and the top of the waste;
 - b. Prior to installing an increment of the sidewall liner, the sidewall liner in that area shall be inspected. Any areas damaged by desiccation, frost action, etc. shall be excavated and reconstructed in accordance with the Construction Quality Assurance program approved by this permit;
 - c. After each increment of the composite liner up the sidewall is completed, the operator shall provide written notification of its completion to the Illinois EPA's Champaign Regional Office. Upon receipt of the notification, the inspector shall be allowed fifteen working days to examine the construction. The Illinois EPA is not obligated to approve the construction or certification. The operator may dispose of refuse in the subphase after the fifteen day period if, having complied with the terms of this condition, the operator is not informed of a problem by the Illinois EPA or its agents; and
 - d. At the same time the Champaign Regional Office or delegated government is given notification that an increment of the sidewall liner has been completed, the Permit Section shall be provided with the information required in an Acceptance Report pursuant to 35 Ill. Adm. Code, 811.505(d) on its construction.
10. Applications for operating authorization shall not be made for areas of less than 1.5 acre increments of constructed liner.
 11. All stakes and monuments marking the facility boundary and the permitted disposal area shall be maintained, inspected annually and surveyed no less frequently than once in five years by a professional land surveyor. Any lost or damaged monuments shall be replaced.
 12. All standards for testing the characteristics and performance of materials, products, systems and services shall be those established by the American Society for Testing and Materials (ASTM) unless otherwise stated in the permit application.
 13. Effective upon issuance of Modification No. 6 (Log No. 2009-148), all conformance testing of the geomembrane used shall meet Geosynthetic Research Institute's requirements with the following exceptions: (For the geomembrane used in the bottom liner, the minimum thickness must be within 5% of nominal for all samples, i.e. 60 mil liner must be at least 57 mil;) and UV resistance testing is not necessary unless the geomembrane is exposed for more than 30 days.
 14. A cutoff trench shall be installed at the toe of the landfill invert sidewalls, along the eastern and southern edges of the MSW unit, as shown on Drawings P-EX1 and P-EX2,

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submitted in application Log No. 2005-070, addendum dated June 9, 2006. As proposed in application Log No. 2008-054, addendum dated August 18, 2009, the cutoff trench shall be installed along the southern edge of the CWU if Upper Radnor Till Sand is encountered during future investigations along the southern boundary of CWU. The cutoff trench material, placement and compaction shall meet the Earth Liner specifications of the CQA plan.

II. OPERATING CONDITIONS

1. Pursuant to 35 Ill. Adm. Code, Sections 811.107(a) and 811.107(b), throughout the operating life of this landfill, waste shall not be placed in a manner or at a rate which results in unstable internal or external slopes or interference with construction, operation or monitoring activities.
2. The operator of this solid waste facility shall not conduct the operation in a manner which results in any of the following:
 - a. refuse in standing or flowing waters;
 - b. leachate flows entering waters of the State;
 - c. leachate flows exiting the landfill confines (i.e., the facility boundaries established for the landfill in a permit or permits issued by the Illinois EPA);
 - d. open burning of refuse in violation of Section 9 of the Act;
 - e. uncovered refuse remaining from any previous operating day or at the conclusion of any operating day, unless authorized by permit;
 - f. failure to provide final cover within time limits established by Board regulations;
 - g. acceptance of wastes without necessary permits;
 - h. scavenging as defined by Board regulations;
 - i. deposition of refuse in any unpermitted (i.e., without an Illinois EPA approved significant modification authorizing operation) portion of the landfill;
 - j. acceptance of a special waste without a required manifest and identification record;
 - k. failure to submit reports required by permits or Board regulations;

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- l. failure to collect and contain litter from the site by the end of each operating day; and
 - m. failure to submit any cost estimate or any financial assurance mechanism for the facility as required by Section 21.o.13 of the Act.
3. Moveable, temporary fencing shall be used to prevent blowing litter when the refuse is above the natural ground line.
4. At the end of each day of operation, all exposed waste shall be covered with:
- a. Clean soil at least six (6) inches thick (i.e., conventional daily cover); or
 - b. An alternate cover as described below in Condition No. II.5.
5. Polypropylene non-woven and woven geotextile such as Fabrisoil, Typar 3601, Amoco 2002 or their equivalents are approved as alternate daily cover pursuant to 35 Ill. Adm. Code, Sections 811.106(b) and 812.111(b). Use of alternate materials as daily cover shall be subject to the following conditions:
- a. If any alternate daily cover other than those approved by this permit are to be used, their use must be approved by the Illinois EPA through the permit process;
 - b. At any one time, the total area, using alternate daily cover, shall be no more than 2,500 square yards. Beyond this maximum, daily cover soil shall be used on all areas where waste has been disposed and to which intermediate or final cover has not been applied;
 - c. Areas upon which alternate daily cover has been used must be covered with either conventional cover or additional waste within six days;
 - d. Conventional daily cover in accordance with 35 Ill. Adm. Code 811.106(a) shall be used if weather or other conditions adversely affect the ability of the alternate daily cover to prevent problems with blowing litter, fire, odors, or vectors;
 - e. Geotextile fabric shall be anchored adequately to prevent wind damage. If the alternate daily cover is torn during or after placement, it must be repaired immediately or the damaged area must be covered with six inches of daily cover soil;
 - f. When an alternate daily cover is applied, the operator shall keep a record including a description of the weather conditions, the type of alternate daily cover

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used and its performance. A summary of this information shall be provided with this facility's annual reports; and

- g. Any alternate daily cover which has been used for daily cover may not be reused for any purpose (including road underlayment and erosion control) outside of permitted disposal boundaries.
6. No later than 60 days after placement of the final lift of waste in any area, the area shall receive a final cover system meeting the design specifications approved in this permit application. The final cover system for the entire facility consists of the following layers from bottom of cover to top of cover:
 - 12-inches of soil foundation layer
 - 12-inches of compacted clay with hydraulic conductivity no greater than 1×10^{-7} cm/sec.
 - 40-mil HDPE geomembrane (textured on the sideslopes)
 - Drainage layer consisting of a geotextile and HDPE geonet.
[Alternatively, a geocomposite drainage layer can be used.]
 - 3-foot thick protective cover capable of supporting vegetation.
7. All waste not covered within sixty days of placement with additional waste or final cover shall have an intermediate cover of compacted clean soil with a minimum thickness of one foot applied to it.
8. The operator shall implement a load checking program that meets the requirements of 35 Ill. Adm. Code, Section 811.323. If regulated hazardous waste is discovered, the Illinois EPA shall be notified no later than 5:00 p.m. the next business day after the day it is detected. The load checker shall prepare a report describing the results of each inspection. A summary of these reports shall be submitted to the Illinois EPA as part of this facility's annual report.
9. Asbestos containing wastes shall not accepted until a revised operating plan including appropriate National Emission Standards for Hazardous Air Pollutants (NESHAPS) requirements has been submitted to and approved by the Illinois EPA. The revised operating plan shall be submitted to the Illinois EPA in the form of an application for significant modification.
10. Management of Unauthorized Waste
 - a. Landscape waste found to be mixed with municipal waste will be removed the same day and transported to a facility that is operating in accordance with the Act, Title V, Section 21;

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- b. Lead-acid batteries will be removed the same day and transported either to a drop-off center handling such waste, or to a lead-acid battery retailer;
- c. Potentially infectious medical waste (PIMW) found to be mixed with municipal waste shall be managed in accordance with 35 Ill. Adm. Code, Subtitle M;
- d. Tires found to be mixed with municipal waste shall be removed and managed in accordance with 35 Ill. Adm. Code, Part 848;
- e. White good components mixed with municipal waste shall be removed and managed in accordance with Section 22.28 of the Act;
- f. Disposal of polychlorinated biphenyls (PCB) wastes, as defined in 40 CFR 761.3 and subject to Toxic Substances Control Act (TSCA), is prohibited in the MSW unit. Disposal of such PCB wastes in the CWU Unit will be allowed, if and when:
 - i. The U.S. Environmental Protection Agency (USEPA) permits the CWU as a "chemical waste landfill" as defined in 40 CFR 761.3;
 - ii. The CWU is constructed; and
 - iii. The Illinois EPA has approved operation authorization for the CWU, pursuant to 35 Ill. Adm. Code 813.203, allowing waste disposal to begin.
- g. No liquid waste (special or non-special) as determined by the Paint Filter Test shall be disposed unless the waste is from a household or is in a small container similar in size to that normally found in household waste and the container was designed for use other than storage. The prohibition applies to on-site generated wastes except for leachate or gas condensate that is specifically approved by permit for recirculation into the landfill. However, minor amounts of liquid resulting from precipitation (rain, sleet, hail or snow) during transport and disposal operations shall not be construed as a violation of this condition;
- h. In accordance with Section 21.6 of the Act, beginning July 1, 1996, no owner or operator of a sanitary landfill shall accept liquid used oil for final disposal that is discernable in the course of prudent business operation; and
- i. After the unauthorized waste has been removed, a thorough cleanup of the affected area will be made according to the type of unauthorized waste managed. Records shall be kept for three (3) years and will be made available to the Illinois EPA.

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11. Operating hours are those hours during which waste may be accepted. For this facility, the operating hours shall be limited to 6:00 a.m. to 6:00 p.m., Monday through Friday, and 6:00 a.m. to 3:00 p.m. on Saturday. Adequate lighting shall be provided for outdoor activities at the landfill occurring before sunrise or after sunset.
12. If it is required for the facility to be open beyond normal operating hours to respond to emergency situations, a written record of the date(s), times and reason the facility was open shall be made part of the operating record for the facility. The Illinois EPA-Champaign Regional Office and, when applicable, the county authority responsible for inspections of this facility per a delegation agreement with the Illinois EPA shall be notified no later than 5:00 p.m. the next business day following the acceptance of waste outside the specified operating hours.
13. Road building materials used to construct roads at the facility that are not solid waste may be stockpiled on-site in the amount estimated to be needed within the next construction season provided they are managed in accordance with 35 Ill. Adm. Code, Section 811.108(c)(1).
14. Equipment shall be maintained and available for use at the facility during all hours of operation to allow proper operation of the landfill. If breakdowns occur that would prevent proper facility operation, back-up equipment shall be brought onto the site.
15. All utilities, including but not limited to heat, lights, power, communications equipment and sanitary facilities necessary for safe, efficient and proper operation of the landfill shall be available at the facility at all times.
16. Waste shall be deposited at the fill face and compacted upward into the fill face unless precluded by extreme weather conditions or for reasons of safety.
17. The operator shall implement methods for controlling dust so as to prevent wind dispersal of particulate matter off-site.
18. The facility shall be constructed and operated to minimize the level of equipment noise audible outside the facility. The facility shall not cause or contribute to a violation of 35 Ill. Adm. Code, Parts 900 through 905.
19. The operator shall implement measures to control the population of disease and nuisance vectors.
20. The operator shall institute fire protection measures in accordance with the proposed Hazard Protection and Emergency Response Plan.

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21. The operator shall implement methods to prevent tracking of mud by hauling vehicles onto public roadways.
22. Access to the active area and all other areas within the boundaries of the facility shall be controlled by use of fences, gates and natural barriers to prevent unauthorized entry at all times.
23. A permanent sign shall be maintained at the facility entrance containing the information required under 35 Ill. Adm. Code, Section 811.109(b)(1) through (5).
24. Waste received at the CWU must be handled, analyzed, documented and disposed in accordance with the Operating Plan provided in application Log No. 2008-054, addendum dated January 23, 2009.
25. As proposed in the Operating Plan for the CWU, all waste loads destined for disposal in the CWU shall be inspected. The inspections shall ascertain that the waste does not contain any unacceptable materials, meets the waste acceptance criteria specified in the Operating Plan for CWU and is in accordance with the Special Conditions included in Section III.A of this permit. The information and observations derived from these inspections shall be recorded in accordance with 35 Ill. Adm. Code 811.323(c)(2).
26. If any regulated hazardous wastes are identified during load checking, they should be handled in accordance with 35 Ill. Adm. Code 811.323(d).
27. Waste disposal operations shall be restricted to areas of the landfill specifically approved by the Illinois EPA for operation or granted operating authorization pursuant to 35 Ill. Adm. Code, Section 813.203. Such areas of the landfill are presently limited to:
 - a. The approximately 6.65 acres of Phase 1A, in accordance with the application and plans provided in permit application Log No. 2008-063 and approved by Modification No. 5.

III. SPECIAL WASTE

A. DISPOSAL OF SPECIAL WASTE

1. The permittee is authorized to accept non-hazardous special waste that meets the definition of industrial process waste or pollution control waste as found in Sections 3.235 and 3.335, respectively, of the Illinois Environmental Protection Act, in accordance with the following requirements:
 - a. The waste is analyzed in accordance with the requirements described below and complies with the acceptance criteria in the approved waste analysis plan;

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- b. The waste is delivered by an Illinois licensed special waste hauler or an exempt hauler as defined in 35 Ill. Adm. Code, Section 809.211; and
 - c. The waste is accompanied by a manifest, if required.
2. The permittee shall obtain a completed Special Waste Preacceptance Form (enclosed along with Permit No. 2005-070-LF) and a preacceptance analysis from each generator for each waste to be accepted. In addition, the Annual Generator Special Waste and Recertification for Disposal of Special Waste form (enclosed along with Permit No. 2005-070-LF), which certifies the waste has not changed since the last analysis, must be completed and included in the operating record. A complete laboratory analysis must be provided with the exceptions listed below.

Analysis shall be conducted using SW-846 test methods. The waste shall be reanalyzed at least every five years and must identify the actual concentration of each chemical constituent and state of each physical parameter. In all cases, a copy of the lab analysis (on lab letterhead and signed by a responsible party such as the person conducting the analysis or his/her supervisor) must be included in the operating record with the Special Waste Preacceptance Form (Profile Identification Sheet). The analysis may not be greater than one year old at the time. A new analysis is required if the composition of the waste changes (normal variations in waste composition are expected and are not included in this requirement). All waste must be analyzed as follows:

- a. The permittee shall obtain the following lab analyses to determine the concentrations of the following parameters.

- Paint Filter Test
 - Flash point
 - Sulfide (reactive)
 - Cyanide (reactive)
 - Phenol (total)
 - pH
 - Toxicity Characteristic Constituents

- b. The permittee shall obtain analysis for reactive sulfides (H_2S) and cyanides (HCN). Waste containing 250 ppm or greater reactive cyanide or 500 ppm or greater reactive sulfide is presumed to be hazardous waste pursuant to 35 Ill. Adm. Code, Section 721.123(a)(5) unless specific information to show it does not present a danger to human health or the environment is provided. Analysis for total sulfide and/or cyanide may be substituted for reactive concentrations if they are equal to or less than 10 ppm. For wastes containing greater than 10 ppm reactive cyanide or reactive sulfide, the permittee shall not accept the waste unless the generator provides a signed and dated statement indicating the following:

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- i. The waste has never caused injury to a worker because of H₂S and/or HCN generation;
 - ii. That the OSHA work place air concentration limits for H₂S and/or HCN have not been exceeded in areas where the waste is generated, stored or otherwise handled; and
 - iii. That air concentrations of H₂S and/or HCN above 10 ppm have not been encountered in areas where the waste is generated, stored or otherwise handled.
- c. The permittee shall obtain analysis for phenols. If the total phenol concentration is greater than 1000 ppm, the waste will be required to be drummed and labeled, unless justification that this precaution is not necessary is provided. The justification must demonstrate skin contact is unlikely during transport or disposal.
- d. The permittee shall obtain metals and organics analysis. Either procedure may be utilized (i.e., total or TCLP), but any constituent whose total concentration exceeds the TCLP limit specified in 35 Ill. Adm. Code, Section 721.124 must be analyzed using the TCLP test and the results reported, unless an alternative test has been approved by the Illinois EPA. TCLP test methods must be in accordance with SW 846-1311.
- e. EXCEPTIONS:
 - i. The generator may certify that the eight pesticides (D012, D013, D014, D015, D016, D017, D020 and D031) would not reasonably be expected to be present in the waste based on the nature of the process generating the waste.
 - ii. Petroleum contaminated media and debris from LUST sites subject to corrective action regulation under 35 Ill. Adm. Code, Parts 731 and 732 are temporarily exempt from complete TCLP analysis and the generator may limit analyses to flashpoint, paint filter test and TCLP lead.
 - iii. For off-specification, unused or discarded commercial or chemical products, an MSDS to determine the hazardous constituents present may be provided in lieu of analytical results.

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f. CLARIFICATIONS:

Notwithstanding the exception for manufactured gas plant waste contained in 35 Ill. Adm. Code 721.124(a), no manufactured gas plant waste shall be disposed in Clinton Landfill 3's MSW unit, unless: i) the waste has been tested in accordance with subsection (d) of this special condition, and ii) the analysis has demonstrated that the waste does not exceed the regulatory levels for any contaminant given in the table contained in 35 Ill. Adm. Code 721.124(b).

Manufactured gas plant waste exceeding the regulatory levels specified in 35 Ill. Adm. Code 721.124(b) can be disposed in the CWU.

- g. Pursuant to 35 Ill. Adm. Code 722.111, the generator of a solid waste is required to determine if the waste is hazardous and comply with all applicable hazardous waste regulations. For any waste that has been determined to be hazardous, the results of quality assurance testing for the treatment program, taken at an appropriate frequency to demonstrate the waste is no longer hazardous, must be obtained. Verification that the waste meets the land disposal restrictions must also be documented. These requirements are in addition to the other standard special waste test requirements.
3. An individual waste stream permit is no longer required by the Illinois EPA for this facility. Therefore, a waste stream permit number will no longer be required on the manifest when shipping waste to this facility as authorized by this permit.
4. Special waste generated due to an emergency situation may be disposed without complete TCLP analysis if:
- a. The permittee receives authorization from the Emergency Response Unit of the Illinois EPA at 1-217-782-3637;
 - b. The permittee ensures that the generator has received an incident number from the Illinois Emergency Management Agency at 1-800-782-7860 within Illinois, or 1-217-782-7860 outside of Illinois; and
 - c. The waste is analyzed for the chemical constituents required by the Emergency Response Unit.
5. The permittee shall conduct the following analyses for waste received in labeled containers in lab packs, including commingled wastes:
- a. Compatibility review in accordance with the procedures identified in USEPA document EPA-600/2-80-076; and

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- b. MSDS review to determine the hazardous constituents present and appropriate USEPA hazardous waste class.
- 6. RCRA empty containers received as a special waste are subject to the following conditions:
 - a. Containers have a rated capacity of less than 110 gallons only.
 - b. Containers which formerly held 'P' listed hazardous waste or TSCA regulated quantities of PCBs or empty compressed gas cylinders are not included under this permit. Containers which formerly held TSCA regulated quantities of PCBs are subject to the TSCA requirements administered by the USEPA.
 - c. All containers must meet the definition of empty as described in 35 Ill. Adm. Code, Section 721.107(b).
 - d. Additionally, where possible, a copy of the material safety data sheets for products last present in the container shall be obtained and kept on file.
 - e. For drums, at least one end must be removed and the drums must be crushed flat.
- 7. The Special Waste Preacceptance Form shall be utilized for the special waste profile identification requirements of 35 Ill. Adm. Code, Section 811.404(a).
- 8. The Annual Generator Special Waste Recertification for Disposal Special Waste form (enclosed along with Permit No. 2005-070-LF) shall be utilized for the special waste recertification requirements of 35 Ill. Adm. Code, Section 811.404(b).
- 9. The operator shall retain all special waste records until the end of the post-closure period in accordance with 35 Ill. Adm. Code, Section 811.405.
- B. SOLIDIFICATION OF SPECIAL WASTE
 - 1. Waste solidification shall take place in liquid tight and structurally sound inspectable containers like steel drums and roll-off containers placed over an area that has both a certified liner and an operating leachate collection system that meet the standards of 35 Ill. Adm. Code 811.306, 811.307 and 811.308. The solidification area shall be at least 10-feet above the landfill floor, and at least 30-feet from the landfill sidewall liner. Berms shall be constructed around the solidification area to prevent run-off from the area.
 - 2. Solidification of liquid wastes destined for disposal in CWU shall occur within the limits of CWU.

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3. Solidification containers shall be adequately spaced to allow inspections and equipment access. No more than 10 drums and 10 roll-off containers shall be used at any one time.
4. All special waste generators which send liquid waste to this facility for solidification and disposal must have an Illinois EPA generator number.
5. Only non-hazardous wastes as defined in 35 Ill. Adm. Code 722.111 may be received for solidification at this facility.
6. This permit approves the use of the following reagents and absorbents in the solidification process:
 - a. Reagents
 - i. Lime
 - ii. Pozzalime
 - iii. Fly ash from coal combustion
 - iv. Bottom ash from coal combustion
 - v. Cements (only used for TSCA regulated PCB liquids to be disposed in CWU)
 - vi. Bentonite (only used for TSCA regulated PCB liquids to be disposed in CWU)
 - b. Absorbents
 - i. Soil
 - ii. Oil Dry
 - iii. Sawdust
 - iv. Corn cobs

All reagents and absorbents used must not exhibit any characteristic which would classify it as a hazardous waste. Use of other materials or wastes other than those listed above shall be subject to approval by the Illinois EPA permit process.

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7. Absorbents and reagents will be stockpiled on site in accordance with the facility's Storm Water Pollution Prevention Plan. Absorbent stockpiles shall not contain more than 500 cubic yards of absorbent materials. Reagent stockpiles shall be covered to protect the reagents from precipitation and wind. Reagent stockpiles shall not contain more than 120 cubic yards of reagents. Storage of reagents and absorbents shall not contribute to a violation of Section 21(a), Section 12, or Section 9 of the Act.
8. The solidification unit must be operated so as to minimize spilling reagents/absorbents and waste. Any spilled reagents/absorbents and waste shall be removed on a daily basis.
9. The following conditions are applicable to any waste containing a liquid phase(s) (fails paint filter):
 - a. Each phase must be analyzed for total organic halogen (TOX) using the test method specified in 35 Ill. Adm. Code, Part 729. Any waste containing 10,000 ppm or greater of TOX must be analyzed to determine the specific constituents, and their concentrations, that make up TOX. These constituents and their concentration should be reported on the lab analysis report. Any liquid containing multiple phases must include individual analyses for each phase;
 - b. Wastes destined for disposal in CWU shall be analyzed for total PCBs;
 - c. The preacceptance documentation must include a description of the solidification method used at the generating site (or off-site permitted treatment facility) with test results demonstrating that the solidified waste passes the paint filter test; and
 - d. If a waste is used to solidify the liquid (i.e., two or more wastes are mixed) all required testing must be performed on the solidified waste. Otherwise, all testing (except paint filter) may be performed on the waste before solidification and a statement from the generator may be accepted certifying that the additives used have been evaluated and there is no reason to believe they would cause the waste to become hazardous.
10. The permittee shall not perform solidification if the bench-scale reactivity test(s) determines incompatibility of the waste and reagent.
11. The following information shall be documented in the facility's operating record for each load of waste received for solidification:
 - a. Date the load was received;
 - b. Manifest number associated with the waste load;

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- c. Waste name;
 - d. Volume of waste received;
 - e. Generator name, location and Illinois EPA generator number or hauler number, if not a special waste;
 - f. Results of all analyses conducted on the waste load;
 - g. Type of reagent and/or absorbent used to solidify the waste; and
 - h. Documentation that the solidified waste does not exhibit hazardous characteristics as defined in 35 Ill. Adm. Code 721 Subpart C, e.g., result of the compatibility test done in accordance with the facility's waste analysis plan.
- 12. Each load of the solidified waste shall be sampled and tested by the paint filter test described in 35 Ill. Adm. Code 729.320 prior to disposal. Waste that yields fluid may not be disposed.
 - 13. A complete TCLP analysis shall be performed on solidified waste resulting from a liquid waste with a pH ≤ 5 to demonstrate that no hazardous waste has been produced.
 - 14. By the end of each day of the operation, all waste received for treatment shall be solidified. Solidified wastes shall be removed from the solidification unit and disposed of at the active disposal face of the landfill no later than the end of next business day.
 - 15. All wash water generated from the solidification unit shall be managed in the same manner as leachate.
 - 16. The solidification unit may be operated from 6:00 a.m. to 6:00 p.m. Monday through Friday and 6:00 a.m. to 3:00 p.m. on Saturday.
 - 17. In the event of a spill, such materials and equipment necessary must be available on site in order to prevent leachate migration from the contaminated area.

IV. RECORDKEEPING

- 1. Information developed by the operator but not yet forwarded to the Illinois EPA in a quarterly or annual report shall be kept at or near the facility for inspection by the Illinois EPA upon request during normal working hours.
- 2. Information and observations derived from load checking inspections shall be recorded in writing and retained at the facility for at least three years.

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3. Every person who delivers special waste to a special waste hauler, every person who accepts special waste from a special waste hauler and every special waste hauler shall retain a copy of the special waste transportation record as a record of each special waste transaction. These copies shall be retained for three years and shall be made available at reasonable times for inspection and photocopying by the Illinois EPA pursuant to Section 4(d) of the Act.
4. The operator shall retain copies of any special waste profile identification sheets, special waste recertifications, certifications of representative samples, special waste laboratory analyses, special waste analysis plans, and any waivers of requirements, at the facility until the end of the closure period and thereafter at the site office until the end of the post-closure care period.
5. Inspections of the closed landfill shall be conducted in accordance with the approved post-closure care plan. Records of field investigations, inspections, sampling and corrective action taken are to be maintained at the site and made available to Illinois EPA personnel. During the post-closure care period, those records are to be maintained at the office of the site operator.
6. The owner or operator shall record and retain near the facility in an operating record or in some alternative location specified by the Illinois EPA, the information submitted to the Illinois EPA pursuant to 35 Ill. Adm. Code, Parts 812 and 813, as it becomes available. At a minimum, the operating record shall contain the following information, even if such information is not required by 35 Ill. Adm. Code, Part 812 or 813:
 - a. Any location restriction demonstration required by 35 Ill. Adm. Code, Sections 811.302, 812.109, and 812.303;
 - b. Inspection records, training procedures, and notification procedures required by 35 Ill. Adm. Code, Section 811.323;
 - c. Gas monitoring results and any remediation plans required by 35 Ill. Adm. Code, Sections 811.310 and 811.311;
 - d. Any MSWLF unit design documentation for placement of leachate or gas condensate in a MSWLF unit required by 35 Ill. Adm. Code, Section 811.107(m);
 - e. Any demonstration, certification, monitoring results, testing, or analytical data relating to the groundwater monitoring program required by 35 Ill. Adm. Code, Sections 811.319, 811.324, 811.325, 811.326, 812.317, 813.501 and 813.502;

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- f. Closure and post-closure care plans and any monitoring, testing, or analytical data required by 35 Ill. Adm. Code, Sections 811.110, 811.111, 812.114(h), 812.115 and 812.313; and
- g. Any cost estimates and financial assurance documentation required by 35 Ill. Adm. Code Part 811, Subpart G.

V. GENERAL CONDITIONS

- 1. This permit is issued with the expressed understanding that no process discharge to Waters of the State or to a sanitary sewer will occur from these facilities except as authorized by a permit issued by the Bureau of Water. Additionally, all stormwater discharges from the facility shall be authorized by appropriate permit issued by Bureau of Water.
- 2. This permit does not relieve the permittee of the responsibility of complying with the provisions of the State of Illinois Rules and Regulations, 35 Ill. Adm. Code Subtitle B, Air Pollution Control, Chapter 1. The permittee may be required to file reports and/or obtain applicable permits through the Illinois EPA's Bureau of Air (BOA) – Division of Air Pollution Control.

Based upon the information submitted in this application and consultations with BOA – Permit Section, this project requires an Air Pollution Control Construction Permit, pursuant to 35 Ill. Adm. Code 201.142, prior to the construction of the Municipal Solid Waste Landfill. Further, this project may be subject to the New Source Performance Standards (NSPS) for new Municipal Solid Waste Landfills (61 Fed. Reg. 9905 et seq.) that USEPA promulgated on March 12, 1996, i.e., 40 CFR Part 60, Subpart WWW – Standards of Performance for Municipal Solid Waste Landfills. The Illinois EPA's BOA is implementing NSPS, for landfills classified as new Municipal Solid Waste Landfill, pursuant to a delegation agreement between Illinois EPA and USEPA.

Please contact the Illinois EPA's BOA – Division of Air Pollution Control – Permit Section at 217/782-2113, if you have any questions regarding these requirements.

- 3. If changes occur which modify any of the information the permittee has used in obtaining a permit for this facility, the permittee shall notify the Illinois EPA. Such changes would include but not be limited to any changes in the names or addresses of both beneficial and legal titleholders to the herein-permitted site. The notification shall be submitted to the Illinois EPA within fifteen days of the change and shall include the name or names of any parties in interest and the address of their place of abode; or, if a corporation, the name and address of its registered agent.

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4. Pursuant to 35 Ill. Adm. Code, Section 813.201(a), any modifications to this permit shall be proposed in the form of a permit application and submitted to the Illinois EPA.
5. Pursuant to 35 Ill. Adm. Code, Section 813.301, an application for permit renewal shall be filed with the Illinois EPA at least ninety days prior to the expiration date of this permit.
6. Current, valid Prior Conduct Certification pursuant to 35 Ill. Adm. Code Part 745 is required for all operators of landfills that require a permit.
7. Landfill Operator Certification pursuant to 68 Ill. Adm. Code Part 870 is required for operation of a landfill.
8. The permittee(s) shall submit a 39(i) certification and supporting documentation within 30 days of any of the following events:
 - a. The owner or officer of the owner, or operator, or any employee who has control over operating decisions regarding the facility has violated federal, State, or local laws, regulations, standards, or ordinances in the operation of waste management facilities or sites; or
 - b. The owner or operator or officer of the owner, or operator, or any employee who has control over operating decisions regarding the facility has been convicted in this or another State of any crime which is a felony under the laws of this State, or conviction of a felony in a federal court; or
 - c. The owner or operator or officer of the owner, or operator, or any employee who has control over operating decisions regarding this facility has committed an act of gross carelessness or incompetence in handling, storing, processing, transporting, or disposing of waste.
 - d. A new person is associated with the owner or operator who can sign the application form(s) or who has control over operating decisions regarding the facility, such as corporate officer or a delegated employee.

VI. SURFACE WATER CONTROL

1. Runoff from disturbed areas to Waters of the State shall be permitted by the Illinois EPA in accordance with 35 Ill. Adm. Code, Part 309, and meet the requirements of 35 Ill. Adm. Code, Part 304 unless permitted otherwise.

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2. All surface water control structures other than temporary diversions for intermediate phases shall be operated until the final cover is placed and erosional stability is provided by the final protective layer of the final cover system.
3. Runoff from undisturbed areas resulting from precipitation events less than or equal to the 25-year, 24-hour precipitation event shall be diverted around disturbed areas where possible and not commingled with runoff from disturbed areas.
4. Site surface drainage, during development, during operation and after the site is closed, shall be managed in accordance with the approved drainage control plan detailed in Permit Application Log Nos. 2005-070 and 2008-054. Stormwater management structures shall be constructed prior to disturbing any portion of a drainage area in accordance with the sequence shown on the phasing plans, Drawing Nos. P-PP1, P-PP2 and P-PP3 provided in Application Log No. 2005-070, addendum dated January 11, 2007; Drawing Nos. D20 and D21 provided in Application Log No. 2008-054; and table of Estimated Construction dates provided in Attachment 3 of Application Log No. 2008-054. The sequence of construction of stormwater management structures depicted on the above mentioned drawings apply to Phases 1, 2 and 3 of the MSW Unit and CWU Cell CWU1. Phasing plans for the entire facility shall be submitted along with the application for permit renewal required by Condition No. V.5 of this permit (Modification No. 9).

VII. LEACHATE MANAGEMENT/MONITORING

1. Pursuant to 35 Ill. Adm. Code, Section 811.309(h)(3), leachate from this MSWLF landfill shall be collected and disposed beginning as soon as it is first produced and continuing for at least 30 years after closure except as otherwise provided by 35 Ill. Adm. Code, Sections 811.309(h)(4) and (h)(5). Collection and disposal of leachate may cease only when the conditions described in 35 Ill. Adm. Code, Section 811.309(h)(2) have been achieved. Leachate removed from this landfill shall be treated at an Illinois EPA permitted facility in accordance with the leachate management plan proposed in Permit Application Log Nos. 2005-070 and 2008-054.
2. Pursuant to 35 Ill. Adm. Code, Sections 811.307(a) and (b), 811.308(a) and (h), and 811.309(a), leachate shall be pumped from the side slope riser sump(s) before the level of leachate rises above the invert of the collection pipe(s) at its lowest point(s). Leachate removal as such shall be performed throughout the period that the leachate collection/management system must be operated in accordance with Permit Application Log Nos 2005-070 and 2008-054.
3. The following monitoring points (leachate collection sumps) are to be used in the Leachate Monitoring Program for this facility:

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Leachate Monitoring Points

<u>Applicant Designation</u>	<u>Illinois EPA Designation</u>
L301	L301
@L302	@L302
@L303	@L303
@L304	@L304
@L305	@L305
@L306	@L306
@L307	@L307
@L308	@L308
@L309P	@L30P
@L309R	@L30R
@L310	@L310
@L311P	@L31P
@L311R	@L31R
@L312	@L312
@L313	@L313

@ indicates leachate monitoring points not yet placed into service

P designates primary or upper leachate collection system for CWU

R designates redundant or lower leachate collection system for CWU

4. Pursuant to 35 Ill. Adm. Code, Sections 811.309(g), 722.111 and 721, Subpart C, leachate monitoring (i.e., sampling, measurements and analysis) must be conducted in accordance with the permit for this facility. The concentrations or values for the parameters contained in List L1 (below) shall be determined on a semi-annual basis and the results must be submitted with the groundwater reports.

Each year, the permittee shall collect a representative leachate sample and have it tested for the parameters contained in List L2.

Condition VII.6. presents the sampling, testing and reporting schedules in tabular form. Leachate monitoring at each monitoring point shall continue as long as groundwater monitoring at this landfill is necessary pursuant to 35 Ill. Adm. Code, Section 811.319(a)(1)(C).

LIST L1

<u>Leachate Monitoring Parameters</u>	<u>STORET</u>
pH (S.U.)	00400

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LIST L1

<u>Leachate Monitoring Parameters</u>	<u>STORET</u>
Elevation Leachate Surface (ft. MSL)	71993
Bottom of Well Elevation (ft. MSL)	72020
Leachate Level from Measuring Point (ft.)	72109
Arsenic (total)	01002
Barium (total)	01007
Cadmium (total)	01027
Iron (total)	01045
Ammonia Nitrogen – N (mg/L)	00610
Bacteria (Fecal Coliform) (FCBR/100 mL)	31616
Biochemical Oxygen Demand (BOD5) (mg/L)	00310
1,1,1,2-Tetrachloroethane	77562
1,1,1-Trichloroethane	34506
1,1,2,2-Tetrachloroethane	34516
1,1,2-Trichloroethane	34511
1,1-Dichloroethane	34496
1,1-Dichloroethylene	34501
1,1-Dichloropropene	77168
1,2,3-Trichlorobenzene	77613
1,2,3-Trichloropropane	77443
1,2,4-Trichlorobenzene	34551
1,2,4-Trimethylbenzene	77222
1,2-Dibromo-3-Chloropropane	38760
1,2-Dichloroethane	34531
1,2-Dichloropropane	34541
1,3,5-Trimethylbenzene	77226
1,3-Dichloropropane	77173
1,3-Dichloropropene	34561
1,4-Dichloro-2-Butene	73547
1-Propanol	77018
2,2-Dichloropropane	77170
2,4,5-tp (Silvex)	39760
2,4,6-Trichlorophenol	34621
2,4-Dichlorophenol	34601
2,4-Dichlorophenoxyacetic Acid (2,4-D)	39730
2,4-Dimethylphenol	34606

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LIST L1

<u>Leachate Monitoring Parameters</u>	<u>STORET</u>
2,4-Dinitrotoluene	34611
2,4-Dinitrophenol	34616
2,6-Dinitrotoluene	34626
2-Chloroethyl Vinyl Ether	34576
2-Chloronaphthalene	34581
2-Chlorophenol	34586
2-Hexanone	77103
2-Propanol (Isopropyl Alcohol)	81310
3,3-Dichlorobenzidine	34631
4,4-DDD	39310
4,4-DDE	39320
4,6-Dinitro-O-Cresol	34657
4-Bromophenyl Phenyl Ether	34636
4-Chlorophenyl Phenyl Ether	34641
4-Methyl-2-Pentanone	78133
4-Nitrophenol	34646
Acenaphthene	34205
Acenaphthylene	34200
Acetone	81552
Alachlor	77825
Aldicarb	39053
Aldrin	39330
Alpha – BHC	39337
Aluminum	01105
Anthracene	34220
Antimony	01097
Atrazine	39033
Benzene	34030
Benzo (a) Anthracene	34526
Benzo (a) Pyrene	34247
Benzo (b) Fluoranthene	34230
Benzo (ghi) Perylene	34521
Benzo (k) Fluoranthene	34242
Beryllium (total)	01012
Beta – BHC	39338

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LIST L1

<u>Leachate Monitoring Parameters</u>	<u>STORET</u>
Bicarbonate (mg/L as CaCO ₃)	00425
Bis (2-Chloro-1-Methylethyl) Ether	73522
Bis (2-Chloroethoxy) Methane	34278
Bis (2-Chloroethyl) Ether	34273
Bis (2-Ethylhexyl) Phthalate	39100
Bis(Chloromethyl) Ether	34268
Boron	01022
Bromobenzene	81555
Bromochloromethane	77297
Bromodichloromethane	32101
Bromoform	32104
Bromomethane	34413
Butanol	45265
Butyl Benzyl Phthalate	34292
Calcium (mg/L)	00916
Carbofuran	81405
Carbon Disulfide	77041
Carbon Tetrachloride	32102
Chemical Oxygen Demand (COD) (mg/L)	00335
Chlordane	39350
Chloride (mg/L)	00940
Chlorobenzene	34301
Chloroethane	34311
Chloroform	32106
Chloromethane	34418
Chromium (total)	01034
Chrysene	34320
Cis-1,2-Dichloroethylene	77093
Cobalt (total)	01037
Copper (total)	01042
Cyanide (mg/L)	00720
DDT	39370
Delta - BHC	46323
Di-N-Butyl Phthalate	39110
Di-N-Octyl Phthalate	34596

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LIST L1

<u>Leachate Monitoring Parameters</u>	<u>STORET</u>
Dibenzo (a,h) Anthracene	34556
Dibromochloromethane	32105
Dibromomethane	77596
Dichlorodifluoromethane	34668
Dichloromethane	34423
Dieldrin	39380
Diethyl Phthalate	34336
Dimethyl Phthalate	34341
Endosulfan I	34361
Endosulfan II	34356
Endosulfan Sulfate	34351
Endrin	39390
Endrin Aldehyde	34366
Ethyl Acetate	81585
Ethylbenzene	78113
Ethylene Dibromide (EDB)	77651
Fluoranthene	34376
Flourene	34381
Fluoride (mg/L)	00951
Heptachlor Epoxide	39420
Heptachlor	39410
Hexachlorobenzene	39700
Hexachlorobutadiene	39702
Hexachlorocyclopentadiene	34386
Hexachloroethane	34396
Ideno (1,2,3-cd) Pyrene	34403
Iodomethane	77424
Isopropylbenzene	77223
Lead (total)	01051
Lindane	39782
Magnesium (total) (mg/L)	00927
Manganese (total)	01055
Mercury (total)	71900
Methoxychlor	39480
Methyl Ethyl Ketone	81595

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LIST L1

<u>Leachate Monitoring Parameters</u>	<u>STORET</u>
Naphthalene	34696
Nickel (total)	01067
Nitrate-Nitrogen (mg/L)	00620
Nitrobenzene	34447
Oil. Hexane Soluble (or Equivalent) (mg/L)	00550 or 00552
Parathion	39540
Pentachlorophenol	39032
Phenanthrene	34461
Phenols	32730
Phosphorous (mg/L)	00665
Polychlorinated Biphenyls	39516
Potassium (mg/L)	00937
Pyrene	34469
Selenium	01147
Silver (total)	01077
Specific Conductance (umhos/cm)	00094
Sodium (mg/L)	00929
Styrene	77128
Sulfate (mg/L)	00945
Temperature of Leachate Sample (°F)	00011
Tert-Butylbenzene	77353
Tetrachlorodibenzo-p-Dioxins	34675
Tetrachloroethylene	34475
Tetrahydrofuran	81607
Thallium	01059
Tin	01102
Toluene	34010
Total Organic Carbon (TOC) (mg/L)	00680
Total Dissolved Solids (TDS) (mg/L)	70300
Total Suspended Solids (TSS) (mg/L)	00530
Toxaphene	39400
Trans-1,2-Dichloroethylene	34546
Trans-1,3-Dichloropropene	34699
Trichloroethylene	39180

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LIST L1

<u>Leachate Monitoring Parameters</u>	<u>STORET</u>
Trichlorofluoromethane	34488
Vinyl Acetate	77057
Vinyl Chloride	39175
Xylene	81551
Zinc (total)	01092
m-Dichlorobenzene	34566
m+p-Xylene	61283
n-Butylbenzene	77342
n-Nitrosodimethylamine	34438
n-Nitrosodiphenylamine	34433
n-Nitrosodipropylamine	34428
n-Propylbenzene	77224
o-Chlorotoluene	77275
o-Dichlorobenzene	34536
o-Nitrophenol	34591
o-Xylene	77135
p-Chlorotoluene	77277
p-Cresol	77146
p-Dichlorobenzene	34571
p-Isopropyltoluene	77356
sec-Butylbenzene	77350

LIST L2

RCRA Parameters for Leachate and Condensate

<u>RCRA PARAMETERS</u>	<u>STORETS</u>
<u>Ignitability</u>	
Flashpoint, Pensky-Martens Closed Cup (°F)	00497
<u>Corrosivity</u>	
pH (S.U.)	00400

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LIST L2

RCRA Parameters for Leachate and Condensate

RCRA PARAMETERSSTORETSReactivity

Reactive Cyanide	99040
Reactive Sulfide	99042

Toxicity

	<u>Total</u> <u>conc.</u> <u>(ug/l)</u>	<u>TCLP</u> <u>conc.</u> <u>(mg/L)</u>
Arsenic	01002	99012
Barium	01007	99014
Cadmium	01027	99016
Chromium	01034	99018
Lead	01051	99020
Mercury	71900	99022
Selenium	01147	99024
Silver	01077	99026
Endrin	39390	99028
Lindane	39782	99030
Methoxychlor	39480	99032
Toxaphene	39400	99034
2,4-D	39730	99036
2,4,5-TP Silvex	39760	99038
Benzene	34030	99128
Carbon tetrachloride	32102	99050
Chlordane	39350	99148
Chlorobenzene	34301	99096
Chloroform	32106	99149
o-Cresol	77152	99150
m-Cresol	77151	99151
p-Cresol	77146	99152
Cresol	79778	99153
1,4-Dichlorobenzene	34571	99154
1,2-Dichloroethane	34531	99155

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LIST L2

RCRA Parameters for Leachate and Condensate

<u>RCRA PARAMETERS</u>	<u>STORETS</u>	
1,1-Dichloroethylene	34501	99156
2,4-Dinitrotoluene	34611	99157
Heptachlor (and its epoxide)	39410 and 39420	99158
Hexachlorobenzene	39700	99159
Hexachloro-1,3-Butadiene	39702	99160
Hexachloroethane	34396	99161
Methyl Ethyl Ketone	81595	99060
Nitrobenzene	34447	99062
Pentachlorophenol	39032	99064
Pyridine	77045	99066
Tetrachloroethylene	34475	99068
Trichloroethylene	39180	99076
2,4,5-Trichlorophenol	77687	99078
2,4,6-Trichlorophenol	34621	99080
Vinyl Chloride	39175	99162

Notes for all leachate monitoring parameters:

- a. Flashpoint shall be reported in degrees Fahrenheit. The parameters for reactivity and toxicity shall be reported in parts per million.
- b. The permittee shall obtain metals and organics analysis. Either procedure may be utilized (i.e., total or TCLP), but any constituent whose total concentration exceeds the TCLP limit specified in 35 Ill. Adm. Code, Section 721.124 must be analyzed using the TCLP test and the results reported, unless an alternative test has been approved by the Illinois EPA. TCLP test methods must be in accordance with SW 846-1311.
- c. The test methods for leachate monitoring shall be those approved in the USEPA's Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846), Third Edition or the equivalent thereof.
- d. All parameters shall be determined from unfiltered samples.
- e. The monitoring results should be reported in ug/l units unless otherwise indicated.

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5. The schedule for leachate sample collection and submission of monitoring data is illustrated below:

<u>Sampling Period</u>	<u>Sampling Points</u>	<u>Lists</u>	<u>Report Due Date</u>
April-May 2008	L301	L1	July 15, 2008
April-May 2008	LREP	L2	July 15, 2008
Oct-Nov 2008	L301	L1	January 15, 2009
April-May 2009	L301	L1	July 15, 2009
April-May 2009	LREP	L2	July 15, 2009
Oct-Nov 2009	L301	L1	January 15, 2010
April-May 2010	L301	L1	July 15, 2010
April-May 2010	LREP	L2	July 15, 2010
Oct-Nov 2010	L301	L1	January 15, 2011
April-May 2011	L301	L1	July 15, 2011
April-May 2011	LREP	L2	July 15, 2011
Oct-Nov 2011	L301	L1	January 15, 2012
April-May 2012	L301	L1	July 15, 2012
April-May 2012	LREP	L2	July 15, 2012
Oct-Nov 2012	L301	L1	January 15, 2013

L1 – Leachate Monitoring Parameters

L2 – Annual RCRA Leachate Parameters

LREP –Representative Leachate Sample

6. The leachate monitoring data must be submitted in an electronic format. The information is to be submitted as fixed-width text files formatted as found at www.epa.state.il.us/land/waste-mgmt/groundwater-monitoring.html
7. The development of the leachate re-circulation as proposed in application Log No. 2005-070 is hereby approved. Operation of the leachate re-circulation shall not be initiated until an acceptance report has been submitted to and approved by the Illinois EPA as a significant modification pursuant to 35 Ill. Adm. Code, Sections 811.505(d) and 813.203.
8. As proposed in application Log No. 2008-054, upon commencement of waste disposal operations in the CWU, leachate monitoring points L309P and L311P shall be analyzed for PCBs every month. Monitoring data for these analyses shall be submitted along with the leachate monitoring data required by Condition No. VII.5 of this permit.
9. Leachate shall not be re-circulated in the CWU.
10. Leachate from the CWU shall be:

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- a. Transported offsite to a licensed wastewater treatment plant for treatment and discharge under a NPDES permit. The operator shall provide documentation that necessary approval from the wastewater treatment plant has been obtained for the acceptance of leachate from the CWU as a prerequisite to obtaining operating authorization for the initial phase of Cell CWU 1 of the CWU; or
 - b. Solidified in accordance with the approved Operating Plan and disposed in the CWU or another landfill permitted to accept such waste; or
 - c. Transported offsite to a licensed waste treatment facility for thermal destruction, recycling, chemical oxidation, or other treatment in accordance with Toxic Substance Control Act requirements.
11. Leachate from the CWU shall be pumped to the CWU leachate storage tank and managed in accordance with Condition No. VII.10. Leachate from the CWU shall not be recirculated in the MSW unit or in any way comingled with the leachate from the MSW unit.
12. As part of (or prior to) the application for the first significant modification seeking operating authorization in the initial phase of Cell CWU1 of the CWU, construction documentation of the leachate storage tank and the leachate forcemain must be submitted. This report shall document that construction of the leachate storage tank, load out pad and leachate forcemain have been completed in accordance with the designs and specifications provided in application Log No. 2008-054 and shall be submitted to the Illinois EPA in the form of an application for significant modification pursuant to 35 Ill. Adm. Code 811.505(d) and 813.203.
13. The CWU includes a geocomposite drainage layer located between the upper and lower liner systems, referred to as the "redundant leachate drainage layer". This layer drains into the leachate monitoring points, L309R and L311R. Within 90 days after issuance of the permit letter approving Log No. 2008-054, the operator must submit a plan for monitoring L309R and L311R. The monitoring plan must be submitted to the Illinois EPA in the form of a permit application for a significant modification. This permit application must also describe: 1) how the data from monitoring L309R and L311R will be used in determining if the upper liner system may be leaking, and 2) what actions will be taken if such a determination is made.

VIII. GROUNDWATER MONITORING

1. The groundwater monitoring program must be capable of determining background groundwater quality hydraulically upgradient of and unaffected by the units and to detect, from all potential sources of discharge, any releases to groundwater within the facility.

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The Illinois EPA reserves the right to require installation of additional monitoring wells as may be necessary to satisfy the requirements of this permit.

2. The groundwater monitoring wells shall be constructed and maintained in accordance with the requirements of 35 Ill. Adm. Code, 811.318(d) and designs approved by the Illinois EPA.
3. Groundwater monitoring wells shall be installed in the locations shown in Drawing P-GWMP, of the August 18, 2009 addendum of the permit application, Log No. 2008-054 and screened in the hydrogeologic unit(s) identified as potential contaminant pathway(s) within the zone of attenuation. All wells as listed in Condition VIII.9 (Phase 1) must be installed so that samples may be taken during the months of July – August, 2007 and the results submitted to the Illinois EPA by October 15, 2007. Wells for the CWU1 and CWU2 shall be installed no later than September 1, 2010, or prior to waste placement, whichever occurs first.
4. Within 60 days of installation of any groundwater monitoring well, boring logs compiled by a qualified geologist, well development data and as-built diagrams shall be submitted to the Illinois EPA utilizing the enclosed "Well Completion Report" form. For each well installed pursuant to this permit, one form must be completed.
5. Groundwater monitoring wells shall be easily visible, labeled with the Illinois EPA monitoring point designations and fitted with padlocked protective covers.
6. In the event that any well becomes consistently dry or unserviceable and therefore requires replacement, a replacement well shall be installed within ten (10) feet of the existing well. The Illinois EPA shall be notified in writing at least 15 days prior to the installation of all replacement wells. A replacement well that is more than ten feet from the existing well or which does not monitor the same geologic zone is considered to be a new well and must be approved via a significant modification permit.
7. All borings, wells and piezometers not used as monitoring points shall be abandoned in accordance with the standards in 35 Ill. Adm. Code 811.316, and the decommissioning and reporting procedures contained in the Illinois Department of Public Health's (IDPH) Water Well Construction Code, 77 Ill. Adm. Code, Part 920 (effective 1/1/92). In the event specific guidance is not provided by IDPH procedures, the enclosed Illinois EPA monitoring well plugging procedures shall be followed.
8. Groundwater sampling and analysis shall be performed in accordance with the requirements of 35 Ill. Adm. Code 811.318(e) and the specific procedures and methods approved by the Illinois EPA.

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9. The following monitoring points are to be used in the groundwater detection monitoring program for this facility:

Lower Radnor Till Sand Wells

Upgradient Wells

Applicant Designation

Illinois EPA Designation

G01M

G01M

Wells Within Zone of Attenuation

Applicant Designation

Illinois EPA Designation

G08M

G08M

G09M

G09M

G10M

G10M

G11M

G11M

G12M

G12M

Organic Soil Wells

Upgradient Wells

Applicant Designation

Illinois EPA Designation

G02D

G02D

Wells Within Zone of Attenuation

Applicant Designation

Illinois EPA Designation

G01D

G01D

G08D

G08D

G09D

G09D

G10D

G10D

G11D

G11D

G12D

G12D

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Roxana Silt-Robein Member Wells

Wells Within Zone of Attenuation

Applicant DesignationIllinois EPA Designation

G08R

G08R

G09R

G09R

G10R

G10R

G11R

G11R

G12R

G12R

NOTES:

- a. Upgradient wells screened in the Roxana Silt-Robein Member shall be installed if a downgradient well screened in that zone contains sufficient water and is able to be monitored.
- b. Wells are to be phased in according to the schedule provided in Table 812.317-1 of September 22, 2009 addendum to Application Log No. 2008-054. The following table shows this schedule:

Operating
Phase

Monitoring Wells to be Installed

1	G01M ¹ , G01D, G02D ¹ , G08M, G08D, G08R, G09M, G09D, G09R, G10M, G10D, G10R, G11M, G11D, G11R, G12M, G12D, G12R
CWU 1&2	G39M ² , G39D ² , G39R ² , G40M, G40D, G40R, G47M, G47D, G47R, G58M, G58D, G58R, G48M, G48D, G48R, G59D, G59R, G49M, G49D, G49R, G50D, G50R, G51M, G51D, G51R, G52S, G52M, G52D, G52R, G07S ¹ , G07D ¹ , G07R, G03D ¹ , G05M ¹
2	G04M ¹ , G13M, G13D, G13R, G14M, G14D, G14R, G15M, G15D, G15R
3	G16M, G16D, G16R, G17M, G17D, G17R, G18M, G18D, G18R, G19M, G19D, G19R, G20M, G20D, G20R
4	G06D ¹ , G21M, G21D, G21R, G22M, G22D, G22R, G23M, G23D, G23R
5	G24M, G24R, G24D, G25M, G25D, G25R, G26M, G26D, G26R, G27M, G27D, G27R, G31M, G31D, G31R

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- 6 G28M, G28D, G28R, G29M, G29D, G29R, G30S, G30M, G30D, G30R
- 7 G32M, G32D, G32R
- 8 G36S, G36M, G36D, G36R, G37S, G37M, G37D, G37R, G38S, G38M, G38D, G38R
- 9 G44S, G44M, G44D, G44R, G45S, G45M, G45D, G45R, G46S, G46M, G46D, G46R
- 10 G53S, G53D, G53R, G54S², G54M², G54D², G54R², G55S, G55M, G55D, G55R, G56S, G56M, G56D, G56R, G57S, G57D, G57R

Wells noted with a (1) are upgradient wells. Wells noted with a (2) are compliance boundary wells.

- 10. The monitoring program, approved by Permit No. 2008-054, shall continue for a minimum period of 30 years after closure and shall not cease until the conditions described in 35 Ill. Adm. Code, 811.319(a)(1)(C) have been achieved. The operator shall collect samples from all of the monitoring points listed in Condition VIII.9, test the samples for the parameters listed in Condition VIII.12 (Lists G1 and G2), and report the results to the Illinois EPA, all in accordance with the schedule in Condition VIII.18.
- 11. The applicable groundwater quality standards (AGQS) and the maximum allowable predicted concentrations (MAPC), as listed in Attachment 1, are subject to the following conditions:
 - a. Temperature and the field parameters involving depth or elevation are not considered groundwater constituents and do not need AGQS.
 - b. For constituents which have not been detected in the groundwater, either the practical quantitation limit (PQL) or the method detection limit (MDL) shall be used as the AGQS.
 - c. MAPCs are only applicable to those wells within the zone of attenuation.
 - d. AGQS are only applicable to upgradient/background and compliance boundary wells.
- 12. AGQS and MAPC values must be determined for all of the parameters which appear in either Lists G1 or G2 (not including groundwater depth or elevations). The AGQS values shall be calculated using a minimum of four (4) consecutive quarters of groundwater

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monitoring data and employing the statistical method described in the January 11, 2007 addendum to the application, Log No. 2005-070.

LIST G (Groundwater - Variable)

<u>GROUNDWATER MONITORING PARAMETER</u>	<u>STORETS</u>
Elevation of Bottom of Well (ft. MSL) (Annually without dedicated pumps; every 5 years with dedicated pumps or whenever the pump is pulled)	72020

LIST G1 (Groundwater - Quarterly)

<u>FIELD PARAMETERS</u>	<u>STORETS</u>
pH	00400
Specific Conductance	00094
Temperature of Water Sample (°F)	00011
Depth to Water (ft. below land surface)	72019
Depth to Water (ft. below measuring point)	72109
Elevation of Measuring Point (Top of casing ft. MSL)	72110
Elevation of Groundwater Surface (ft. MSL)	71993
<u>INDICATOR PARAMETERS</u>	<u>STORETS</u>
Ammonia (as Nitrogen; Dissolved) mg/L	00608
Arsenic (Dissolved) ug/L	01000
Boron (Dissolved) ug/L	01020
Cadmium (Dissolved) ug/L	01025
Chloride (Dissolved) mg/L	00941
Chromium (Dissolved) ug/L	01030
Cyanide (Total) mg/L	00720
Lead (Dissolved) ug/L	01049
Magnesium (Dissolved) mg/L	00925
Mercury (Dissolved) ug/L	71890
Nitrate (as Nitrogen, Dissolved) mg/L	00618
Sulfate (Dissolved) mg/L	00946
Total Dissolved Solids (TDS, 180°C; Dissolved) mg/L	70300
Zinc (Dissolved) ug/L	01090

NOTE:

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- i. All parameters with the "(Dissolved)" label to the right shall be determined using groundwater samples which have been filtered through a 0.45 micron filter. All other parameters shall be determined from unfiltered samples.
- ii. Maximum allowable predicted concentrations (MAPCs) and applicable groundwater quality standards (AGQS) are given in ug/L except as otherwise noted. Also, the monitoring results should be reported in ug/L units unless otherwise indicated.
- iii. List G1 and List G2 AGQS/MAPC values are included in Attachment 1.

LIST G2 (Groundwater - Semiannual)

<u>PARAMETERS</u> (ug/L)	<u>STORETS</u>
Acetone	81552
Acrylonitrile	34215
Benzene	34030
Bromobenzene	81555
Bromochloromethane (chlorobromomethane)	77297
Bromodichloromethane	32101
Bromoform (Tribromomethane)	32104
n-Butylbenzene	77342
sec-Butylbenzene	77350
tert-Butylbenzene	77353
Carbon Disulfide	77041
Carbon Tetrachloride	32102
Chlorobenzene	34301
Chloroethane (Ethyl Chloride)	34311
Chloroform (Trichloromethane)	32106
o-Chlorotoluene	77275
p-Chlorotoluene	77277
Dibromochloromethane	32105
1,2-Dibromo-3-Chloropropane	38760
1,2-Dibromoethane	77651
1,2-Dichlorobenzene	34536
1,3-Dichlorobenzene	34566
1,4-Dichlorobenzene	34571
trans-1,4-Dichloro-2-Butene	49263
Dichlorodifluoromethane	34668
1,1-Dichloroethane	34496
1,2-Dichloroethane	34531
1,1-Dichloroethylene	34501
cis-1,2-Dichloroethylene	77093

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LIST G2 (Groundwater - Semiannual) (cont.)

<u>PARAMETERS</u> (ug/L)	<u>STORETS</u>
trans-1,2-Dichloroethylene	34546
1,2-Dichloropropane	34541
1,3-Dichloropropane	77173
2,2-Dichloropropane	77170
1,1-Dichloropropene	77168
1,3-Dichloropropene	34561
cis-1,3-Dichloropropene	34704
trans-1,3-Dichloropropene	34699
Ethylbenzene	78113
Hexachlorobutadiene	39702
2-Hexanone (Methyl Butyl Ketone)	77103
Isopropylbenzene	77223
p-Isopropyltoluene	77356
Methyl Bromide (Bromomethane)	34413
Methyl Chloride (Chloromethane)	34418
Methylene Bromide (Dibromomethane)	77596
Dichloromethane	34423
Methyl Ethyl Ketone	81595
Methyl Iodide (Iodomethane)	77424
4-Methyl-2-Pentanone	78133
Naphthalene	34696
Oil (Hexane-Soluble) (mg/L)	00550
n-Propylbenzene	77224
Styrene	77128
1,1,1,2-Tetrachloroethane	77562
1,1,2,2-Tetrachloroethane	34516
Tetrachloroethylene	34475
Tetrahydrofuran	81607
Toluene	34010
Total Phenolics	32730
1,2,3-Trichlorobenzene	77613
1,2,4-Trichlorobenzene	34551
1,1,1-Trichloroethane	34506
1,1,2-Trichloroethane	34511
Trichloroethylene	39180
Trichlorofluoromethane	34488
1,2,3-Trichloropropane	77443
1,2,4-Trimethylbenzene	77222
1,3,5-Trimethylbenzene	77226

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LIST G2 (Groundwater - Semiannual) (cont.)

<u>PARAMETERS</u> (ug/L)	<u>STORETS</u>
Vinyl Acetate	77057
Vinyl Chloride	39175
Xylenes	81551

LIST G3 (Groundwater-Semiannual)

<u>PARAMETERS</u> (ug/L)	<u>STORETS</u>
Acenaphthene	34205
Acenaphthylene	34200
Anthracene	34220
Benzene	34030
Benzo(a)anthracene	34526
Benzo(a)pyrene	34247
Benzo(b)fluoranthene	34230
Benzo(ghi)perylene	34521
Benzo(k)fluoranthene	34242
Crysene	34320
Pentachlorophenol	39032
Dibenzo(a,h)anthracene	34556
Ethylbenzene	78113
Fluoranthene	34376
Indeno(1,2,3-cd)pyrene	34403
Naphthalene	34696
PCB-Total	39516
Phenanthrene	34461
Pyrene	34469
Toluene	34010
Xylenes-Total	81551

NOTE:

- i. All parameters with the "(Dissolved)" label to the right shall be determined using groundwater samples which have been filtered through a 0.45 micron filter. All other parameters shall be determined from unfiltered samples.

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- ii. Maximum allowable predicted concentrations (MAPCs) and applicable groundwater quality standards (AGQS) are given in ug/L except as otherwise noted. Also, the monitoring results should be reported in ug/L units unless otherwise indicated.
- iii. List G1 and List G2 AGQS/MAPC values are included in Attachment 1.
- 13. Pursuant to 35 Ill. Adm. Code, 811.319(a)(4)(A), any of the following events shall constitute an observed increase only if the concentrations of the constituents monitored can be measured at or above the practical quantitation limit (PQL):
 - a. The concentration of any constituent in List G1 of Condition VIII.12 shows a progressive increase over eight (8) consecutive quarters.
 - b. The concentration of any constituent monitored in accordance with List G1, List G2, or List G3 of Condition VIII.12 exceeds the MAPC at an established monitoring point within the zone of attenuation.
 - c. The concentration of any organic constituent in List G2 or List G3, monitored in accordance with Condition VIII.12 exceeds the preceding measured concentration at any established point.
 - d. The concentration of any constituent monitored at or beyond the edge of the zone of attenuation (compliance boundary) exceeds its AGQS, or pursuant to 811.320(d) any constituent monitored at an upgradient well, exceeds its AGQS.
- 14. For each round of sampling described in Condition 10 of this Section, the operator must determine if an observed increase has occurred within 90 days of the date initial sampling. If an observed increase is identified, the operator must also notify the Illinois EPA in writing and follow the confirmation procedures of 35 Ill. Adm. Code, 811.319(a)(4)(B). Furthermore, the operator must complete the confirmation procedures within 180 days of the initial sampling event.
- 15. Upon confirmation of a monitored increase and within 180 days of the initial sampling date, the operator shall submit a permit application for a significant modification to demonstrate an alternate source per 35 Ill. Adm. Code 811.319(a)(4)(b)(iii) or begin an assessment monitoring program in order to determine whether the solid waste disposal facility is the source of the contamination and to provide information needed to carry out a groundwater impact assessment in accordance with 35 Ill. Adm. Code 811.319(b).
- 16. In the event that an alternative source demonstration is denied, pursuant to 35 Ill. Adm. Code 813.105, the operator must commence sampling for the constituents listed in 35 Ill. Adm. Code 811.319(b)(5), and submit an assessment monitoring plan as a significant

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permit modification, both within 30 days after the dated notification of Agency denial. The operator must sample the well or wells that exhibited the confirmed increase.

In the event that assessment monitoring is required as a result of organic detections in the G52 well nest, well nest G53 shall be installed and monitored as part of the assessment.

Should the results of the assessment monitoring plan indicate impacts due to the facility, the requirements and timelines of 35 Ill. Adm. Code 811.324, 811.325 and 811.326 must be followed and address the entirety of the Uppermost Aquifer, which includes the Mahomet Aquifer.

17. The first quarterly statistical evaluations shall be performed on groundwater samples taken during the months of July – August, 2007 and the results submitted to the Illinois EPA by October 15, 2007.
18. The schedule for sample collection and submission of quarterly monitoring results is as follows:

<u>Sampling Quarter</u>	<u>Sampling Due</u>	<u>Report Due Date</u>
Jan-Feb (1st)	List G1	April 15
April-May (2nd)	List G, G1 and G2	July 15
July-Aug (3rd)	List G1	October 15
Oct-Nov (4th)	List G1 and G2	January 15

G – Well Depth

G1 - Routine Groundwater Parameters

G2 - Semiannual Groundwater Parameters

In addition, all wells installed for CWU1 and CWU2 (listed in Condition No. VIII.9) shall monitor List G3 for the 2nd and 4th quarter events.

19. Elevation of stick-up is to be surveyed and reported to the Illinois EPA:
 - a. When the well is installed (with the as-built diagrams),
 - b. Every two years thereafter, or
 - c. Whenever there is reason to believe that the elevation has changed.
20. Annually, the operator shall prepare an evaluation of the groundwater flow direction and the hydraulic gradients at the facility using the groundwater surface elevations (Storet

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#71993) determined for each monitoring event. This assessment shall be submitted with the monitoring results due on July 15.

21. All monitoring points shall be maintained in accordance with the approved permit application such that the required samples and measurements may be obtained.
22. Background concentrations which exhibit a statistically significant change shall be adjusted and updated in accordance with 35 Ill. Adm. Code 811.320(d)(2) and submitted to the Illinois EPA as a permit modification.
23. Information required by Conditions VIII.10 and VIII.18 must be submitted in an electronic format. The information is to be submitted, as fixed-width text files formatted as found at www.epa.state.il.us/land/waste-mgmt/groundwater-monitoring.html.
24. As proposed in Application Log No. 2005-070, wells screened within the Roxana Silt-Robein Member shall be installed at all proposed nested well locations. If any of the downgradient wells are able to be monitored, then upgradient wells shall be installed to monitor the Roxana Silt-Robein Member, and the operator shall submit an application for significant permit modification that contains contaminant transport modeling for this zone. If the Roxana Silt-Robein Member wells listed in Condition VIII.9 cannot be monitored, then the operator shall notify the Illinois EPA by submitting an application for significant permit modification.
25. The operator shall establish interwell values for magnesium(d), chromium(d), and any new organic parameters in the List G2 that do not already have an established PQL or MDL. Interwell values shall be established using (4) consecutive quarters of background data from 4th Quarter 2008 through 3rd Quarter 2009 employing the statistical methods found in Condition VIII.12 of this permit. The application shall include the historical groundwater data (laboratory data sheets) and the statistical calculations used to derive the new background values. The background values shall be submitted to the Illinois EPA in the form of a significant modification permit application no later than October 31, 2009.

An application to address this condition has been received by the Illinois EPA. The Illinois EPA decision date for application Log No. 2009-529 is January 31, 2010.

26. The operator shall investigate the extent of the Upper Radnor Till as described in the June 24, 2009 addendum to application Log No. 2008-054. At least 3 additional evenly spaced test pits or borings must be advanced along the southern edge of the CWU floor. The results of the investigation must be submitted as an application for significant modification no later than June 1, 2010.

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27. If the investigation required by VIII.26 determines that the Upper Radnor Till exists along the southern edge of the CWU floor, the operator shall propose adding groundwater monitoring wells in the Upper Radnor Sand. The proposal, justified by well-spacing modeling results shall be submitted to the Illinois EPA as an application for significant modification no later than June 1, 2010. The application shall include a map showing the extent of the Upper Radnor Till, a discussion of modeling input and output, provide a copy of the model input and output, and provide a new map of the groundwater monitoring plan.

IX. LANDFILL GAS MANAGEMENT/MONITORING

1. The landfill gas monitoring plan described in Application Log No. 2005-070 is approved. Monitoring devices shall be put into service in accordance with the following schedule:
 - a. The gas monitoring probes within the waste boundary shall be installed and put into service within ninety days after final cover has been applied to the various areas where they are located.
 - b. Monitoring devices outside the waste boundary shall be put into service when waste has been disposed in the landfill near that monitoring location.
 - c. Monitoring devices within buildings shall be put into service when waste disposal begins and the building has been constructed.
 - d. Ambient air monitoring devices shall be put into service downwind of the disposal unit after initial receipt of waste.
 - e. Documentation that all the gas monitoring probes outside the waste boundary and the methane monitoring devices within the on-site buildings and ambient air monitoring devices have been installed shall be included with the application for a significant modification requesting authorization to place waste upon new liner.
2. The gas monitoring probes both inside and outside the waste boundary shall be monitored for the following parameters:
 - a. Methane;
 - b. Pressure;
 - c. Nitrogen*;
 - d. Oxygen; and
 - e. Carbon Dioxide

*NOTE: For routine monitoring, Nitrogen may be reported as the net remaining volume fraction after the other measured constituents have been accounted for.

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3. The ambient air monitoring devices described in the Application Log No. 2005-070 shall be used to test the air downwind of the landfill for methane.
4. All buildings within the facility boundaries shall be monitored continuously for methane.
5. Gas monitoring shall continue for at least 30 years after closure and may be discontinued only after the conditions described in 35 Ill. Adm. Code, Section 811.310(c)(4) have been achieved.
6. Sampling and testing of the gas monitoring probes and ambient air monitoring shall be performed at least monthly throughout the remaining operating life and during the first five years after closure of the waste disposal unit. During the remainder of the post-closure care period, monitoring may be reduced to quarterly.
7. In the event of any of the occurrences listed below, the operator shall: within two business days, notify the Illinois EPA in writing of an observed exceedance; implement the requirements of 35 Ill. Adm. Code 811.311 to ensure the protection of human health; and within 180 days of the occurrence, submit to the Illinois EPA an application for a significant modification either proposing a gas collection/management system or demonstrating that the facility is not the cause of the occurrence.
 - a. A methane concentration greater than 50 percent of the lower explosive limit in air is detected in any of the below ground monitoring devices outside the waste boundary;
 - b. A methane concentration greater than 50 percent of the lower explosive limit in air is detected during ambient air monitoring;
 - c. A methane concentration greater than 25 percent of the lower explosive limit in air is detected in any building on or near the facility; or
 - d. Malodors attributed to the unit are detected beyond the property boundary.
8. The gas probes shall be inspected at least monthly for structural integrity and proper operation.
9. The results from gas monitoring for each calendar year shall be submitted to the Illinois EPA in the annual report required by 35 Ill. Adm. Code, Section 813.504.
10. At the end of the post-closure care period, the gas monitoring probes shall be decommissioned. The probes outside the waste boundary shall be decommissioned using the method described in the enclosed Illinois EPA monitoring well plugging procedure guidance. In decommissioning the probes within the waste disposal unit, the pipes shall be cut off at least two (2) feet below the low permeability layer and plugged. Then the

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low permeability layer, the protective layer and the vegetation shall be restored in the excavated areas.

11. The development of the landfill gas collection and disposal system as proposed in application Log No. 2005-070 and as revised in application Log No. 2008-054 is hereby approved. Upon completion of each phase of the landfill gas collection and disposal system the operator:
 - a. May temporarily operate the subject phase of the landfill gas collection and disposal system for a period not exceeding 180-days as a part of a "shakedown period". The temporary operation shall not be in violation of Condition No. V.2 of this permit and/or any condition included in the permit issued by the Illinois EPA's Bureau of Air; and
 - b. Shall submit an acceptance report to the Illinois EPA pursuant to the requirements of 35 Ill. Adm. Code, Sections 811.505(d) and 813.203. The acceptance report shall be submitted in the form of a permit application for significant modification and shall demonstrate that the construction of the subject phase of the landfill gas collection and disposal system has been completed in accordance with the approved designs. The permit application shall be submitted within 45-days of the commencement of the temporary operation referenced in item (a) above.
 12. Modification No. 9 approved revision to the gas management system to exclude gas collection from within the CWU. However, if any of the conditions listed in 35 Ill. Adm. Code 811.311(a) are attributable to CWU, the operator shall notify the Illinois EPA in accordance with 35 Ill. Adm. Code 811.311(b) and submit a significant modification meeting the requirements of 35 Ill. Adm. Code 811.311(d) within 180 days of the occurrence.
- X. CLOSURE/POST CLOSURE CARE AND FINANCIAL ASSURANCE
1. The facility shall be closed in accordance with the closure plan in Application Log No. 2008-054. The closure plan includes a plan for temporary suspension of waste acceptance. Upon completion of closure activities, the operator shall notify the Illinois EPA that the site has been closed in accordance with the approved closure plan utilizing the Illinois EPA's "Affidavit for Certification of Closure of Solid Waste Landfills permitted under 35 Ill. Adm. Code Parts 813 and 814".
 2. Inspections of the closed landfill shall be conducted in accordance with the approved post-closure care plan in Application Log No. 2008-054. Records of field investigations, inspections, sampling and corrective action taken are to be maintained at the site and made available to Illinois EPA personnel. During the post-closure care period, these records are to be maintained at the office of the site operator.

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3. If necessary, the soil over the entire planting area shall be amended with lime, fertilizer and/or organic matter. On side slopes, mulch or some other form of stabilizing material is to be provided to hold seed in place and conserve moisture.
4. The minimum post-closure care period for this municipal solid waste landfill (MSWLF) is thirty years. When the post-closure care period has been completed, the operator shall notify the Illinois EPA utilizing the Illinois EPA's LPC-PA1 application form, entitled "General Application for Permit".
5. The owner or operator shall provide financial assurance for closure and post-closure care pursuant to 35 Ill. Adm. Code, Section 811.700(b). Financial assurance shall be required only for those areas for which authorization to operate has been obtained or is being requested.
6. The total cost estimate for closure and post-closure care of the MSW Unit approved by Modification No. 7 is \$1,776,674.00. The total cost estimate includes \$630,794.00 for premature closure and \$1,145,880.00 for post-closure care. Cost estimates approved in Modification No. 7 account for closure and post-closure care of Phase 1A of the MSW Unit covering an area of approximately 6.65 acres.

The total cost estimate for premature closure of the CWU, at the end of the current permit term, is \$2,871,838.00. The total cost estimates include \$1,019,383.00 for premature closure and \$1,852,455.00 for post-closure care. These cost estimates account for the closure and post-closure care of CWU Cell CWU1 covering an area of approximately 10.83 acres. (Modification No. 9)

The total cost estimate for the entire facility (MSW Unit and CWU) at the end of the intended operating life is \$11,931,943.00. The total cost estimates include \$5,181,473.00 for closure, \$121,194.00 for closure of Rail Off-Loading Facility, \$51,935.00 for closure of Waste Processing Facility and \$6,577,341.00 for post-closure care. (Modification No. 9)

7. The owner or operator shall increase the total amount of financial assurance so as to equal the current cost estimate within 90 days of an increase in the current cost estimate in accordance with 35 Ill. Adm. Code, Section 811.701(b) and Condition No. X.5 of this permit.
8. The owner or operator shall adjust the cost estimates for closure, post-closure, and corrective action for inflation on an annual basis during the following time periods:
 - a. The active life of the unit for the closure cost;
 - b. The active life and post-closure care period for the post-closure cost; and

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- c. Until any corrective action program is completed in accordance with 35 Ill. Adm. Code Section 811.326, for the cost of corrective action.

Each year, no later than June 1 of that year, the owner or operator shall submit a revised cost estimate in the form of a permit application for significant modification. This application shall provide an update to the cost estimate or a certification that there are no changes to the current cost estimates.

XI. RAIL OFF-LOADING FACILITY

1. The Rail Off-Loading Facility shall be constructed, operated and maintained in accordance with the designs, plans and specifications provided in application Log No. 2007-459 and approved in Modification No. 2.
2. The Rail Off-Loading Facility shall be located within the Clinton Landfill 3 facility boundaries as shown on Drawing P-ROF1 submitted in the original application Log No. 2007-459 and approved in Modification No. 2.
3. The Rail Off-Loading Facility consists of a Gondola Car Off-Loading Area and an Intermodal Container Off-Loading Area.
4. The Gondola Car Off-Loading Area includes an overhead structure under which gondola cars will be off-loaded and an elevated platform to support equipment that will transfer wastes from the gondola cars to dump trucks. Litter screening as shown on Drawings P-ROF4 and P-ROF5, provided in application Log No. 2007-459, addendum dated February 11, 2008, shall be installed around the Gondola Car Off-Loading Area.
5. Gondola cars shall be off-loaded only within the Gondola Car Off-Loading Area.
6. The Gondola Car Off-Loading Area and the area around it shall be cleared of litter daily. The operator shall make an effort to prevent litter from leaving the gondola car off-loading building.
7. No more than four (4) gondola cars shall remain inside the Gondola Car Off-Loading Area at the end of each working day. Gondola cars that contain waste at the end of each working day shall be securely covered to control potential odors. Wastes shall be removed from each gondola car no later than the business day following receipt. If required odor control measures described in the Operating Plan received in the February 11, 2008 addendum to application Log No. 2007-459 shall be implemented.
8. A stable working surface shall be provided for the waste off-loading equipment as well as for the trucks used to transfer waste from the Rail Off-Loading Facility to the active face. The surficial gravel within the Gondola Car Off-Loading Area shall be inspected at least

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once every week. If required, the surficial gravel shall be removed and replaced with clean gravel to prevent tracking of residues out of the Gondola Car Off-Loading Area.

9. Intermodal containers shall be removed from railcars and transported to the landfill active face. Intermodal containers that cannot be emptied by the end of the operating day shall remain sealed and stored at the Intermodal Container Off-Loading Area or near the active face of Clinton Landfill 3 within the permitted waste boundary until the next working day. No more than eight (8) intermodal containers shall be stored overnight.
10. All wastes received at the Rail Off-Loading Facility (except for un-authorized wastes mentioned in Condition No. II.10) shall be disposed at Clinton Landfill 3.
11. All unauthorized waste received at the Rail Off-Loading Facility shall be managed in accordance with Condition No. II.10 of this permit.
12. Upon completion of construction of the Rail Off-Loading Facility, the operator shall:
 - a. Provide an acceptance report pursuant to 35 Ill. Adm. Code 811.505(d) on its construction to the Illinois EPA's Champaign Regional Office. Upon receipt of notification, the inspector shall be allowed fifteen working days to examine the construction. The Illinois EPA is not obligated to approve the construction or certification. The operator may start receiving waste at the Rail Off-Loading Facility if, having complied with the conditions of this section, the designs submitted in application Log No. 2007-459 and Condition No. II.1 of this permit, the operator is not informed of a problem by the Illinois EPA or its agents; and
 - b. At the same time Illinois EPA's Champaign Regional Office is given notification that the construction of the Rail Off-Loading Facility has been completed, the Permit Section shall be provided with the information required in acceptance report pursuant to 35 Ill. Adm. Code 811.505(d) on its construction.
13. The Rail Off-Loading Facility shall be closed prior to, or concurrently with Clinton Landfill 3 final closure.
14. The Rail Off-Loading Facility shall be closed in accordance with the closure plan provided in application Log No. 2008-054. A certification report documenting closure of the Rail Off-Loading Facility shall be submitted to the Illinois EPA in the form of an application for Significant Modification within 90-days of completion of closure.
15. Wastes shall be received at the Rail Off-Loading Facility only during the landfill operating hours specified in Condition No. II.11 of this permit.

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16. Transportation of waste from the Rail Off-Loading Facility to the Clinton Landfill 3 active face shall occur on roads that are within the Clinton Landfill 3 facility boundaries.
17. Except as provided in Condition Nos. XI. 7 and XI. 9, no waste shall remain at the Rail Off-Loading Facility when the said facility is not operating.
18. All the relevant conditions of Section II of this permit, including but not limited to control of dust, litter, odor and vectors shall be complied with during the operation of the Rail Off-Loading Facility.

XII. MANAGEMENT OF EXCESSIVELY DUSTY WASTES

1. The conditions of this section apply to the management of excessively dusty wastes within a purpose built structure referred to as Waste Processing Facility.
2. The Waste Processing Facility shall be constructed, operated and maintained in accordance with the design, plans and specifications provided in application Log No. 2007-509 and approved in Modification No. 3.
3. The Waste Processing Facility shall be located within the waste boundaries of Clinton Landfill 3 and shall be used to process excessively dusty wastes prior disposal in Clinton Landfill 3, MSW Unit.
4. Waste Processing Facility shall not be used to manage wastes destined for disposal in CWU.
5. The Waste Processing Facility shall be of stressed membrane, metal frame construction as described in application Log No. 2007-509. The liner and leachate collection system in the Waste Processing Cell within the Waste Processing Facility shall consist of the following:
 - 3-foot thick compacted clay liner with permeability no greater than 1×10^{-7} cm/sec;
 - 60-mil textured HDPE liner;
 - 1-foot thick sand drainage layer with a permeability no less than 3×10^{-2} cm/sec;
 - 8 ounce per square yard non-woven geotextile; and
 - 6-inch thick random fill
6. The operator shall make an effort to prevent litter from leaving the Waste Processing Cell. The Waste Processing Facility and area around it shall be cleaned of litter every day.

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7. A stable working surface shall be provided for trucks and mechanical mixing equipment accessing the Waste Processing Facility. The surficial aggregate within the Waste Processing Facility shall be inspected at least once every week. If required, the surficial aggregate shall be replaced with clean aggregate to prevent tracking of residues to areas outside of the Waste Processing Facility.
8. Except as allowed in Condition No. XII.9, only clean water shall be used to moisture condition the excessively dusty waste. This process shall be carried out in the Waste Processing Cell within the Waste Processing Facility using mechanical equipment to blend wastes and water together.
9. All liquids draining from the conditioning of dusty wastes shall be collected in the Liquid Collection Sump and managed as leachate. These liquids may be re-used to moisture condition subsequent batches of dusty wastes.
10. All wastes received at the Waste Processing Facility (except for unauthorized wastes mentioned in Condition No. II.10) shall be disposed at Clinton Landfill 3, MSW Unit.
11. All unauthorized wastes received at the Waste Processing Facility shall be managed in accordance with Condition No. II.10 of this permit.
12. Upon completion of construction of the Waste Processing Facility, the operator shall submit an acceptance report, pursuant to 35 Ill. Adm. Code 811.505(d), to the Illinois EPA. The acceptance report shall be submitted in the form an application for significant modification and shall demonstrate that the construction has been completed in accordance with the approved designs. The Waste Processing Facility shall be placed in service only after approval has been obtained from the Illinois EPA.
13. As noted in application Log No. 2007-509, the Waste Processing Facility is intended to be portable in that it can be located anywhere within the permitted Clinton Landfill 3 waste boundary. The operator shall comply with the requirements of Condition No. XII.12 of this permit every time the Waste Processing Facility is relocated. Additionally, information about management of wastes and waste residues at the prior location of the Waste Processing Facility has to be provided as well.
14. The Waste Processing Facility shall be closed prior to or concurrently with the Clinton Landfill 3 final closure.
15. The Waste Processing Facility shall be closed in accordance with the closure plan provided in application Log No. 2008-054. A certification report documenting the closure of the Waste Processing Facility shall be submitted to the Illinois EPA in the form of an application for Significant Modification within 90-days of completion of closure.

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16. Wastes shall be received at the Waste Processing Facility only during the landfill operating hours specified in Condition No. II.11 of this permit.
17. No liquid wastes shall be received at the Waste Processing Facility.
18. The construction of the Waste Processing Facility approved in this permit does not relieve the permittee to file reports and/or obtain applicable permit(s) from the Illinois EPA's Bureau of Air. Furthermore, the operation of the Waste Processing Facility shall not violate any conditions included in the permit(s) issued by the Illinois EPA's Bureau of Air.
19. The Waste Processing Facility and surrounding area shall be inspected each day during which wastes are processed or otherwise contained within the building. The integrity of the following features shall be inspected to ensure that they remain functional:
 - Waste Processing Cell, including unloading pad and leachate collection system;
 - Leachate storage tanks;
 - Waste Processing Facility roof and sidewalls; and
 - Surface water controls.
20. The operator shall make an effort to process dusty wastes delivered to the Waste Processing Facility prior to the end of the operating day. However, in no case shall the unprocessed waste be stored for more than 72 hours prior to disposal. The maximum volume of waste in storage at any time shall not exceed 120 cubic yards.
21. All relevant conditions of Section II of this permit, including but not limited to control of dust, litter, odor and vectors shall be complied with during the operation of the Waste Processing Facility.

XIII. REPORTING REQUIREMENTS

1. Within ninety (90) days of issuance of this permit (Modification No. 9), the operator shall submit to the Illinois EPA one map of the facility with a scale no smaller than one (1) inch equals 200 feet. This map shall show:
 - a. The facility boundaries;
 - b. The permitted waste boundaries of the unit;
 - c. All on-site buildings; and
 - d. All groundwater, leachate and gas monitoring points for the unit.

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Each monitoring point shall be labeled on the map with its Illinois EPA designation. The designations provided in this permit by the Illinois EPA shall be used for the leachate and groundwater monitoring points. The gas monitoring points shall be labeled using a logical nomenclature developed by the operator or the consultant.

2. The annual certification shall be submitted to the Illinois EPA during operation and for the entire post-closure monitoring period, pursuant to 35 Ill. Adm. Code 813.501. The certification shall be signed by the operator or duly authorized agent, shall be filed each year by May 1 of the following year, and shall state:
 - a. All records required to be submitted to the Illinois EPA pursuant to 35 Ill. Adm. Code 858.207 and 858.308 have been timely and accurately submitted; and
 - b. All applicable fees required by the Act have been paid in full.
3. The annual report for each calendar year shall be submitted to the Illinois EPA by May 1 of the following year pursuant to 35 Ill. Adm. Code 813.504. The annual report shall include:
 - a. Information relating to monitoring data from the leachate collection system, groundwater monitoring network, gas monitoring system and any other monitoring data specified in this permit, including:
 - i. Summary of monitoring data for the calendar year;
 - ii. Dates of submittal of comprehensive monitoring data to the Illinois EPA during the calendar year;
 - iii. Statistical summaries and analysis of trends;
 - iv. Changes to the monitoring program; and
 - v. Discussion of error analysis, detection limits and observed trends.
 - b. Proposed activities including:
 - i. Amount of waste expected in the next year;
 - ii. Structures to be built within the next year; and
 - iii. New monitoring stations to be installed within the next year.

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- c. Any modification or significant modification affecting operation of the facility;
and
 - d. The signature of the operator or duly authorized agent as specified in 35 Ill. Adm. Code 815.102.
4. The permittee shall submit a completed "Solid Waste Landfill Groundwater, Leachate, Facility and Gas Reporting Form" (LPC 591) as a cover sheet for any notices or reports required by the facility's permit for identification purposes. One copy of the LPC 591 form must accompany each report; however, except for electronically formatted data, the permittee must submit one (1) original and a minimum of two (2) copies of each report you submit to the Illinois EPA. The form is not to be used for applications for supplemental permit or significant modification.
5. All certifications, logs, reports, plan sheets and groundwater and leachate monitoring data, required to be submitted to the Illinois EPA by the permittee shall be mailed to the following address:

Illinois Environmental Protection Agency
Permit Section
Bureau of Land -- #33
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

Except for electronic groundwater and leachate monitoring data, the operator shall provide the Illinois EPA with the original and two (2) copies of all certifications, logs, reports and plan sheets required by this permit.

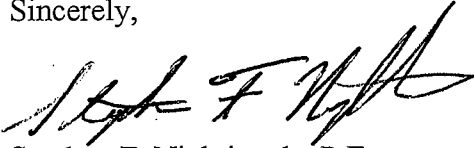
Within 35 days of the date of mailing of the Illinois EPA's final decision, the applicant may petition for a hearing before the Illinois Pollution Control Board to contest the decision of the Illinois EPA, however, the 35-day period for petitioning for a hearing may be extended for a period of time not to exceed ninety days by written notice provided to the Board from the applicant and the Illinois EPA within the 35-day initial appeal period.

Work required by this permit, your application or the regulations may also be subject to other laws governing professional services, such as the Illinois Professional Land Surveyor Act of 1989, the Professional Engineering Practice Act of 1989, the Professional Geologist Licensing Act, and the Structural Engineering Licensing Act of 1989. This permit does not relieve anyone from compliance with these laws and the regulations adopted pursuant to these laws. All work that falls within the scope and definitions of these laws must be performed in compliance with

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them. The Illinois EPA may refer any discovered violation of these laws to the appropriate regulating authority.

Sincerely,



Stephen F. Nightingale, P.E.
Manager, Permit Section
Bureau of Land

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CJL gt

Attachments: Standard Conditions
AGQS/MAPC Interwell Values for Each Monitored Unit

cc: George L. Armstrong, P.E., PDC Technical Services, Inc.
Jesse Varsho, P.E.,/Devin A. Moose, P.E., Shaw Environmental, Inc.

STANDARD CONDITIONS FOR CONSTRUCTION/DEVELOPMENT PERMITS
ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
BUREAU OF LAND

August 22, 2001

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) grants the Environmental Protection Agency authority to impose conditions on permits which it issues.

These standard conditions shall apply to all permits which the Agency issues for construction or development projects which require permits under the Bureau of Land. Special conditions may also be imposed in addition to these standard conditions.

1. Unless this permit has been extended or it has been voided by a newly issued permit, this permit will expire two years after date of issuance unless construction or development on this project has started on or prior to that date.
2. The construction or development of facilities covered by this permit shall be done in compliance with applicable provisions of Federal laws and regulations, the Illinois Environmental Protection Act, and Rules and Regulations adopted by the Illinois Pollution Control Board.
3. There shall be no deviations from the approved plans and specifications unless a written request for modification of the project, along with plans and specifications as required, shall have been submitted to the Agency and a supplemental written permit issued.
4. The permittee shall allow any agent duly authorized by the Agency upon the presentation of credentials:
 - a. to enter at reasonable times the permittee's premises where actual or potential effluent, emissions or noise sources are located or where any activity is to be conducted pursuant to this permit.
 - b. to have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit.
 - c. to inspect at reasonable times, including during any hours of operation of equipment constructed or operated under this permit, such equipment or monitoring methodology or equipment required to be kept, used, operated, calibrated and maintained under this permit.
 - d. to obtain and remove at reasonable times samples of any discharge or emission of pollutants.

- e. to enter at reasonable times and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring, or recording any activity, discharge, or emission authorized by this permit.
5. The issuance of this permit:
- a. shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are to be located;
 - b. does not release the permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the proposed facilities;
 - c. does not release the permittee from compliance with other applicable statutes and regulations of the United States, of the State of Illinois, or with applicable local laws, ordinances and regulations;
 - d. does not take into consideration or attest to the structural stability of any units or parts of the project;
 - e. in no manner implies or suggests that the Agency (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.
6. Unless a joint construction/operation permit has been issued, a permit for operating shall be obtained from the Agency before the facility or equipment covered by this permit is placed into operation.
7. These standard conditions shall prevail unless modified by special conditions.
8. The Agency may file a complaint with the Board for modification, suspension or revocation of a permit:
- a. upon discovery that the permit application contained misrepresentations, misinformation or false statements or that all relevant facts were not disclosed; or
 - b. upon finding that any standard or special conditions have been violated; or
 - c. upon any violation of the Environmental Protection Act or any Rule or Regulation effective thereunder as a result of the construction or development authorized by this permit.

SFN\STANDARD CONDITIONS

Attachment 1

AGQS/MAPC Interwell Values for Each Monitored Unit

<u>FIELD PARAMETERS</u>	<u>STORETS</u>	<u>Upper Radnor</u>	<u>Lower Radnor</u>	<u>Organic Soil</u>	<u>Roxana Silt-Robein</u>
pH	00400	6.24-7.75	6.09-7.51	6.32-7.48	
Specific Conductance	00094	1108.7	967.4	1199.2	
Temperature of Water Sample(° F)	00011	----	----	----	----
Depth to Water (ft. below land surface)	72019	----	----	----	----
Depth to Water(ft. below meas. point)	72109	----	----	----	----
Elev. of Meas. Pt.(Top of casing ft. MSL)	72110	----	----	----	----
Elev. of Groundwater Surface(ft. MSL)	71993	----	----	----	----
Elev. of Bottom of Well (ft. MSL)	72020	----	----	----	----

<u>INDICATOR PARAMETERS</u>	<u>STORETS</u>	<u>Upper Radnor</u>	<u>Lower Radnor</u>	<u>Organic Soil</u>	<u>Roxana Silt-Robein</u>
Ammonia (as N; Dissolved) mg/L	00608	23.5	16.8	17.0	
Arsenic (Dissolved) ug/L	01000	125.4	104.3	107.3	
Boron (Dissolved) ug/L	01020	575.5	729.0	564.1	
Cadmium (Dissolved) ug/L	01025	1.0	1.0	1.0	
Chloride (Dissolved) mg/L	00941	8.5	5.9	17.23	
Cyanide (Total) mg/L	00720	0.005	0.005	0.005	
Iron (Dissolved) ug/L	01046	8278	7600.0	12759.2	
Lead (Dissolved) ug/L	01049	1.0	1.0	2.5	
Manganese (Dissolved) ug/L	01056	241.4	105.9	272.9	
Mercury (Dissolved) ug/L	71890	0.2	0.2	0.20	
Nitrate (as N, Dissolved) mg/L	00618	0.02	0.031	0.5	
Phenols (Total Recoverable) ug/L	32730	5	5	5	
Sulfate (Dissolved) mg/L	00946	8.4	9.7	22.0	
TDS (180°C; Dissolved) mg/L	70300	692.7	643.3	875.1	
TOC (Total) mg/L	00680	11.0	14.2	46.0	
Zinc (Dissolved) ug/L	01090	36.52	15.0	49.32	

<u>PARAMETERS (ug/L)</u>	<u>STORETS</u>	<u>Upper Radnor</u>	<u>Lower Radnor</u>	<u>Organic Soil</u>	<u>Roxana Silt-Robein</u>
<u>UNFILTERED (totals)</u>					
Acenaphthene	34205	2.0	2.0	2.0	
Acenaphthylene	34200	2.0	2.0	2.0	
Acetone	81552	10.0	10.0	10.0	
Acrolein	34210	50.0	50.0	50.0	
Acrylonitrile	34215	50.0	50.0	50.0	
# Alachlor	77825	0.4	0.4	0.4	
# Aldicarb	39053	0.4	0.4	0.4	
@ Aldrin	39330	0.05	0.05	0.05	
Aluminum	01105	454.413	220069	178253	
Ammonia (as N) (mg/L)	00610	22.0	17.0	18.0	
Anthracene	34220	2.0	2.0	2.0	
# Antimony	01097	3.0	3.0	3.0	
# Arsenic	01002	598.4	128.7	113.4	
Aroclor 1016	79683	0.5	0.5	0.5	
Aroclor 1221	79684	0.5	0.5	0.5	
Aroclor 1232	79685	0.5	0.5	0.5	
Aroclor 1242	79686	0.5	0.5	0.5	
Aroclor 1248	79687	0.5	0.5	0.5	
Aroclor 1254	79688	0.5	0.5	0.5	
Aroclor 1260	79689	0.5	0.5	0.5	
# Atrazine	39033	0.2	0.2	0.2	

Clinton Landfill #3

1

Site No. 0390055036

Log No. 2005-070

*****PCB 2013-022*****

PARAMETERS (ug/L)	STORETS	Upper Radnor	Lower Radnor	Organic Soil	Roxana Silt-Robein
<u>UNFILTERED (totals)</u>					
# Barium	01007	2203.2	1050	541.1	
# Benzene	34030	1.0	1.0	1.0	
Benzo(a)anthracene	34526	0.13	0.13	0.13	
# Benzo(a)Pyrene	34247	0.2	0.2	0.2	
Benzo(b)fluoranthene	34230	0.18	0.18	0.18	
Benzo(ghi)perylene	34521	0.2	0.2	0.2	
Benzo(k)fluoranthene	34242	0.2	0.2	0.2	
# Beryllium	01012	27.0	15.5	2.6	
BOD (mg/L)	00310	67.0	42.6	45.4	
# Boron	01022	1198.7	736.2	564.1	
*Bromobenzene	81555	1.0	1.0	1.0	
*Bromochloromethane	77297	1.0	1.0	1.0	
*Bromodichloromethane	32101	1.0	1.0	1.0	
*Bromoform	32104	1.0	1.0	1.0	
*Bromomethane	34413	2.0	2.0	2.0	
*n-Butylbenzene	77342	1.0	1.0	1.0	
*sec-Butylbenzene	77350	1.0	1.0	1.0	
*tert-Butylbenzene	77353	1.0	1.0	1.0	
# Cadmium	01027	1.0	1.3	1.0	
Calcium (mg/L)	00916	1516.3	774.1	256.3	
# Carbofuran	81405	1.5	1.5	1.5	
Carbon Disulfide	77041	4.0	8.0	26.0	
# Carbon Tetrachloride	32102	1.0	1.0	1.0	
COD (mg/L)	00335	7.0	36.3	109.5	
# Chlordane	39350	0.5	0.5	0.5	
# Chloride (mg/L)	00940	7.8	5.7	13.0	
##*Chlorobenzene	34301	1.0	1.0	1.0	
*Chloroethane	34311	2.0	2.0	2.0	
*Chloroform	32106	1.0	1.0	1.0	
*Chloromethane	34418	2.0	2.0	2.0	
*o-Chlorotoluene	77275	1.0	1.0	1.0	
*p-Chlorotoluene	77277	1.0	1.0	1.0	
# Chromium	01034	810.2	508.9	345.8	
Chrysene	34320	0.2	0.2	0.2	
*Chlorodibromomethane	32105	1.0	1.0	1.0	
# Cobalt	01037	330.6	158.3	26.0	
# Copper	01042	959.3	324.9	351.1	
p-Cresol	77146	10.0	10.0	10.0	
# Cyanide (mg/L)	00720	0.005	0.005	0.005	
# Dalapon	38432	1.5	1.5	1.5	
@ DDT	39370	0.1	0.1	0.1	
Dibenzo(a,h)anthracene	34556	2.0	2.0	2.0	
*Dibromomethane	77596	1.0	1.0	1.0	
*m-Dichlorobenzene	34566	1.0	1.0	1.0	
##*o-Dichlorobenzene	34536	1.0	1.0	1.0	
# p-Dichlorobenzene	34571	1.0	1.0	1.0	
*Dichlorodifluoromethane	34668	2.0	2.0	2.0	
##*Dichloromethane	34423	7.0	7.0	7.0	
@ Dieldrin	39380	0.1	0.1	0.1	
Diethyl Phthalate	34336	10.0	10.0	10.0	
Dimethyl Phthlate	34341	10.0	10.0	10.0	
Di-N-Butyl Phthlate	39110	10.0	10.0	10.0	
# Dinoseb (DNBP)	81287	0.2	0.2	0.2	
# Endothall	38926	40.0	40.0	40.0	
# Endrin	39390	0.1	0.1	0.1	

Clinton Landfill #3

2

Site No. 0390055036

Log No. 2005-070

PARAMETERS (ug/L)	STORETS	Upper Radnor	Lower Radnor	Organic Soil	Roxana Silt-Robein
<u>UNFILTERED (totals)</u>					
# Di(2-Ethylhexyl)Phthalate	39100	22.0	7.6	7.4	
#*Ethylbenzene	78113	1.0	1.0	1.0	
#*Ethylene Dibromide (EDB)	77651	0.05	0.05	0.05	
Fluoranthene	34376	0.2	0.2	0.2	
# Fluoride (mg/L)	00951	0.80	0.60	0.58	
# Heptachlor	39410	0.05	0.05	0.05	
# Heptachlor Epoxide	39420	0.05	0.05	0.05	
*Hexachlorobutadiene	39702	10.0	10.0	10.0	
# Hexachlorocyclopentadiene	34386	10.0	10.0	10.0	
Ieno(1,2,3-cd)pyrene	34403	2.0	2.0	2.0	
Iodomethane	77424	1.0	1.0	1.0	
# Iron	01045	825948	475695	110816	
Isophorone	34408	10.0	10.0	10.0	
*Isopropylbenzene	77223	1.0	1.0	1.0	
*p-Isopropyltoluene	77356	1.0	1.0	1.0	
# Lead	01051	910.6	309.7	46.0	
# Lindane	39782	0.05	0.05	0.05	
Magnesium (mg/L)	00927	706.6	1300	125.7	
# Manganese	01055	13939.0	7858	2013	
# Mercury	71900	0.2	0.2	0.2	
# Methoxychlor	39480	0.5	0.5	0.5	
*Naphthalene	34696	10.0	10.0	10.0	
# Nickel	01067	885.6	1400	284	
# Nitrate-Nitrogen (mg/L)	00620	0.02	0.02	0.4	
@ Oil(Hexane-Soluble) (mg/L)	00550	5.0	25.0	19.0	
@ Parathion	39540	0.2	0.2	0.2	
# Pentachlorophenol	39032	0.05	0.05	0.05	
# pH	00400	6.24-7.75	6.09-7.51	6.32-7.48	
Phenanthrene	34461	2.0	2.0	2.0	
# Phenols	32730	0.005	0.005	0.005	
# Picloram	39720	0.2	0.2	0.2	
# Polychlorinated Biphenyls	39516	0.5	0.5	0.5	
Potassium (mg/L)	00937	141.7	2300.0	19.8	
*n-Propylbenzene	77224	1.0	1.0	1.0	
Pyrene	34469	0.2	0.2	0.2	
# Selenium	01147	17.9	10.8	2.2	
# Silver	01077	5.0	5.0	5.0	
# Simazine	39055	0.2	0.2	0.2	
Sodium (mg/L)	00929	25.0	7700.0	61.7	
#*Styrene	77128	1.0	1.0	1.0	
# Sulfate (mg/L)	00945	6.4	6.5	38.2	
TOC (mg/L)	00680	11.0	14.2	46.0	
#*Tetrachloroethylene	34475	1.0	1.0	1.0	
Tetrahydrofuran	81607	20.0	20.0	20.0	
# Thallium	01059	1.7	2.5	1.0	
#*Toluene	34010	1.0	1.0	1.0	
# Toxaphene	39400	1.5	1.5	1.5	
# Trichloroethylene	39180	1.0	1.0	1.0	
*Trichlorofluoromethane	34488	1.0	1.0	1.0	
Vanadium	01087	1196.74	486.4	75.0	
# Vinyl Chloride	39175	2.0	2.0	2.0	
Vinyl Acetate	77057	5.0	5.0	5.0	
# Xylenes	81551	3.0	3.0	3.0	
*m,p-Xylene	85795	1.0	1.0	1.0	
*o-Xylene	77135	1.0	1.0	1.0	

PARAMETERS (ug/L)	STORETS	Upper Radnor	Lower Radnor	Organic Soil	Roxana Silt-Robein
<u>UNFILTERED</u> (totals)					
# Zinc	01092	1808.2	1100	188.7	
*1,1,1,2-Tetrachloroethane	77562	1.0	1.0	1.0	
# 1,1,1-Trichloroethane	34506	1.0	1.0	1.0	
*1,1,2,2-Tetrachloroethane	34516	1.0	1.0	1.0	
##1,1,2-Trichloroethane	34511	1.0	1.0	1.0	
*1,1-Dichloroethane	34496	1.0	1.0	1.0	
# 1,1-Dichloroethylene	34501	1.0	1.0	1.0	
*1,1-Dichloropropene	77168	1.0	1.0	1.0	
*1,2,3-Trichlorobenzene	77613	1.0	1.0	1.0	
*1,2,3-Trichloropropane	77443	1.0	1.0	1.0	
##1,2,4-Trichlorobenzene	34551	1.0	1.0	1.0	
*1,2,4-Trimethylbenzene	77222	1.0	1.0	1.0	
##1,2-Dibromo-3-Chloropropane	38760	0.05	0.05	0.05	
##cis-1,2-Dichloroethylene	77093	1.0	1.0	1.0	
##trans-1,2-Dichloroethylene	34546	1.0	1.0	1.0	
# 1,2-Dichloroethane	34531	1.0	1.0	1.0	
##1,2-Dichloropropane	34541	1.0	1.0	1.0	
*1,3,5-Trimethylbenzene	77226	1.0	1.0	1.0	
*1,3-Dichloropropane	77173	1.0	1.0	1.0	
*1,3-Dichloropropene	34561	1.0	1.0	1.0	
cis-1,3-Dichloropropene	34704	1.0	1.0	1.0	
trans-1,3-Dichloropropene	34699	1.0	1.0	1.0	
trans-1,4-Dichloro-2-Butene	49263	1.0	1.0	1.0	
*2,2-Dichloropropane	77170	1.0	1.0	1.0	
# 2,4,5-TP (Silvex)	39760	0.05	0.05	0.05	
# 2,4-D 39730	0.1	0.1	0.1	1.0	
2-Butanone	81595	5.0	5.0	5.0	
2-Hexanone	77103	5.0	5.0	5.0	
4-Methyl-2-Pentanone	78133	5.0	5.0	5.0	

NOTE:

- i. The preceding list of parameters (G2) includes all those found in Attachment 1 to Appendix C to LPC-PA2. The 51 constituents from 40 CFR 141.40 and the parameters from 35 Ill. Adm. Code 620.410 and the parameters from 35 Ill. Adm. Code 302, designated with (*), (#) and (@) respectively are required to be monitored annually and may not be deleted.
- ii. All parameters with the "(Dissolved)" label to the right shall be determined using groundwater samples which have been filtered through a 0.45 micron filter. All other parameters shall be determined from unfiltered samples.
- iii. Maximum allowable predicted concentrations (MAPCs) and applicable groundwater quality standards (AGQS) are given in ug/L except as otherwise noted. Also, the monitoring results should be reported in ug/L units unless otherwise indicated.

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BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

In the Matter of:)	
)	
MAHOMET VALLEY WATER AUTHORITY,)	
CITY OF CHAMPAIGN, ILLINOIS, a municipal)	
corporation, DON GERARD, CITY OF URBANA,)	
ILLINOIS, a municipal corporation,)	
LAUREL LUNT PRUSSING,)	
CITY OF BLOOMINGTON, ILLINOIS,)	
a municipal corporation, COUNTY OF CHAMPAIGN,)	
ILLINOIS, COUNTY OF PIATT, ILLINOIS,)	
TOWN OF NORMAL, ILLINOIS, a municipal)	
corporation, VILLAGE OF SAVOY, ILLINOIS,)	
a municipal corporation, and CITY OF DECATUR,)	
ILLINOIS, a municipal corporation,)	
)	
Complainants,)	
)	
v.	)	PCB 20 -
)	
CLINTON LANDFILL, INC.,	)	(Enforcement - Land)
an Illinois corporation,)	
)	
Respondent.)	

EXHIBIT E

Agency Permit Renewal issued July 5, 2012

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

Bureau

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

PAT QUINN, GOVERNOR

JOHN J. KIM, INTERIM DIRECTOR

/524-3300

July 5, 2012

Certified Mail

7010 2780 0002 1163 1399

Clinton Landfill, Inc.
Attn: Mr. Ron Welk
4700 N. Sterling Avenue
P.O. Box 9071
Peoria, Illinois 61612

Re: 0390055036 – DeWitt County
Clinton Landfill 3
Permit No. 2005-070-LF
Log No. 2011-505
Modification No. 29
Expiration Date: February 15, 2017
Permit Landfill 810-817 File
Permit Approval

Dear Mr. Welk:

Permit is hereby granted to Clinton Landfill, Inc. as owner and operator, approving the development of a new municipal solid waste and non-hazardous special waste landfill all in accordance with the application and plans prepared by George L. Armstrong, P.E. of PDC Technical Services, Inc. Final plans, specifications, application, and supporting documents, as submitted and approved, shall constitute part of this permit and are identified in the records of the Illinois Environmental Protection Agency (Illinois EPA), Bureau of Land, Division of Land Pollution Control by the permit number and log number designated in the heading above.

Specifically, Permit No. 2005-070-LF issued March 2, 2007 approved:

- a. The development of this landfill so as to comply with the applicable requirements of Title 35, Illinois Administrative Code (hereinafter 35 Ill. Adm. Code), Subtitle G, Parts 811 and 812, pursuant to 35 Ill. Adm. Code, Section 813.104;
- b. The development of a new Municipal Solid Waste Landfill (MSWLF) unit consisting of a 266.533 acre facility with a single waste disposal unit of approximately 157.451 acres with a gross airspace of approximately 32,014,225 cubic yards, including daily cover and intermediate cover; and excluding leachate sand drainage layer, sidewall liner protective soils and final cover. The maximum final elevation shall be approximately 870 feet above mean sea level. Based on the anticipated waste acceptance rate of 426,000 tons per year (compacted in place density of 1,200 lbs/cubic yard) the facility is estimated to have an operating life of 45 years;

4302 N. Main St., Rockford, IL 61103 (815) 987-7760
595 S. State, Elgin, IL 60123 (847) 608-3131
2125 S. First St., Champaign, IL 61820 (217) 278-5800
2009 Mall St., Collinsville, IL 62234 (618) 346-5120

IEPA - DIVISION OF RECORDS MANAGEMENT

RELEASABLE

JUL 12 2012

PLEASE PRINT ON RECYCLED PAPER

REVIEWED MEN

9511 Harrison St., Des Plaines, IL 60016 (847) 294-4000
5407 N. University St., Arbor 113, Peoria, IL 61614 (309) 693-5462
2309 W. Main St., Suite 116, Marion, IL 62959 (618) 993-7200
100 W. Randolph, Suite 10-300, Chicago, IL 60601 (312) 814-6026

Exhibit E - Citizens' Complaint

Page 2

- c. The lower waste boundaries and the waste footprint approved by this permit are shown on Drawing No. P-LCS1 entitled "Leachate Drainage and Collection Plan". The lower waste boundaries approved by this permit are defined by the top of liner grades shown on Drawing No. P-LCS1 plus 1-foot for the leachate sand drainage layer on the floor liner and 1.5-feet for the protective soils on the sidewall liner. The final contours approved by this permit are shown on Drawing No. P-FG4 entitled "Final Waste Grade Plan." Both Drawings are in the addendum dated June 9, 2006; and
- d. Acceptance of special waste streams without individual special waste stream authorizations, in accordance with the special conditions listed in Part III of this permit.

Modification No. 9 to Permit No. 2005-070-LF issued January 8, 2010 approved the reconfiguration of Clinton Landfill 3 into a Municipal Solid Waste (MSW) unit and a Chemical Waste Unit (CWU) as described below:

- a. The CWU covers approximately 22.495 acres in the southwestern corner of landfill. The MSW unit comprises the remainder of Clinton Landfill 3. A portion of the MSW unit overlies (piggybacks) the CWU. The MSW unit and CWU are not independent landfill units. They share a common groundwater monitoring network, will be certified to have completed closure together, and will have the same post-closure care period.
- b. After the CWU has been constructed and has received operating authorization from the Illinois EPA allowing waste disposal to begin, it will be able to accept a variety of non-hazardous industrial process wastes, non-hazardous pollution control wastes, certified non-special wastes, chemical wastes, inert wastes and putrescible wastes. Manufactured Gas Plant waste exceeding the regulatory levels specified in 35 Ill. Adm. Code 721.124(b) is among the waste that may be accepted at the CWU. The CWU will be able to accept Polychlorinated Biphenyl (PCB) wastes, as defined in 40 Code of Federal Regulations (CFR) 761.3, if the U.S. Environmental Protection Agency (USEPA) permits the CWU as a "chemical waste landfill" as defined in 40 CFR 761.3.
- c. The CWU will have a gross airspace (inclusive of daily and intermediate cover and the separation layer between the CWU and Municipal Solid Waste Unit, and exclusive of protective soil on sidewall liner and leachate drainage layer) of 2,529,506 cubic yards. Based on the anticipated waste acceptance rate of 75,000 tons per year (compacted in place density of 2000 lbs/cubic yard) the CWU is estimated to have an operating life of 34 years. The MSW unit covers approximately 146.453 acres (including the piggyback over CWU) and will have a gross airspace of 29,259,566 cubic yards. The MSW unit is estimated to have an operating life of 41 years at the anticipated waste acceptance rate of 426,000 tons per year (compacted in place density of 1200 lbs/cubic yard).

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- d. A composite liner system in the CWU consists of 3-foot thick compacted soil liner with a maximum permeability of 1×10^{-7} cm/sec, 60-mil high density polyethylene (HDPE) textured geomembrane, a geocomposite drainage layer and a second layer of 60-mil HDPE textured geomembrane throughout the CWU. The floor and the lower portions of the sidewall also include a geosynthetic clay liner and a third 60-mil HDPE textured geomembrane. The liner system in the MSW unit approved in Permit No. 2005-070-LF remains unchanged.
- e. The lower waste boundaries and waste footprint for the CWU are shown on the Drawing No. D7 entitled "Proposed Leachate Collection Grades" provided in Attachment 6 of application Log No. 2008-054, addendum dated June 10, 2009. The final contours for the landfill are the same as those approved in Permit No. 2005-070-LF.
- f. Modification No. 9 also made the following changes, associated with the CWU, to Permit No. 2005-070-LF:
 - i. An Operating Plan for CWU.
 - ii. Revised closure/post-closure care plan and cost estimates.
 - iii. Revised geomembrane and geocomposite drainage layer specifications; and
 - iv. Revision of the gas management system to exclude gas collection from within the CWU unless and until problems with gas from the CWU occur.

Modification No. 29 is hereby granted to Clinton Landfill, Inc. as owner and operator, allowing modification of an existing municipal solid waste and non-hazardous special waste landfill all in accordance with application and plans prepared by George L. Armstrong, P.E. and Joyce A. Day, P.G., both of PDC Technical Services, Inc. and signed and sealed by Mr. Armstrong on November 17, 2011 and identified in the Illinois EPA records as Log No. 2011-505.

The permit application approved by Modification No. 29 consists of the following documents:

Permit Application Log No. 2011-505

Original Permit Application	November 17, 2011	November 21, 2011
Additional Information	November 23, 2011	November 28, 2011
	January 27, 2012	January 30, 2012
	February 2, 2012	February 6, 2012
	February 14, 2012	February 15, 2012
Waiver	March 7, 2012	March 8, 2012
Additional Information	April 9, 2012	April 10, 2012

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Waiver	April 19, 2012	April 20, 2012
Additional Information	May 21, 2012	May 22, 2012
	May 24, 2012	May 25, 2012
	June 21, 2012	June 25, 2012

Modification No. 29 to Permit No. 2005-070-LF approves the following:

1. Renewal of Permit No. 2005-070-LF;
2. Revised Operating Plans for the MSW Unit and CWU; and
3. Revised Closure Plan.

Except for the differences described in the table below, the special conditions in Modification No. 29 are identical to the special conditions in Modification No. 28 to Permit No. 2005-070-LF, issued May 31, 2012.

Special Condition in Modification No. 28	Special Condition in Modification No. 29	Description of Modification
II.24	II.24	Revised to reference the MSW Unit and CWU Operating Plans being approved in this permit.
V.5	V.5	The reference to application Log No. 2011-505 being under review was deleted.
VI.4	VI.4	Revised to reference the phasing plans provided in application Log No. 2011-505.
VII.5	VII.5	Leachate monitoring schedule for May 2014 to December 2014 was added.
VIII.9	VIII.9	Revised to reflect the current groundwater monitoring well network.
None	VIII.25	This condition requiring the development of interwell AGQS/MAPC values for Roxana Silt-Robein Member unit was added.
X.1	X.1	Revised to reference the closure plan provided in application Log No. 2011-505.
XI.7	XI.7	Revised to reference MSW Unit operating plan being approved in this permit.

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Special Condition in Modification No. 28	Special Condition in Modification No. 29	Description of Modification
XI.14	XI.14	Revised to reference the closure plan provided in application Log No. 2011-505.
XII.2	XII.2	Revised to reference Log No. 2011-505.
XII.15	XII.15	Revised to reference the closure plan provided in application Log No. 2011-505.

Pursuant to Section 39(a) of Illinois Environmental Protection Act (Act) [415 ILCS 5/39(a)] and 35 Ill. Adm. Code, 813.104(b), this permit is issued subject to the development, operating and reporting requirements for non-hazardous waste landfills in 35 Ill. Adm. Code, Parts 810, 811, 812 and 813, the standard conditions attached hereto, and the following special conditions. In case of conflict between the permit application and these conditions (both standard and special), the conditions of this permit shall govern.

I. CONSTRUCTION QUALITY ASSURANCE

1. All necessary surface drainage control facilities shall be constructed prior to other disturbance in any area.
2. No part of the unit shall be placed into service or accept waste until an acceptance report for all the activities listed below has been submitted to and approved by the Illinois EPA as a significant modification pursuant to 35 Ill. Adm. Code, Sections 811.505(d) and 813.203.
 - a. Preparation of the subgrade and foundation to design parameters;
 - b. Installation of the compacted earth/synthetic liner;
 - c. Installation of the leachate drainage, collection and management systems;
 - d. Placement of final cover;
 - e. Installation of leachate re-circulation system;
 - f. Installation of gas control facilities, except as provided in Condition No. IX.11 of this permit;
 - g. Construction of ponds, ditches, lagoons and berms; and
 - h. Construction of cutoff trench.

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3. The permittee shall designate an independent third party contractor as the Construction Quality Assurance (CQA) Officer(s). The CQA Officer(s) shall be an Illinois Certified Professional Engineer who is independent from and not under the control or influence of the operator, any employee of the operator, or any other corporation, company or legal entity that is a subsidiary, affiliate, parent corporation or holding corporation associated with the operator.
4. Except as provided below, the CQA Officer(s) designated pursuant to Condition I.3 shall personally be present during all construction and testing that is subject to CQA certification pursuant to 35 Ill. Adm. Code, Section 811.503(a). If the CQA Officer(s) is unable to be present as required, then a written explanation and signed statement must be provided for each absence pursuant to 35 Ill. Adm. Code, Section 811.503(b).
5. The clay liner shall be tested for density and moisture content a minimum of five tests per lift per acre.
6. A minimum of one laboratory hydraulic conductivity test shall be performed for every 10,000 cubic yards of soil placed in the liner. Additionally, each lift of the soil liner shall be tested for hydraulic conductivity at least once for each phase of construction.
7. If the clay portion of the liner is exposed to freezing conditions, it must be recertified. The designated CQA Officer(s) shall then certify that the clay portion of the liner and all necessary repairs to the liner geomembrane and leachate drainage layer meet the required design standards. This certification must be provided to the Illinois EPA prior to disposal of waste on the subject portion of the liner. If operating authorization has not yet been issued for that area, the recertification shall be included in the application for Significant Modification of Permit to obtain Operating Authorization for that area.
8. Pursuant to 35 Ill. Adm. Code, Section 811.505(d), upon completion of construction of each major phase, the CQA Officer(s) shall submit an acceptance report to the Illinois EPA. The acceptance report shall be submitted before the structure is placed into service and shall contain the following:
 - a. A certification by the CQA Officer(s) that the construction has been prepared and constructed in accordance with the engineering design;
 - b. As-built drawings; and
 - c. All daily summary reports.

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9. Construction of Sidewall Liner:
 - a. The operator shall maintain a minimum "freeboard" of one (1) foot between the top of the sidewall liner and the top of the waste;
 - b. Prior to installing an increment of the sidewall liner, the sidewall liner in that area shall be inspected. Any areas damaged by desiccation, frost action, etc. shall be excavated and reconstructed in accordance with the Construction Quality Assurance program approved by this permit;
 - c. After each increment of the composite liner up the sidewall is completed, the operator shall provide written notification of its completion to the Illinois EPA's Champaign Regional Office. Upon receipt of the notification, the inspector shall be allowed fifteen working days to examine the construction. The Illinois EPA is not obligated to approve the construction or certification. The operator may dispose of refuse in the subphase after the fifteen day period if, having complied with the terms of this condition, the operator is not informed of a problem by the Illinois EPA or its agents; and
 - d. At the same time the Champaign Regional Office or delegated government is given notification that an increment of the sidewall liner has been completed, the Permit Section shall be provided with the information required in an Acceptance Report pursuant to 35 Ill. Adm. Code, 811.505(d) on its construction.
10. Applications for operating authorization shall not be made for areas of less than 1.5 acre increments of constructed liner.
11. All stakes and monuments marking the facility boundary and the permitted disposal area shall be maintained, inspected annually and surveyed no less frequently than once in five years by a professional land surveyor. Any lost or damaged monuments shall be replaced.
12. All standards for testing the characteristics and performance of materials, products, systems and services shall be those established by the American Society for Testing and Materials (ASTM) unless otherwise stated in the permit application.
13. Effective upon issuance of Modification No. 26 (Log No. 2011-424), all testing including conformance and seaming of the geomembrane used at the landfill shall meet Geosynthetic Research Institute's requirements with the following

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exceptions: For the geomembrane used in the bottom liner, the minimum thickness must be within 5% of nominal for all samples, i.e. 60 mil liner must be at least 57 mil; and UV resistance testing is not necessary unless the geomembrane is exposed for more than 30 days.

14. A cutoff trench shall be installed at the toe of the landfill invert sidewalls, along the eastern and southern edges of the MSW unit, as shown on Drawings P-EX1 and P-EX2, submitted in application Log No. 2005-070, addendum dated June 9, 2006. As proposed in application Log No. 2008-054, addendum dated August 18, 2009, the cutoff trench shall be installed along the southern edge of the CWU if Upper Radnor Till Sand is encountered during future investigations along the southern boundary of CWU. The cutoff trench material, placement and compaction shall meet the Earth Liner specifications of the CQA plan.
15. Notwithstanding the survey tolerances for the landfill liner and final cover grades included in the CQA plan and design drawings, the as-built top of liner grades shall not be below the approved design grades and the as-built final waste grades shall not be above the approved design grades.

II. OPERATING CONDITIONS

1. Pursuant to 35 Ill. Adm. Code, Sections 811.107(a) and 811.107(b), throughout the operating life of this landfill, waste shall not be placed in a manner or at a rate which results in unstable internal or external slopes or interference with construction, operation or monitoring activities.
2. The operator of this solid waste facility shall not conduct the operation in a manner which results in any of the following:
 - a. refuse in standing or flowing waters;
 - b. leachate flows entering waters of the State;
 - c. leachate flows exiting the landfill confines (i.e., the facility boundaries established for the landfill in a permit or permits issued by the Illinois EPA);
 - d. open burning of refuse in violation of Section 9 of the Act;
 - e. uncovered refuse remaining from any previous operating day or at the conclusion of any operating day, unless authorized by permit;

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- f. failure to provide final cover within time limits established by Board regulations;
 - g. acceptance of wastes without necessary permits;
 - h. scavenging as defined by Board regulations;
 - i. deposition of refuse in any unpermitted (i.e., without an Illinois EPA approved significant modification authorizing operation) portion of the landfill;
 - j. acceptance of a special waste without a required manifest and identification record;
 - k. failure to submit reports required by permits or Board regulations;
 - l. failure to collect and contain litter from the site by the end of each operating day; and
 - m. failure to submit any cost estimate or any financial assurance mechanism for the facility as required by Section 21.o.13 of the Act.
3. Moveable, temporary fencing shall be used to prevent blowing litter when the refuse is above the natural ground line.
4. At the end of each day of operation, all exposed waste shall be covered with:
- a. Clean soil at least six (6) inches thick (i.e., conventional daily cover);
 - b. Polypropylene non-woven and woven geotextile such as Fabrisoil, Typar 3601, Amoco 2002 or their equivalents;
 - c. Cement kiln by-products;
 - d. Chipped or shredded tires;
 - e. Clean concrete debris;
 - f. Clean demolition debris;
 - g. Coal combustion by-products;
 - h. End product compost;

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- i. Foundry castings;
- j. Foundry sand;
- k. Non-hazardous contaminated soil;
- l. Paper pulp;
- m. Processed asphalt shingles;
- n. Refractory brick;
- o. Solidified leachate;
- p. Wastewater treatment plant (WWTP) sludge; or
- q. Wood chips.

5. The materials listed in Special Condition II.4(b) through (q) are approved as alternate daily cover materials (ADCM) pursuant to 35 Ill. Adm. Code, Sections 811.106(b) and 812.111(b). Use of ADCMs shall be subject to the following conditions:
- a. If any ADCMs other than those approved by this permit are to be used, their use must be approved by the Illinois EPA through the permit process;
 - b. At any one time, the total area, using ADCMs, shall be no more than 7,500 square yards. Beyond this maximum, daily cover soil shall be used on all areas where waste has been disposed and to which intermediate or final cover has not been applied;
 - c. Unless otherwise specified below, areas upon which ADCM has been used must be covered with either conventional cover or additional waste within ten (10) calendar days of initial application;
 - d. Conventional daily cover in accordance with 35 Ill. Adm. Code 811.106(a) shall be used if weather or other conditions adversely affect the ability of the ADCMs to prevent problems with blowing litter, fire, odors, or vectors;
 - e. Only conventional soil daily cover and polypropylene geotextile products mentioned in Condition No. II.4(b) shall be used as daily cover within the Chemical Waste Unit;

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- f. All ADCMs, with the exception of manufactured ADCMs included in Condition No. II.4(b), shall be applied in continuous layers at least six-inches thick;
- g. Geotextile fabric shall be anchored adequately to prevent wind damage. If the geotextile fabric is torn during or after placement, it must be repaired immediately or the damaged area must be covered with six inches of daily cover soil. If tires are used as weights for the geotextile fabric, they shall be converted tires, in accordance with 35 Ill. Adm. Code, Part 848: Management of Used and Waste Tires;
- h. When an ADCM is applied, the operator shall keep a record including a description of the weather conditions, the type of alternate daily cover used and its performance. A summary of this information shall be provided with this facility's annual reports;
- i. Any ADCM which has been used for daily cover may not be reused for any purpose (including road underlayment and erosion control) outside of permitted disposal boundaries;
- j. All ADCMs must meet the requirements of 35 Ill. Adm. Code, 811.106(b)(1) through (4) at all times;
- k. The condition of the alternate materials used as daily cover shall be inspected at the beginning of each shift to determine if its integrity or continuity has been damaged by sun exposure, wind or physical contact. If the inspection reveals that the structural integrity or continuity has been damaged or if uncovered refuse is observed in the covered areas the damaged or uncovered areas shall be repaired immediately to restore a continuous uniform cover over the waste. If any problems develop from covering the waste with a particular alternate cover, the use of offending cover shall immediately cease until the cause of the problem is determined and necessary corrective action taken. A record of the inspection and subsequent corrective action taken shall be made available to the Illinois EPA personnel upon request;
- l. If the Illinois EPA's Champaign Regional Office determines that any ADCM is not performing satisfactorily as daily cover, the operator shall cease using it as daily cover immediately upon receipt of a written notification of such determination and manage the material appropriately;
- m. Special wastes received at the site to be used as ADCM shall be transported to the facility using the Illinois EPA's special waste manifest system. Additionally, these ADCMs shall meet all the applicable conditions specified in Section III of this permit and comply with the facility's load checking program. Section 22.48

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of the Act allows for the de-classification of certain special wastes;

- n. All runoff from the ADCM areas shall be directed to the leachate collection system and treated as leachate. ADCM shall only be used in areas of the landfill where leachate flowing off the cover would drain into the leachate collection system and not to surface water, e.g., never place ADCMs on outside slopes;
- o. The following conditions apply for the management of stockpiles of materials to be used as alternate daily covers:
 - i. The following ADCMs shall be stockpiled in an amount not to exceed ten (10) day supply for use as daily cover: chipped or shredded tires, clean concrete debris, clean demolition debris, end product compost, foundry castings, processed asphalt roof shingles, refractory brick and wood chips. All other ADCMs (except for the manufactured ADCMs listed in Condition No. II.4(b)) shall be used for daily cover or disposed in the active face of the landfill by the end of the same operating day;
 - ii. The stockpiles shall be located as close as practicable to the active face in an area with a certified liner and leachate collection system. All runoff from the stockpiles shall be managed as leachate;
 - iii. ADCMs shall not be stockpiled on areas of the landfill that have received final cover;
 - iv. ADCMs shall not be stockpiled in areas of the landfill that would result in exceedence of permitted final waste elevations; and
 - v. The stockpiles shall be managed so as to avoid development of nuisance conditions including blowing litter, fire potential, malodors etc
- p. The use of cement kiln by-products, coal combustion by-products and foundry sand as ADCM is subject to the following conditions:
 - i. No stockpiling of cement kiln by products, coal combustion by-products and foundry sand is allowed. All the materials received each day must be used as daily cover or disposed off in the active face of the landfill;
 - ii. Foundry sand used as ADCM shall meet the Waste Classification Limits of a Beneficially Usable Waste or a Potentially Usable Waste defined in 35 Ill. Adm. Code Part 817;
 - iii. Cement kiln by-products, coal combustion by-products and foundry sand once applied as ADCM shall not be removed;
 - iv. Measures shall be taken to prevent dust-related problems. These measures may include use of the cement kiln by-products, coal combustion by-products and foundry sand below surrounding grade, receiving the materials in a damp condition and use only when weather conditions (wind) will not cause fugitive dust emissions. "Wetting" disposal areas covered with cement kiln by-products, coal combustion by-products or foundry sand is prohibited; and

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- v. Areas where cement kiln by-products and coal combustion by-products are used as ADCM must be covered with either conventional daily cover or additional waste within 24-hours of initial placement.
- q. Chipped or shredded tires used as ADCM shall be managed in accordance with 35 Ill. Adm. Code Part 848, Management of Used and Waste Tires and shall be no larger than 2 inches in size. Chipped or shredded tires once applied as ADCM shall not be removed;
- r. The use of clean concrete debris and clean demolition debris as ADCM is subject to the following conditions:
 - i. Only clean construction and demolition debris, as defined in Section 3.160(b) of the Act, may be used as ADCM;
 - ii. Clean concrete debris and clean demolition debris utilized as ADCM shall be processed to a gradation of less than 2 inches;
 - iii. If necessary, measures shall be taken to prevent dust-related problems. These measures may include use of clean concrete debris and clean demolition debris below surrounding grade and use only when weather conditions (wind) will not cause fugitive dust emissions. "Wetting" disposal areas covered with Clean concrete debris and clean demolition debris is prohibited; and
 - iv. During removal of clean concrete debris and clean demolition debris used as ADCM for the purpose of reuse, measures shall be taken to keep the collected materials free of refuse. Collected clean concrete debris and clean demolition debris which contains visible quantities of waste materials may not be stockpiled for reuse unless the waste materials are removed to the active face of the landfill.
- s. The use of End Product Compost as ADCM is subject to the following conditions:
 - i. End product compost used as ADCM shall meet the definition of End Product Compost found in 35 Ill. Adm. Code 830.102;
 - ii. The end product compost shall be thoroughly biodegraded to the point such that odors emanating from the material are not in violation of 35 Ill. Adm. Code 811.106(b), and the potential for fire sustainment is minimized;
 - iii. End product compost may be used in combination with clean soil as a mixture to improve the performance as daily cover and to prevent odor problems; and
 - iv. During removal of end product compost ADCM for the purpose of reuse, measures shall be taken to keep the collected end product compost free of refuse materials. Collected end product compost which contains visible quantities of waste materials may not be stockpiled for reuse unless the waste materials are removed to the active face of the landfill.

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- t. Foundry castings and refractory brick must be sized 2 inches or less to ensure that the requirements of 811.106(b) are met. Foundry castings and refractory brick once applied as ADCM shall not be removed;
- u. Paper pulp once applied as ADCM shall not be removed. Additionally, no stockpiling of paper pulp is allowed. All the materials received each day must be used as daily cover or disposed off in the active face of the landfill;
- v. Only non-hazardous materials that can be legally disposed in this municipal solid waste and non-hazardous special waste landfill may be used as ADCM;
- w. The following conditions apply to non-hazardous contaminated soil used as ADCM:
 - i. Contaminated soil with obnoxious odors or soil with debris shall not be used as ADCM;
 - ii. No soils from manufactured gas plant (MGP) remediation sites shall be used as ADCM;
 - iii. Each load of non-hazardous contaminated soil to be used as ADCM shall be inspected to ensure that its use will not generate odors and will prevent threat of fires. The operator shall maintain a log of these inspections including, but not limited to, the date, a description of soil contaminant, the generator name, number and address; and the amount in cubic yards. The logs shall be made part of the operating record and shall be available for Illinois EPA inspection upon request ;
 - iv. No stockpiling of non-hazardous contaminated soil is allowed. All the materials received each day must be used as daily cover or disposed of in the active face of the landfill;
 - v. Non-hazardous contaminated soil must be of a moisture content, consistency and gradation that the requirements of 35 Ill. Adm. Code 811.106(b) are met; and
 - vi. Once placed, non-hazardous contaminated soil used as ADCM shall not be removed.
- x. Processed asphalt shingles shall be non-asbestos and free of metals, woods, and other deleterious materials and sized 2 inches or less. Asphalt shingles once applied as ADCM shall not be removed;
- y. The following conditions apply to solidified leachate used as ADCM:
 - i. Only leachate solidified at this landfill's MSW Unit can be used as ADCM;
 - ii. Only leachate solidified with reagents listed in Condition No. III.B.6(a) and soil may be used as ADCM. Leachate solidified with absorbents

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- (with the exception of soil) shall not be used as ADCM;
 - iii. No stockpiles of solidified leachate shall be maintained. Solidified leachate removed from the solidification unit shall be applied as ADCM or disposed of in the active face by the end of the same operating day;
 - iv. Solidified leachate once applied as ADCM shall not be removed; and
 - v. Solidified leachate shall be covered with either conventional soil daily cover or additional waste within a 24-hour period of initial placement.
- z. The following conditions apply to wastewater treatment plant (WWTP) sludge as ADCM:
 - i. The WWTP sludge must meet the definition of 'Digested Sludge' contained in 35 Ill. Adm. Code 391.102;
 - ii. The WWTP sludge must contain at least 50% solids when it is received at the landfill;
 - iii. WWTP sludge containing the minimum 50% solids shall be mixed with clean soil at a ratio of 50% sludge to 50% soil;
 - iv. As the percentage of solids increase, the mixing ratio with soil may decrease, but in no case shall be less than 90% sludge to 10% soils;
 - v. WWTP sludge must always be blended with sufficient clean soil to ensure compliance with the requirements of 35 Ill. Adm. Code 811.106(b);
 - vi. WWTP sludge once applied as ADCM shall not be removed;
 - vii. Areas where WWTP sludge is used as ADCM must be covered with either conventional daily cover or additional waste within 24-hours of initial placement;
 - viii. No stockpiling of WWTP sludge is allowed. All the materials received each day must be used as daily cover or disposed off in the active face of the landfill;
 - ix. A sample of WWTP sludge used at this facility shall be tested for the parameters included in 35 Ill. Adm. Code Subtitle C Section 391.501(a). This information shall be included in the facility annual report; and
 - x. Any vehicle used for transporting WWTP sludge to the landfill shall be covered to prevent spillage or windblown particles.
- aa. The following conditions apply to wood chips as ADCM:
 - i. Wood chips used as ADCM shall be from clean non-waste commodity wood that does not exhibit dust, odor, other nuisance problems. Furthermore, the wood shall not contain any painted or treated wood;
 - ii. Wood chips utilized as ADCM shall be processed to a gradation of less than 2-inches;
 - iii. Areas where wood chips is used as ADCM must be covered with either conventional daily cover, another type of approved ADCM, or additional waste, within 24-hour period of initial placement; and
 - iv. During removal of wood chips as ADCM for the purpose of reuse,

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measures shall be taken to keep the collected wood chips free of refuse materials. Collected wood chips which contain visible quantities of waste materials may not be stockpiled for reuse unless the waste materials are removed to the active face of the landfill.

6. No later than 60 days after placement of the final lift of waste in any area, the area shall receive a final cover system meeting the design specifications approved in this permit application. The final cover system for the entire facility consists of the following layers from bottom of cover to top of cover:
 - 12-inches of soil foundation layer
 - 12-inches of compacted clay with hydraulic conductivity no greater than 1×10^{-7} cm/sec.
 - 40-mil HDPE geomembrane (textured on the sideslopes)
 - Drainage layer consisting of a geotextile and HDPE geonet.
[Alternatively, a geocomposite drainage layer can be used.]
 - 3-foot thick protective cover capable of supporting vegetation.
7. All waste not covered within sixty days of placement with additional waste or final cover shall have an intermediate cover of compacted clean soil with a minimum thickness of one foot applied to it.
8. The operator shall implement a load checking program that meets the requirements of 35 Ill. Adm. Code, Section 811.323. If regulated hazardous waste is discovered, the Illinois EPA shall be notified no later than 5:00 p.m. the next business day after the day it is detected. The load checker shall prepare a report describing the results of each inspection. A summary of these reports shall be submitted to the Illinois EPA as part of this facility's annual report.
9. Acceptance of Asbestos Containing Waste Materials (ACWM) shall be subject to the procedures for safe handling and management of friable and non-friable ACWM provided in application Log No. 2010-145 and requirements of National Emission Standards for Hazardous Air Pollutants (NESHAPS).
10. Management of Unauthorized Waste
 - a. Landscape waste found to be mixed with municipal waste will be removed the same day and transported to a facility that is operating in accordance with the Act, Title V, Section 21;
 - b. Lead-acid batteries will be removed the same day and transported either to a drop-off center handling such waste, or to a lead-acid battery retailer;

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- c. Potentially infectious medical waste (PIMW) found to be mixed with municipal waste shall be managed in accordance with 35 Ill. Adm. Code, Subtitle M;
- d. Tires found to be mixed with municipal waste shall be removed and managed in accordance with 35 Ill. Adm. Code, Part 848;
- e. White good components mixed with municipal waste shall be removed and managed in accordance with Section 22.28 of the Act;
- f. Only those types of polychlorinated biphenyls (PCB) wastes, as defined in 40 CFR 761.3 and subject to Toxic Substances Control Act (TSCA), that are allowed by 40 CFR Part 761 or TSCA to be disposed in a municipal solid waste landfill may be disposed in the MSW unit. PCB wastes which are allowed by 40 CFR 761 to be disposed in a "chemical waste landfill" as defined in 40 CFR 761.3 may be disposed in the CWU Unit, if and when all of the following conditions have been met:
 - i. The U.S. Environmental Protection Agency (USEPA) permits the CWU as a "chemical waste landfill" as defined in 40 CFR 761.3;
 - ii. The CWU is constructed; and
 - iii. The Illinois EPA has approved operation authorization for the CWU, pursuant to 35 Ill. Adm. Code 813.203, allowing waste disposal to begin.
- g. No liquid waste (special or non-special) as determined by the Paint Filter Test shall be disposed unless the waste is from a household or is in a small container similar in size to that normally found in household waste and the container was designed for use other than storage. The prohibition applies to on-site generated wastes except for leachate or gas condensate that is specifically approved by permit for recirculation into the landfill. However, minor amounts of liquid resulting from precipitation (rain, sleet, hail or snow) during transport and disposal operations shall not be construed as a violation of this condition;
- h. In accordance with Section 21.6 of the Act, beginning July 1, 1996, no owner or operator of a sanitary landfill shall accept liquid used oil for final disposal that is discernable in the course of prudent business operation;

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- i. After the unauthorized waste has been removed, a thorough cleanup of the affected area will be made according to the type of unauthorized waste managed. Records shall be kept for three (3) years and will be made available to the Illinois EPA; and
 - j. In accordance with Subsection 95(b) of the Electronics Products Recycling and Reuse Act (415 ILCS 150), beginning January 1, 2012, no person may knowingly cause or allow the disposal of a CED [covered electronic device] or any other computer, computer monitor, printer, television, electronic keyboard, facsimile machine, videocassette recorder, portable digital music player, digital video disc player, video game console, electronic mouse, scanner, digital converter box, cable receiver, satellite receiver, digital video disc recorder, or small-scale server in a sanitary landfill, except as may be allowed by a waiver obtained pursuant to Subsection 95(e) of the Electronics Products Recycling and Reuse Act.
- 11. Operating hours are those hours during which waste may be accepted. For this facility, the operating hours shall be limited to 6:00 a.m. to 6:00 p.m., Monday through Friday, and 6:00 a.m. to 3:00 p.m. on Saturday. Adequate lighting shall be provided for outdoor activities at the landfill occurring before sunrise or after sunset.
 - 12. If it is required for the facility to be open beyond normal operating hours to respond to emergency situations, a written record of the date(s), times and reason the facility was open shall be made part of the operating record for the facility. The Illinois EPA Champaign Regional Office and, when applicable, the county authority responsible for inspections of this facility per a delegation agreement with the Illinois EPA shall be notified no later than 5:00 p.m. the next business day following the acceptance of waste outside the specified operating hours.
 - 13. Road building materials used to construct roads at the facility that are not solid waste may be stockpiled on-site in the amount estimated to be needed within the next construction season provided they are managed in accordance with 35 Ill. Adm. Code, Section 811.108(c)(1).
 - 14. Equipment shall be maintained and available for use at the facility during all hours of operation to allow proper operation of the landfill. If breakdowns occur that would prevent proper facility operation, back-up equipment shall be brought onto the site.
 - 15. All utilities, including but not limited to heat, lights, power, communications equipment and sanitary facilities necessary for safe, efficient and proper operation of the landfill shall be available at the facility at all times.

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16. Waste shall be deposited at the fill face and compacted upward into the fill face unless precluded by extreme weather conditions or for reasons of safety.
17. The operator shall implement methods for controlling dust so as to prevent wind dispersal of particulate matter off-site.
18. The facility shall be constructed and operated to minimize the level of equipment noise audible outside the facility. The facility shall not cause or contribute to a violation of 35 Ill. Adm. Code, Parts 900 through 905.
19. The operator shall implement measures to control the population of disease and nuisance vectors.
20. The operator shall institute fire protection measures in accordance with the proposed Hazard Protection and Emergency Response Plan.
21. The operator shall implement methods to prevent tracking of mud by hauling vehicles onto public roadways.
22. Access to the active area and all other areas within the boundaries of the facility shall be controlled by use of fences, gates and natural barriers to prevent unauthorized entry at all times.
23. A permanent sign shall be maintained at the facility entrance containing the information required under 35 Ill. Adm. Code, Section 811.109(b)(1) through (5).
24. Waste received at the MSW Unit and CWU must be handled, analyzed, documented and disposed in accordance with the Operating Plans for the MSW Unit and CWU provided in application Log No. 2011-505 (Modification No. 29), addendum dated June 21, 2012.
25. As proposed in the Operating Plan for the CWU, all waste loads destined for disposal in the CWU shall be inspected. The inspections shall ascertain that the waste does not contain any unacceptable materials, meets the waste acceptance criteria specified in the Operating Plan for CWU and is in accordance with the Special Conditions included in Section III.A of this permit. The information and observations derived from these inspections shall be recorded in accordance with 35 Ill. Adm. Code 811.323(c)(2).
26. If any regulated hazardous wastes are identified during load checking, they should be handled in accordance with 35 Ill. Adm. Code 811.323(d).

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27. Waste disposal operations shall be restricted to areas of the landfill specifically approved by the Illinois EPA for operation or granted operating authorization pursuant to 35 Ill. Adm. Code, Section 813.203. Such areas of the landfill are presently limited to:
- a. The approximately 6.65 acres of Phase 1A of MSW Unit, in accordance with the application and plans provided in permit application Log No. 2008-063 and approved by Modification No. 5;
 - b. The approximately 4.15 acres of Phase 1B of MSW Unit, in accordance with the application and plans provided in permit application Log No. 2009-564 and approved by Modification No. 10;
 - b. The approximately 2.84 acres of Phase 1C of MSW Unit, in accordance with the application and plans provided in permit application Log No. 2010-466 and approved by Modification No. 16;
 - c. The approximately 4.5 acres of Phase 1A of CWU, in accordance with application and plans provided in permit application Log 2011-024 and approved by Modification No. 18;
 - d. The approximately 5.94 acres of Phase 3A of MSW Unit, in accordance with the application and plans provided in permit application Log No. 2011-072 and approved by Modification No. 21;
 - e. The approximately 4.57 acres of Phase 3B (3.8 acres) and Phase 3A2 (0.77 acres) of MSW Unit, in accordance with the application and plans provided in permit application Log No. 2011-550 and approved by Modification No. 27; and
 - f. The approximately 1.64 acres of Phase 1A of CWU, in accordance with application and plans provided in permit application Log Nos. 2011-024 and 2012-047 and approved by Modification Nos. 18 and 28, respectively.
28. A separation layer shall be placed on the northern and eastern slopes of the CWU to physically separate wastes placed in the MSW Unit from wastes placed in the CWU. The separation layer shall consist of the following from top to bottom:
- 40 mil textured HDPE geomembrane
 - 12 inches of compacted soil (minimum)

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29. Wastes received at the Customer Convenience Facility (CCF) shall be collected in a container placed on a concrete pad and disposed at the active face of the landfill by the end of each operating day. The location of the CCF is shown on the drawing titled Customer Convenience Facility Site Plan (Drawing number P-CCF-1) provided in application Log No. 2011-424. No special wastes shall be received at the CCF. Wastes shall be received at the CCF only during the landfill operating hours specified in Condition No. II.11 of this permit.

III. SPECIAL WASTE

A. DISPOSAL OF SPECIAL WASTE

1. The permittee is authorized to accept non-hazardous special waste that meets the definition of industrial process waste or pollution control waste as found in Sections 3.235 and 3.335, respectively, of the Illinois Environmental Protection Act, in accordance with the following requirements:
 - a. The waste is analyzed in accordance with the requirements described below and complies with the acceptance criteria in the approved waste analysis plan;
 - b. The waste is delivered by an Illinois licensed special waste hauler or an exempt hauler as defined in 35 Ill. Adm. Code, Section 809.211; and
 - c. The waste is accompanied by a manifest, if required.
2. The permittee shall obtain a completed Special Waste Preacceptance Form (enclosed along with Permit No. 2005-070-LF) and a preacceptance analysis from each generator for each waste to be accepted. In addition, the Annual Generator Special Waste and Recertification for Disposal of Special Waste form (enclosed along with Permit No. 2005-070-LF), which certifies the waste has not changed since the last analysis, must be completed and included in the operating record. A complete laboratory analysis must be provided with the exceptions listed below.

Analysis shall be conducted using SW-846 test methods. The waste shall be reanalyzed at least every five years and must identify the actual concentration of each chemical constituent and state of each physical parameter. In all cases, a copy of the lab analysis (on lab letterhead and signed by a responsible party such as the person conducting the analysis or his/her supervisor) must be included in the operating record with the Special Waste Preacceptance Form (Profile Identification Sheet). The analysis may not be greater than one year old at the time. A new analysis is required if the composition of the waste changes (normal

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variations in waste composition are expected and are not included in this requirement). All waste must be analyzed as follows:

- a. The permittee shall obtain the following lab analyses to determine the concentrations of the following parameters.

Paint Filter Test
Flash point
Sulfide (reactive)
Cyanide (reactive)
Phenol (total)
pH
Toxicity Characteristic Constituents

- b. The permittee shall obtain analysis for reactive sulfides (H_2S) and cyanides (HCN). Waste containing 250 ppm or greater reactive cyanide or 500 ppm or greater reactive sulfide is presumed to be hazardous waste pursuant to 35 Ill. Adm. Code, Section 721.123(a)(5) unless specific information to show it does not present a danger to human health or the environment is provided. Analysis for total sulfide and/or cyanide may be substituted for reactive concentrations if they are equal to or less than 10 ppm. For wastes containing greater than 10 ppm reactive cyanide or reactive sulfide, the permittee shall not accept the waste unless the generator provides a signed and dated statement indicating the following:
 - i. The waste has never caused injury to a worker because of H_2S and/or HCN generation;
 - ii. That the OSHA work place air concentration limits for H_2S and/or HCN have not been exceeded in areas where the waste is generated, stored or otherwise handled; and
 - iii. That air concentrations of H_2S and/or HCN above 10 ppm have not been encountered in areas where the waste is generated, stored or otherwise handled.
- c. The permittee shall obtain analysis for phenols. If the total phenol concentration is greater than 1000 ppm, the waste will be required to be drummed and labeled, unless justification that this precaution is not necessary is provided. The justification must demonstrate skin contact is unlikely during transport or disposal.

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- d. The permittee shall obtain metals and organics analysis. Either procedure may be utilized (i.e., total or TCLP), but any constituent whose total concentration exceeds the TCLP limit specified in 35 Ill. Adm. Code, Section 721.124 must be analyzed using the TCLP test and the results reported, unless an alternative test has been approved by the Illinois EPA. TCLP test methods must be in accordance with SW 846-1311.
- e. EXCEPTIONS:
 - i. The generator may certify that the eight pesticides (D012, D013, D014, D015, D016, D017, D020 and D031) would not reasonably be expected to be present in the waste based on the nature of the process generating the waste.
 - ii. Petroleum contaminated media and debris from LUST sites subject to corrective action regulation under 35 Ill. Adm. Code, Parts 731 and 732 are temporarily exempt from complete TCLP analysis and the generator may limit analyses to flashpoint, paint filter test and TCLP lead.
 - iii. For off-specification, unused or discarded commercial or chemical products, an MSDS to determine the hazardous constituents present may be provided in lieu of analytical results.
- f. CLARIFICATIONS:

Notwithstanding the exception for manufactured gas plant waste contained in 35 Ill. Adm. Code 721.124(a), no manufactured gas plant waste shall be disposed in Clinton Landfill 3's MSW unit, unless: i) the waste has been tested in accordance with subsection (d) of this special condition, and ii) the analysis has demonstrated that the waste does not exceed the regulatory levels for any contaminant given in the table contained in 35 Ill. Adm. Code 721.124(b).

Manufactured gas plant waste exceeding the regulatory levels specified in 35 Ill. Adm. Code 721.124(b) can be disposed in the CWU.
- g. Pursuant to 35 Ill. Adm. Code 722.111, the generator of a solid waste is required to determine if the waste is hazardous and comply with all applicable hazardous waste regulations. For any waste that has been determined to be hazardous, the results of quality assurance testing for the treatment program, taken at an appropriate frequency to demonstrate the waste is no longer hazardous, must be obtained. Verification that the

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waste meets the land disposal restrictions must also be documented.
These requirements are in addition to the other standard special waste test requirements.

3. An individual waste stream permit is no longer required by the Illinois EPA for this facility. Therefore, a waste stream permit number will no longer be required on the manifest when shipping waste to this facility as authorized by this permit.
4. Special waste generated due to an emergency situation may be disposed without complete TCLP analysis if:
 - a. The permittee receives authorization from the Emergency Response Unit of the Illinois EPA at 1-217-782-3637;
 - b. The permittee ensures that the generator has received an incident number from the Illinois Emergency Management Agency at 1-800-782-7860 within Illinois, or 1-217-782-7860 outside of Illinois; and
 - c. The waste is analyzed for the chemical constituents required by the Emergency Response Unit.
5. The permittee shall conduct the following analyses for waste received in labeled containers in lab packs, including commingled wastes:
 - a. Compatibility review in accordance with the procedures identified in USEPA document EPA-600/2-80-076; and
 - b. MSDS review to determine the hazardous constituents present and appropriate USEPA hazardous waste class.
6. RCRA empty containers received as a special waste are subject to the following conditions:
 - a. Containers have a rated capacity of less than 110 gallons only.
 - b. Containers which formerly held 'P' listed hazardous waste must be triple rinsed in accordance with 35 Ill. Adm. Code 721.107(b)(3)(A).
 - c. TSCA regulated quantities of PCBs or empty compressed gas cylinders are not included under this permit. Containers which formerly held TSCA regulated quantities of PCBs are subject to the TSCA requirements administered by the USEPA.

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- c. All containers must meet the definition of empty as described in 35 Ill. Adm. Code, Section 721.107(b).
 - d. Additionally, where possible, a copy of the material safety data sheets for products last present in the container shall be obtained and kept on file.
 - e. For drums, at least one end must be removed and the drums must be crushed flat.
- 7. The Special Waste Preacceptance Form shall be utilized for the special waste profile identification requirements of 35 Ill. Adm. Code, Section 811.404(a).
 - 8. The Annual Generator Special Waste Recertification for Disposal Special Waste form (enclosed along with Permit No. 2005-070-LF) shall be utilized for the special waste recertification requirements of 35 Ill. Adm. Code, Section 811.404(b).
 - 9. The operator shall retain all special waste records until the end of the post-closure period in accordance with 35 Ill. Adm. Code, Section 811.405.

B. SOLIDIFICATION OF SPECIAL WASTE

- 1. Waste solidification shall take place in liquid tight and structurally sound inspectable containers like steel drums and roll-off containers placed over an area that has both a certified liner and an operating leachate collection system that meet the standards of 35 Ill. Adm. Code 811.306, 811.307 and 811.308. The solidification area shall be at least 10-feet above the landfill floor, and at least 30-feet from the landfill sidewall liner. Berms shall be constructed around the solidification area to prevent run-off from the area.
- 2. Solidification of liquid wastes destined for disposal in CWU shall occur within the limits of CWU.
- 3. Solidification containers shall be adequately spaced to allow inspections and equipment access. No more than 10 drums and 10 roll-off containers shall be used at any one time.
- 4. All special waste generators which send liquid waste to this facility for solidification and disposal must have an Illinois EPA generator number.
- 5. Only non-hazardous wastes as defined in 35 Ill. Adm. Code 722.111 may be received for solidification at this facility.

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6. This permit approves the use of the following reagents and absorbents in the solidification process:

a. Reagents

- i. Lime
- ii. Pozzalime
- iii. Fly ash from coal combustion
- iv. Bottom ash from coal combustion
- v. Cements (only used for TSCA regulated PCB liquids to be disposed in CWU)
- vi. Bentonite (only used for TSCA regulated PCB liquids to be disposed in CWU)

b. Absorbents

- i. Soil
- ii. Oil Dry
- iii. Sawdust
- iv. Corn cobs

All reagents and absorbents used must not exhibit any characteristic which would classify it as a hazardous waste. Use of other materials or wastes other than those listed above shall be subject to approval by the Illinois EPA permit process.

7. Lime, Pozzalime, Fly ash from coal combustion, Bottom ash from coal combustion, Cements, Bentonite, Soil, Oil Dry, Saw Dust and Corn cobs has been approved for use as waste solidification agents. Purchased Lime, Pozzalime, Cements, Bentonite, sawdust and Corn Cobs; uncontaminated soil; and unused oil dry are not considered waste. Any other solidification agents are considered waste and shall be managed as such, unless approval for their use as solidification agents has been obtained through one of the beneficial use determination (BUD) processes described in Sections 3.135 and 22.54 of the Act.

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8. Absorbents and reagents will be stockpiled on site in accordance with the facility's Storm Water Pollution Prevention Plan. Absorbent stockpiles shall not contain more than 500 cubic yards of absorbent materials. Reagent stockpiles shall be covered to protect the reagents from precipitation and wind. Reagent stockpiles shall not contain more than 120 cubic yards of reagents. Storage of reagents and absorbents shall not contribute to a violation of Section 21(a), Section 12, or Section 9 of the Act.
9. The solidification unit must be operated so as to minimize spilling reagents/absorbents and waste. Any spilled reagents/absorbents and waste shall be removed on a daily basis.
10. The following conditions are applicable to any waste containing a liquid phase(s) (fails paint filter):
 - a. Each phase must be analyzed for total organic halogen (TOX) using the test method specified in 35 Ill. Adm. Code, Part 729. Any waste containing 10,000 ppm or greater of TOX must be analyzed to determine the specific constituents, and their concentrations, that make up TOX. These constituents and their concentration should be reported on the lab analysis report. Any liquid containing multiple phases must include individual analyses for each phase;
 - b. Wastes destined for disposal in CWU shall be analyzed for total PCBs;
 - c. The preacceptance documentation must include a description of the solidification method used at the generating site (or off-site permitted treatment facility) with test results demonstrating that the solidified waste passes the paint filter test; and
 - d. If a waste is used to solidify the liquid (i.e., two or more wastes are mixed) all required testing must be performed on the solidified waste. Otherwise, all testing (except paint filter) may be performed on the waste before solidification and a statement from the generator may be accepted certifying that the additives used have been evaluated and there is no reason to believe they would cause the waste to become hazardous.
11. The permittee shall not perform solidification if the bench-scale reactivity test(s) determines incompatibility of the waste and reagent.
12. The following information shall be documented in the facility's operating record for each load of waste received for solidification:

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- a. Date the load was received;
 - b. Manifest number associated with the waste load;
 - c. Waste name;
 - d. Volume of waste received;
 - e. Generator name, location and Illinois EPA generator number or hauler number, if not a special waste;
 - f. Results of all analyses conducted on the waste load;
 - g. Type of reagent and/or absorbent used to solidify the waste; and
 - h. Documentation that the solidified waste does not exhibit hazardous characteristics as defined in 35 Ill. Adm. Code 721 Subpart C, e.g., result of the compatibility test done in accordance with the facility's waste analysis plan.
13. Each load of the solidified waste shall be sampled and tested by the paint filter test described in 35 Ill. Adm. Code 729.320 prior to disposal. Waste that yields fluid may not be disposed.
 14. A complete TCLP analysis shall be performed on solidified waste resulting from a liquid waste with a pH <5 to demonstrate that no hazardous waste has been produced.
 15. By the end of each day of the operation, all waste received for treatment shall be solidified. Solidified wastes shall be removed from the solidification unit and disposed of at the active disposal face of the landfill no later than the end of next business day.
 16. All wash water generated from the solidification unit shall be managed in the same manner as leachate.
 17. The solidification unit may be operated from 6:00 a.m. to 6:00 p.m. Monday through Friday and 6:00 a.m. to 3:00 p.m. on Saturday.
 18. In the event of a spill, such materials and equipment necessary must be available on site in order to prevent leachate migration from the contaminated area.

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IV. RECORDKEEPING

1. Information developed by the operator but not yet forwarded to the Illinois EPA in a quarterly or annual report shall be kept at or near the facility for inspection by the Illinois EPA upon request during normal working hours.
2. Information and observations derived from load checking inspections shall be recorded in writing and retained at the facility for at least three years.
3. Every person who delivers special waste to a special waste hauler, every person who accepts special waste from a special waste hauler and every special waste hauler shall retain a copy of the special waste transportation record as a record of each special waste transaction. These copies shall be retained for three years and shall be made available at reasonable times for inspection and photocopying by the Illinois EPA pursuant to Section 4(d) of the Act.
4. The operator shall retain copies of any special waste profile identification sheets, special waste recertifications, certifications of representative samples, special waste laboratory analyses, special waste analysis plans, and any waivers of requirements, at the facility until the end of the closure period and thereafter at the site office until the end of the post-closure care period.
5. Inspections of the closed landfill shall be conducted in accordance with the approved post-closure care plan. Records of field investigations, inspections, sampling and corrective action taken are to be maintained at the site and made available to Illinois EPA personnel. During the post-closure care period, those records are to be maintained at the office of the site operator.
6. The owner or operator shall record and retain near the facility in an operating record or in some alternative location specified by the Illinois EPA, the information submitted to the Illinois EPA pursuant to 35 Ill. Adm. Code, Parts 812 and 813, as it becomes available. At a minimum, the operating record shall contain the following information, even if such information is not required by 35 Ill. Adm. Code, Part 812 or 813:
 - a. Any location restriction demonstration required by 35 Ill. Adm. Code, Sections 811.302, 812.109, and 812.303;
 - b. Inspection records, training procedures, and notification procedures required by 35 Ill. Adm. Code, Section 811.323;
 - c. Gas monitoring results and any remediation plans required by 35 Ill. Adm. Code, Sections 811.310 and 811.311;

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- d. Any MSWLF unit design documentation for placement of leachate or gas condensate in a MSWLF unit required by 35 Ill. Adm. Code, Section 811.107(m);
- e. Any demonstration, certification, monitoring results, testing, or analytical data relating to the groundwater monitoring program required by 35 Ill. Adm. Code, Sections 811.319, 811.324, 811.325, 811.326, 812.317, 813.501 and 813.502;
- f. Closure and post-closure care plans and any monitoring, testing, or analytical data required by 35 Ill. Adm. Code, Sections 811.110, 811.111, 812.114(h), 812.115 and 812.313; and
- g. Any cost estimates and financial assurance documentation required by 35 Ill. Adm. Code Part 811, Subpart G.

V. GENERAL CONDITIONS

- 1. This permit is issued with the expressed understanding that no process discharge to Waters of the State or to a sanitary sewer will occur from these facilities except as authorized by a permit issued by the Bureau of Water. Additionally, all stormwater discharges from the facility shall be authorized by appropriate permit issued by Bureau of Water.
- 2. This permit does not relieve the permittee of the responsibility of complying with the provisions of the State of Illinois Rules and Regulations, 35 Ill. Adm. Code Subtitle B, Air Pollution Control, Chapter 1. The permittee may be required to file reports and/or obtain applicable permits through the Illinois EPA's Bureau of Air (BOA) – Division of Air Pollution Control.

Based upon the information submitted in this application and consultations with BOA – Permit Section, this project requires an Air Pollution Control Construction Permit, pursuant to 35 Ill. Adm. Code 201.142, prior to the construction of the Municipal Solid Waste Landfill. Further, this project may be subject to the New Source Performance Standards (NSPS) for new Municipal Solid Waste Landfills (61 Fed. Reg. 9905 et seq.) that USEPA promulgated on March 12, 1996, i.e., 40 CFR Part 60, Subpart WWW – Standards of Performance for Municipal Solid Waste Landfills. The Illinois EPA's BOA is implementing NSPS, for landfills classified as new Municipal Solid Waste Landfill, pursuant to a delegation agreement between Illinois EPA and USEPA.

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Please contact the Illinois EPA's BOA – Division of Air Pollution Control – Permit Section at 217/782-2113, if you have any questions regarding these requirements.

3. If changes occur which modify any of the information the permittee has used in obtaining a permit for this facility, the permittee shall notify the Illinois EPA. Such changes would include but not be limited to any changes in the names or addresses of both beneficial and legal titleholders to the herein-permitted site. The notification shall be submitted to the Illinois EPA within fifteen days of the change and shall include the name or names of any parties in interest and the address of their place of abode; or, if a corporation, the name and address of its registered agent.
4. Pursuant to 35 Ill. Adm. Code, Section 813.201(a), any modifications to this permit shall be proposed in the form of a permit application and submitted to the Illinois EPA.
5. Pursuant to 35 Ill. Adm. Code, Section 813.301, an application for permit renewal shall be filed with the Illinois EPA at least ninety days prior to the expiration date of this permit.
6. Current, valid Prior Conduct Certification pursuant to 35 Ill. Adm. Code Part 745 is required for all operators of landfills that require a permit.
7. Landfill Operator Certification pursuant to 68 Ill. Adm. Code Part 870 is required for operation of a landfill.
8. The permittee(s) shall submit a 39(i) certification and supporting documentation within 30 days of any of the following events:
 - a. The owner or officer of the owner, or operator, or any employee who has control over operating decisions regarding the facility has violated federal, State, or local laws, regulations, standards, or ordinances in the operation of waste management facilities or sites; or
 - b. The owner or operator or officer of the owner, or operator, or any employee who has control over operating decisions regarding the facility has been convicted in this or another State of any crime which is a felony under the laws of this State, or conviction of a felony in a federal court; or
 - c. The owner or operator or officer of the owner, or operator, or any employee who has control over operating decisions regarding this facility

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has committed an act of gross carelessness or incompetence in handling, storing, processing, transporting, or disposing of waste; or

- d. A new person is associated with the owner or operator who can sign the application form(s) or who has control over operating decisions regarding the facility, such as corporate officer or a delegated employee.

VI. SURFACE WATER CONTROL

1. Runoff from disturbed areas to Waters of the State shall be permitted by the Illinois EPA in accordance with 35 Ill. Adm. Code, Part 309, and meet the requirements of 35 Ill. Adm. Code, Part 304 unless permitted otherwise.
2. All surface water control structures other than temporary diversions for intermediate phases shall be operated until the final cover is placed and erosional stability is provided by the final protective layer of the final cover system.
3. Runoff from undisturbed areas resulting from precipitation events less than or equal to the 25-year, 24-hour precipitation event shall be diverted around disturbed areas where possible and not commingled with runoff from disturbed areas.
4. Site surface drainage, during development, during operation and after the site is closed, shall be managed in accordance with the approved drainage control plan detailed in Permit Application Log Nos. 2005-070, 2008-054, 2010-316 and 2011-505. Stormwater management structures shall be constructed prior to disturbing any portion of a drainage area in accordance with the sequence shown on the phasing plans, Drawing Nos. P-PP1 through P-PP11 provided in Application Log No. 2011-505; and table of Estimated Construction dates provided in Application Log No. 2010-316. (Modification Nos. 9, 15 and 29).

VII. LEACHATE MANAGEMENT/MONITORING

1. Pursuant to 35 Ill. Adm. Code, Section 811.309(h)(3), leachate from this MSWLF landfill shall be collected and disposed beginning as soon as it is first produced and continuing for at least 30 years after closure except as otherwise provided by 35 Ill. Adm. Code, Sections 811.309(h)(4) and (h)(5). Collection and disposal of leachate may cease only when the conditions described in 35 Ill. Adm. Code, Section 811.309(h)(2) have been achieved. Leachate removed from this landfill shall be treated at an Illinois EPA permitted facility in accordance with the leachate management plan proposed in Permit Application Log Nos. 2005-070 and 2008-054.

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2. Pursuant to 35 Ill. Adm. Code, Sections 811.307(a) and (b), 811.308(a) and (h), and 811.309(a), leachate shall be pumped from the side slope riser sump(s) before the level of leachate rises above the invert of the collection pipe(s) at its lowest point(s). Leachate removal as such shall be performed throughout the period that the leachate collection/management system must be operated in accordance with Permit Application Log Nos. 2005-070 and 2008-054.
3. The following monitoring points (leachate collection sumps) are to be used in the Leachate Monitoring Program for this facility:

Leachate Monitoring Points

<u>Applicant Designation</u>	<u>Illinois EPA Designation</u>
L301	L301
L311P	L31P
L311R	L31R
@L302	@L302
L303	L303
@L304	@L304
@L305	@L305
@L306	@L306
@L307	@L307
@L308	@L308
@L309P	@L30P
@L309R	@L30R
@L310	@L310
@L312	@L312
@L313	@L313

@ indicates leachate monitoring points not yet placed into service

P designates primary or upper leachate collection system for CWU

R designates redundant or lower leachate collection system for CWU

4. Pursuant to 35 Ill. Adm. Code, Sections 811.309(g), 722.111 and 721, Subpart C, leachate monitoring (i.e., sampling, measurements and analysis) must be conducted in accordance with the permit for this facility. The concentrations or values for the parameters contained in List L1 (below) shall be determined on a semi-annual basis and the results must be submitted with the groundwater reports.

Each year, the permittee shall collect a representative leachate sample and have it tested for the parameters contained in List L2. Leachate from the CWU shall be analyzed for List L3 parameters on a monthly basis.

Condition VII.6. presents the sampling, testing and reporting schedules in tabular form. Leachate monitoring at each monitoring point shall continue as long as groundwater monitoring at this landfill is necessary pursuant to 35 Ill. Adm. Code, Section 811.319(a)(1)(C).

LIST L1

<u>Leachate Monitoring Parameters</u>	<u>STORET</u>
pH (S.U.)	00400
Elevation Leachate Surface (ft. MSL)	71993
Bottom of Well Elevation (ft. MSL)	72020
Leachate Level from Measuring Point (ft.)	72109
Arsenic (total)	01002
Barium (total)	01007
Cadmium (total)	01027
Iron (total)	01045
Ammonia Nitrogen – N (mg/L)	00610
Bacteria (Fecal Coliform) (FCBR/100 mL)	31616
Biochemical Oxygen Demand (BOD5) (mg/L)	00310
1,1,1,2-Tetrachloroethane	77562
1,1,1-Trichloroethane	34506
1,1,2,2-Tetrachloroethane	34516
1,1,2-Trichloroethane	34511
1,1-Dichloroethane	34496
1,1-Dichloroethylene	34501
1,1-Dichloropropene	77168
1,2,3-Trichlorobenzene	77613
1,2,3-Trichloropropane	77443
1,2,4-Trichlorobenzene	34551
1,2,4-Trimethylbenzene	77222
1,2-Dibromo-3-Chloropropane	38760
1,2-Dichloroethane	34531
1,2-Dichloropropane	34541
1,3,5-Trimethylbenzene	77226
1,3-Dichloropropane	77173
1,3-Dichloropropene	34561
1,4-Dichloro-2-Butene	73547

LIST L1

<u>Leachate Monitoring Parameters</u>	<u>STORET</u>
1-Propanol	77018
2,2-Dichloropropane	77170
2,4,5-tp (Silvex)	39760
2,4,6-Trichlorophenol	34621
2,4-Dichlorophenol	34601
2,4-Dichlorophenoxyacetic Acid (2,4-D)	39730
2,4-Dimethylphenol	34606
2,4-Dinitrotoluene	34611
2,4-Dinitrophenol	34616
2,6-Dinitrotoluene	34626
2-Chloroethyl Vinyl Ether	34576
2-Chloronaphthalene	34581
2-Chlorophenol	34586
2-Hexanone	77103
2-Propanol (Isopropyl Alcohol)	81310
3,3-Dichlorobenzidine	34631
4,4-DDD	39310
4,4-DDE	39320
4,6-Dinitro-O-Cresol	34657
4-Bromophenyl Phenyl Ether	34636
4-Chlorophenyl Phenyl Ether	34641
4-Methyl-2-Pentanone	78133
4-Nitrophenol	34646
Acenaphthene	34205
Acenaphthylene	34200
Acetone	81552
Alachlor	77825
Aldicarb	39053
Aldrin	39330
Alpha - BHC	39337
Aluminum	01105
Anthracene	34220
Antimony	01097
Atrazine	39033
Benzene	34030

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LIST L1

<u>Leachate Monitoring Parameters</u>	<u>STORET</u>
Benzo (a) Anthracene	34526
Benzo (a) Pyrene	34247
Benzo (b) Fluoranthene	34230
Benzo (ghi) Perylene	34521
Benzo (k) Fluoranthene	34242
Beryllium (total)	01012
Beta – BHC	39338
Bicarbonate (mg/L as CaCO3)	00425
Bis (2-Chloro-1-Methylethyl) Ether	73522
Bis (2-Chloroethoxy) Methane	34278
Bis (2-Chloroethyl) Ether	34273
Bis (2-Ethylhexyl) Phthalate	39100
Bis(Chloromethyl) Ether	34268
Boron	01022
Bromobenzene	81555
Bromochloromethane	77297
Bromodichloromethane	32101
Bromoform	32104
Bromomethane	34413
Butanol	45265
Butyl Benzyl Phthalate	34292
Calcium (mg/L)	00916
Carbofuran	81405
Carbon Disulfide	77041
Carbon Tetrachloride	32102
Chemical Oxygen Demand (COD) (mg/L)	00335
Chlordane	39350
Chloride (mg/L)	00940
Chlorobenzene	34301
Chloroethane	34311
Chloroform	32106
Chloromethane	34418
Chromium (total)	01034
Chrysene	34320

LIST L1

<u>Leachate Monitoring Parameters</u>	<u>STORET</u>
Cis-1,2-Dichloroethylene	77093
Cobalt (total)	01037
Copper (total)	01042
Cyanide (mg/L)	00720
DDT	39370
Delta – BHC	46323
Di-N-Butyl Phthalate	39110
Di-N-Octyl Phthalate	34596
Dibenzo (a,h) Anthracene	34556
Dibromochloromethane	32105
Dibromomethane	77596
Dichlorodifluoromethane	34668
Dichloromethane	34423
Dieldrin	39380
Diethyl Phthalate	34336
Dimethyl Phthalate	34341
Endosulfan I	34361
Endosulfan II	34356
Endosulfan Sulfate	34351
Endrin	39390
Endrin Aldehyde	34366
Ethyl Acetate	81585
Ethylbenzene	78113
Ethylene Dibromide (EDB)	77651
Fluoranthene	34376
Flourene	34381
Fluoride (mg/L)	00951
Heptachlor Epoxide	39420
Heptachlor	39410
Hexachlorobenzene	39700
Hexachlorobutadiene	39702
Hexachlorocyclopentadiene	34386
Hexachloroethane	34396
Ideno (1,2,3-cd) Pyrene	34403
Iodomethane	77424

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LIST L1

<u>Leachate Monitoring Parameters</u>	<u>STORET</u>
Isopropylbenzene	77223
Lead (total)	01051
Lindane	39782
Magnesium (total) (mg/L)	00927
Manganese (total)	01055
Mercury (total)	71900
Methoxychlor	39480
Methyl Ethyl Ketone	81595
Naphthalene	34696
Nickel (total)	01067
Nitrate-Nitrogen (mg/L)	00620
Nitrobenzene	34447
Oil. Hexane Soluble (or Equivalent) (mg/L)	00550 or 00552
Parathion	39540
Pentachlorophenol	39032
Phenanthrene	34461
Phenols	32730
Phosphorous (mg/L)	00665
Polychlorinated Biphenyls	39516
Potassium (mg/L)	00937
Pyrene	34469
Selenium	01147
Silver (total)	01077
Specific Conductance (umhos/cm)	00094
Sodium (mg/L)	00929
Styrene	77128
Sulfate (mg/L)	00945
Temperature of Leachate Sample (°F)	00011
Tert-Butylbenzene	77353
Tetrachlorodibenzo-p-Dioxins	34675
Tetrachloroethylene	34475
Tetrahydrofuran	81607
Thallium	01059
Tin	01102

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LIST L1

<u>Leachate Monitoring Parameters</u>	<u>STORET</u>
Toluene	34010
Total Organic Carbon (TOC) (mg/L)	00680
Total Dissolved Solids (TDS) (mg/L)	70300
Total Suspended Solids (TSS) (mg/L)	00530
Toxaphene	39400
Trans-1,2-Dichloroethylene	34546
Trans-1,3-Dichloropropene	34699
Trichloroethylene	39180
Trichlorofluoromethane	34488
Vinyl Acetate	77057
Vinyl Chloride	39175
Xylene	81551
Zinc (total)	01092
m-Dichlorobenzene	34566
m+p-Xylene	61283
n-Butylbenzene	77342
n-Nitrosodimethylamine	34438
n-Nitrosodiphenylamine	34433
n-Nitrosodipropylamine	34428
n-Propylbenzene	77224
o-Chlorotoluene	77275
o-Dichlorobenzene	34536
o-Nitrophenol	34591
o-Xylene	77135
p-Chlorotoluene	77277
p-Cresol	77146
p-Dichlorobenzene	34571
p-Isopropyltoluene	77356
sec-Butylbenzene	77350

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LIST L2

RCRA Parameters for Leachate and Condensate

<u>RCRA PARAMETERS</u>	<u>STORETS</u>	
<u>Ignitability</u>		
Flashpoint, Pensky-Martens Closed Cup (°F)	00497	
<u>Corrosivity</u>		
pH (S.U.)	00400	
<u>Reactivity</u>		
Reactive Cyanide	99040	
Reactive Sulfide	99042	
<u>Toxicity</u>		
	<u>Total</u>	<u>TCLP</u>
	<u>conc.</u>	<u>conc.</u>
	<u>(ug/l)</u>	<u>(mg/L)</u>
Arsenic	01002	99012
Barium	01007	99014
Cadmium	01027	99016
Chromium	01034	99018
Lead	01051	99020
Mercury	71900	99022
Selenium	01147	99024
Silver	01077	99026
Endrin	39390	99028
Lindane	39782	99030
Methoxychlor	39480	99032
Toxaphene	39400	99034
2,4-D	39730	99036
2,4,5-TP Silvex	39760	99038
Benzene	34030	99128
Carbon tetrachloride	32102	99050
Chlordane	39350	99148

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LIST L2

RCRA Parameters for Leachate and Condensate

<u>RCRA PARAMETERS</u>	<u>STORETS</u>	
Chlorobenzene	34301	99096
Chloroform	32106	99149
o-Cresol	77152	99150
m-Cresol	77151	99151
p-Cresol	77146	99152
Cresol	79778	99153
1,4-Dichlorobenzene	34571	99154
1,2-Dichloroethane	34531	99155
1,1-Dichloroethylene	34501	99156
2,4-Dinitrotoluene	34611	99157
Heptachlor (and its epoxide)	39410 and 39420	99158
Hexachlorobenzene	39700	99159
Hexachloro-1,3-Butadiene	39702	99160
Hexachloroethane	34396	99161
Methyl Ethyl Ketone	81595	99060
Nitrobenzene	34447	99062
Pentachlorophenol	39032	99064
Pyridine	77045	99066
Tetrachloroethylene	34475	99068
Trichloroethylene	39180	99076
2,4,5-Trichlorophenol	77687	99078
2,4,6-Trichlorophenol	34621	99080
Vinyl Chloride	39175	99162

LIST L3

<u>Leachate Monitoring Parameters for CWU</u>	<u>STORET</u>
Aroclor 1016	34671
Aroclor 1210	39486
Aroclor 1216	39487
Aroclor 1221	39488
Aroclor 1231	39489

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LIST L3

<u>Leachate Monitoring Parameters for CWU</u>	<u>STORET</u>
Aroclor 1232	39492
Aroclor 1240	39490
Aroclor 1242	39496
Aroclor 1248	39500
Aroclor 1250	39493
Aroclor 1252	39494
Aroclor 1254	39504
Aroclor 1260	39508
Aroclor 1262	81649
Aroclor 1268	81650
Aroclor (unspecified)	39516

Notes for all leachate monitoring parameters:

- a. Flashpoint shall be reported in degrees Fahrenheit. The parameters for reactivity and toxicity shall be reported in parts per million.
- b. The permittee shall obtain metals and organics analysis. Either procedure may be utilized (i.e., total or TCLP), but any constituent whose total concentration exceeds the TCLP limit specified in 35 Ill. Adm. Code, Section 721.124 must be analyzed using the TCLP test and the results reported, unless an alternative test has been approved by the Illinois EPA. TCLP test methods must be in accordance with SW 846-1311.
- c. The test methods for leachate monitoring shall be those approved in the USEPA's Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846), Third Edition or the equivalent thereof.
- d. All parameters shall be determined from unfiltered samples.
- e. The monitoring results should be reported in ug/l units unless otherwise indicated.
5. The schedule for leachate sample collection and submission of monitoring data is illustrated below:

Sampling Period	Sampling Points	Lists	Report Due Date
January 2012	L31P	L3	July 15, 2012
February 2012	L31P	L3	July 15, 2012
March 2012	L31P	L3	July 15, 2012
April – May 2012	L303	L1	July 15, 2012
April – May 2012	LREP	L2	July 15, 2012
April 2012	L31P	L3	July 15, 2012
May 2012	L31P	L3	July 15, 2012
June 2012	L31P	L3	July 15, 2012
July 2012	L31P	L3	January 15, 2013
August 2012	L31P	L3	January 15, 2013
September 2012	L31P	L3	January 15, 2013
Oct-Nov 2012	L31P and L31R	L1	January 15, 2013
Oct-Nov 2012	LREP	L2	January 15, 2013
October 2012	L31P	L3	January 15, 2013
November 2012	L31P	L3	January 15, 2013
December 2012	L31P	L3	January 15, 2013
January 2013	L31P	L3	July 15, 2013
February 2013	L31P	L3	July 15, 2013
March 2013	L31P	L3	July 15, 2013
April – May 2013	L301	L1	July 15, 2013
April – May 2013	LREP	L2	July 15, 2013
April 2013	L31P	L3	July 15, 2013
May 2013	L31P	L3	July 15, 2013
June 2013	L31P	L3	July 15, 2013
July 2013	L31P	L3	January 15, 2014
August 2013	L31P	L3	January 15, 2014
September 2013	L31P	L3	January 15, 2014
Oct-Nov 2013	L31P and L31R	L1	January 15, 2014
Oct-Nov 2013	LREP	L2	January 15, 2014
October 2013	L31P	L3	January 15, 2014
November 2013	L31P	L3	January 15, 2014
December 2013	L31P	L3	January 15, 2014
January 2014	L31P	L3	July 15, 2014
February 2014	L31P	L3	July 15, 2014
March 2014	L31P	L3	July 15, 2014
April – May 2014	L303	L1	July 15, 2014
April – May 2014	LREP	L2	July 15, 2014
April – May 2014	L31P	L3	July 15, 2014
May 2014	L31P	L3	July 15, 2014
June 2014	L31P	L3	July 15, 2014
July 2014	L31P	L3	January 15, 2015
August 2014	L31P	L3	January 15, 2015

Sampling Period	Sampling Points	Lists	Report Due Date
September 2014	L31P	L3	January 15, 2015
Oct-Nov 2014	L31P and L31R	L1	January 15, 2015
Oct-Nov 2014	LREP	L2	January 15, 2015
October 2014	L31P	L3	January 15, 2015
November 2014	L31P	L3	January 15, 2015
December 2014	L31P	L3	January 15, 2015

L1 – Leachate Monitoring Parameters

L2 – Annual RCRA Leachate Parameters

LREP –Representative Leachate Sample

L3 – Leachate Monitoring Parameters for CWU

6. The leachate monitoring data must be submitted in an electronic format. The information is to be submitted as fixed-width text files formatted as found at www.epa.state.il.us/land/waste-mgmt/groundwater-monitoring.html
7. The development of the leachate re-circulation as proposed in application Log No. 2005-070 is hereby approved. Operation of the leachate re-circulation shall not be initiated until an acceptance report has been submitted to and approved by the Illinois EPA as a significant modification pursuant to 35 Ill. Adm. Code, Sections 811.505(d) and 813.203.
8. As proposed in application Log No. 2008-054, upon commencement of waste disposal operations in the CWU, leachate monitoring points L309P and L311P shall be analyzed for PCBs every month. Monitoring data for these analyses shall be submitted along with the leachate monitoring data required by Condition No. VII.5 of this permit.
9. Leachate shall not be re-circulated in the CWU.
10. Leachate from the CWU shall be:
 - a. Solidified in accordance with the approved operating plan and disposed in the Phase 1A of the CWU or another landfill permitted to accept such waste; or
 - b. Transported offsite to a licensed waste treatment facility for thermal destruction, recycling, chemical oxidation, or other treatment in accordance with Toxic Substance Control Act; or
 - c. Upon obtaining approval from a licensed wastewater treatment plant, leachate from the CWU can be transported offsite for treatment and

discharge under a NPDES permit. The operator shall provide written notification to the Illinois EPA, Bureau of Land, Permit Section that necessary approval has been obtained from the wastewater treatment plant to accept leachate from the CWU. This documentation shall be provided prior to commencement of shipping of leachate to the wastewater treatment plant and must include a copy of letter of approval from the wastewater treatment plant.

11. Leachate from the CWU shall be pumped to the CWU leachate storage tank and managed in accordance with Condition No. VII.10. Leachate from the CWU shall not be recirculated in the MSW unit or in any way comingled with the leachate from the MSW unit.
12. The redundant leachate drainage layer located between the upper and lower liner systems of the CWU shall be monitored in accordance with the Leachate Monitoring and Response Action Plan provided in application Log No. 2010-146, addendum dated November 18, 2010 (Modification No. 16).

VIII. GROUNDWATER MONITORING

1. The groundwater monitoring program must be capable of determining background groundwater quality hydraulically upgradient of and unaffected by the units and to detect, from all potential sources of discharge, any releases to groundwater within the facility. The Illinois EPA reserves the right to require installation of additional monitoring wells as may be necessary to satisfy the requirements of this permit.
2. The groundwater monitoring wells shall be constructed and maintained in accordance with the requirements of 35 Ill. Adm. Code, 811.318(d) and designs approved by the Illinois EPA.
3. Groundwater monitoring wells shall be installed in the locations shown in Drawing P-GWMP, of the February 18, 2011 addendum of the permit application, Log No. 2010-268 and application Log No. 2010-316 and screened in the hydrogeologic unit(s) identified as potential contaminant pathway(s) within the zone of attenuation. All wells as listed in Condition VIII.9 must be installed so that samples may be taken prior to waste placement.
4. Within 60 days of installation of any groundwater monitoring well, boring logs compiled by a qualified geologist, well development data and as-built diagrams shall be submitted to the Illinois EPA utilizing the enclosed "Well Completion Report" form. For each well installed pursuant to this permit, one form must be completed.

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5. Groundwater monitoring wells shall be easily visible, labeled with the Illinois EPA monitoring point designations and fitted with padlocked protective covers.
6. In the event that any well becomes consistently dry or unserviceable and therefore requires replacement, a replacement well shall be installed within ten (10) feet of the existing well. The Illinois EPA shall be notified in writing at least 15 days prior to the installation of all replacement wells. A replacement well that is more than ten feet from the existing well or which does not monitor the same geologic zone is considered to be a new well and must be approved via a significant modification permit.
7. All borings, wells and piezometers not used as monitoring points shall be abandoned in accordance with the standards in 35 Ill. Adm. Code 811.316, and the decommissioning and reporting procedures contained in the Illinois Department of Public Health's (IDPH) Water Well Construction Code, 77 Ill. Adm. Code, Part 920 (effective 1/1/92). In the event specific guidance is not provided by IDPH procedures, the enclosed Illinois EPA monitoring well plugging procedures shall be followed.
8. Groundwater sampling and analysis shall be performed in accordance with the requirements of 35 Ill. Adm. Code 811.318(e) and the specific procedures and methods approved by the Illinois EPA.
9. The following monitoring points are to be used in the groundwater detection monitoring program for this facility:

UPPER RADNOR TILL SAND (URTS)

Temporary Upgradient Well

Applicant Designation

Illinois EPA Designation

EX-23S

G07S

Wells Within the Zone of Attenuation

Applicant Designation

Illinois EPA Designation

G49S

G49S

G50S

G50S

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Compliance Boundary Wells

Applicant Designation

G54S

Illinois EPA Designation

G54S

Piezometers

Applicant Designation

*G53S

*G57S

Illinois EPA Designation

*G53S

*G57S

LOWER RADNOR TILL SAND WELLS

Upgradient Wells

Applicant Designation

G01M

G04M

G05M

G08M

Illinois EPA Designation

G01M

G04M

G05M

G08M

Wells Within Zone of Attenuation

Applicant Designation

G16M

#G17M

*R17M

G18M

G19M

*G20M

G40M

G47M

G48M

G49M

G58M

Illinois EPA Designation

G16M

#G17M

*R17M

G18M

G19M

*G20M

G40M

G47M

G48M

G49M

G58M

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Compliance Boundary Wells

Applicant Designation

Illinois EPA Designation

G39M

G39M

Piezometers

Applicant Designation

Illinois EPA Designation

*EX-4

*EX-4

*EX-5

*EX-5

*EX-6

*EX-6

ORGANIC SOIL WELLS

Upgradient Wells

Applicant Designation

Illinois EPA Designation

G01D

G01D

G02D

G02D

G03D

G03D

G07D

G07D

G08D

G08D

Wells Within Zone of Attenuation

Applicant Designation

Illinois EPA Designation

G09D

G09D

#G12D

#G12D

G16D

G16D

#G17D

#G17D

*R17D

*R17D

G18D

G18D

#G19D

#G19D

*R19D

*R19D

*G20D

*G20D

G40D

G40D

G47D

G47D

G48D

G48D

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Wells Within Zone of Attenuation (Cont.)

<u>Applicant Designation</u>	<u>Illinois EPA Designation</u>
G49D	G49D
G58D	G58D
G59D	G59D

Compliance Boundary Wells

<u>Applicant Designation</u>	<u>Illinois EPA Designation</u>
G39D	G39D

Piezometers

<u>Applicant Designation</u>	<u>Illinois EPA Designation</u>
*G06D	*G06D
*G50D	*G50D

ROXANA SILT-ROBEIN MEMBER WELLS

Upgradient Wells

<u>Applicant Designation</u>	<u>Illinois EPA Designation</u>
G07R	G07R

Wells Within Zone of Attenuation

<u>Applicant Designation</u>	<u>Illinois EPA Designation</u>
G08R	G08R
G09R	G09R
#G16R	#G16R
*R16R	*R16R
#G17R	#G17R
*R17R	*R17R
G18R	G18R
G19R	G19R
*G20R	*G20R

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Wells Within Zone of Attenuation (Cont.)

<u>Applicant Designation</u>	<u>Illinois EPA Designation</u>
G40R	G40R
G47R	G47R
G48R	G48R
G49R	G49R
G58R	G58R
G59R	G59R

Compliance Boundary Wells

<u>Applicant Designation</u>	<u>Illinois EPA Designation</u>
G39R	G39R

Piezometers

<u>Applicant Designation</u>	<u>Illinois EPA Designation</u>
*G20R	*G20R
*G04R	*G04R

ADDITIONAL PIEZOMETERS

<u>Applicant Designation</u>	<u>Illinois EPA Designation</u>
*EX-8S	*EX-8S
*EX-8D	*EX-8D
*EX-9	*EX-9

*represents monitoring point(s) added to the monitoring program

#represents monitoring point(s) deleted from the monitoring program.

NOTES:

- a. Upgradient wells screened in the Roxana Silt-Robein Member shall be installed if a downgradient well screened in that zone contains sufficient water and is able to be monitored.

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- b. Wells are to be phased in according to the schedule provided in Table 812.317-1 of February 18, 2011 addendum to Application Log No. 2010-268 and application Log No. 2010-316. The following table shows this schedule:

<u>Operating Phase</u>	<u>Monitoring Wells to be Installed</u>
1	G01M ¹ , G01D, G02D ¹ , G08M, G08D, G08R, G09M, G09D, G09R, G12D,
CWU 1A	G03D ¹ , G05M ¹ , G07S ¹ , G07D ¹ , G07R ¹ , G40M, G40D, G40R, G47M, G47D, G47R, G48M, G48D, G48R, G49M, G49D, G49R, G49S, G50S, G58M, G58D, G58R, G59D, G59R.
CWU 2	G39M ² , G39D ² , G39R ²
2 (Cell 3)	G04M ¹ , G16M, G16D, G16R, G17M, G17D, G17R, G18M, G18D, G18R, G19M, G19D, G19R
3 (Cell 2)	G13M, G13D, G13R, G14M, G14D, G14R, G15M, G15D, G15R
4	G06D ¹ , G21M, G21D, G21R, G22M, G22D, G22R, G23M, G23D, G23R
5	G24M, G24R, G24D, G25M, G25D, G25R, G26M, G26D, G26R, G27M, G27D, G27R, G31M, G31D, G31R
6	G28M, G28D, G28R, G29M, G29D, G29R, G30S, G30M, G30D, G30R
7	G32M, G32D, G32R
8	G36S, G36M, G36D, G36R, G37S, G37M, G37D, G37R, G38S, G38M, G38D, G38R
9	G44S, G44M, G44D, G44R, G45S, G45M, G45D, G45R, G46S, G46M, G46D, G46R
10	G53S, G53D, G53R, G54S ² , G54M ² , G54D ² , G54R ² , G55S, G55M, G55D, G55R, G56S, G56M, G56D, G56R, G57S, G57D, G57R

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Wells noted with a (¹) are upgradient wells. Wells noted with a (²) are compliance boundary wells.

- c. Piezometers are monitored for groundwater elevation data only. Piezometers denoted with a "G" will be incorporated into the detection monitoring program, in accordance with the permitted Phasing Plan. Piezometers denoted with an "EX" will be abandoned as site development progresses.
- 10. The monitoring program, approved by Permit No. 2008-054, shall continue for a minimum period of 30 years after closure and shall not cease until the conditions described in 35 Ill. Adm. Code, 811.319(a)(1)(C) have been achieved. The operator shall collect samples from all of the monitoring points listed in Condition VIII.9, test the samples for the parameters listed in Condition VIII.12 (Lists G1 and G2), and report the results to the Illinois EPA, all in accordance with the schedule in Condition VIII.18.
- 11. The applicable groundwater quality standards (AGQS) and the maximum allowable predicted concentrations (MAPC), as listed in Attachment 1, are subject to the following conditions:
 - a. Temperature and the field parameters involving depth or elevation are not considered groundwater constituents and do not need AGQS.
 - b. For constituents which have not been detected in the groundwater, either the practical quantitation limit (PQL) or the method detection limit (MDL) shall be used as the AGQS.
 - c. MAPCs are only applicable to those wells within the zone of attenuation.
 - d. AGQS are only applicable to upgradient/background and compliance boundary wells.
- 12. AGQS and MAPC values must be determined for all of the parameters which appear in either Lists G1 or G2 (not including groundwater depth or elevations). The AGQS values shall be calculated using a minimum of four (4) consecutive quarters of groundwater monitoring data and employing the statistical method described in the January 11, 2007 addendum to the application, Log No. 2005-070.

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LIST G (Groundwater - Variable)

<u>GROUNDWATER MONITORING PARAMETER</u>	<u>STORETS</u>
Elevation of Bottom of Well (ft. MSL) (Annually without dedicated pumps; every 5 years with dedicated pumps or whenever the pump is pulled)	72020

LIST G1 (Groundwater - Quarterly)

<u>FIELD PARAMETERS</u>	<u>STORETS</u>
pH	00400
Specific Conductance	00094
Temperature of Water Sample (°F)	00011
Depth to Water (ft. below land surface)	72019
Depth to Water (ft. below measuring point)	72109
Elevation of Measuring Point (Top of casing ft. MSL)	72110
Elevation of Groundwater Surface (ft. MSL)	71993

<u>INDICATOR PARAMETERS</u>	<u>STORETS</u>
Ammonia (as Nitrogen; Dissolved) mg/L	00608
Arsenic (Dissolved) ug/L	01000
Boron (Dissolved) ug/L	01020
Cadmium (Dissolved) ug/L	01025
Chloride (Dissolved) mg/L	00941
Chromium (Dissolved) ug/L	01030
Cyanide (Total) mg/L	00720
Lead (Dissolved) ug/L	01049
Magnesium (Dissolved) mg/L	00925
Mercury (Dissolved) ug/L	71890
Nitrate (as Nitrogen, Dissolved) mg/L	00618
Sulfate (Dissolved) mg/L	00946
Total Dissolved Solids (TDS, 180°C; Dissolved) mg/L	70300
Zinc (Dissolved) ug/L	01090

NOTE:

- i. All parameters with the "(Dissolved)" label to the right shall be determined using groundwater samples which have been filtered through a 0.45 micron filter. All other parameters shall be determined from unfiltered samples.

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- ii. Maximum allowable predicted concentrations (MAPCs) and applicable groundwater quality standards (AGQS) are given in ug/L except as otherwise noted. Also, the monitoring results should be reported in ug/L units unless otherwise indicated.
- iii. List G1 and List G2 AGQS/MAPC values are included in Attachment 1.

LIST G2 (Groundwater - Semiannual)

<u>PARAMETERS (ug/L)</u>	<u>STORETS</u>
Acetone	81552
Acrylonitrile	34215
Benzene	34030
Bromobenzene	81555
Bromochloromethane (chlorobromomethane)	77297
Bromodichloromethane	32101
Bromoform (Tribromomethane)	32104
n-Butylbenzene	77342
sec-Butylbenzene	77350
tert-Butylbenzene	77353
Carbon Disulfide	77041
Carbon Tetrachloride	32102
Chlorobenzene	34301
Chloroethane (Ethyl Chloride)	34311
Chloroform (Trichloromethane)	32106
o-Chlorotoluene	77275
p-Chlorotoluene	77277
Dibromochloromethane	32105
1,2-Dibromo-3-Chloropropane	38760
1,2-Dibromoethane	77651
1,2-Dichlorobenzene	34536
1,3-Dichlorobenzene	34566
1,4-Dichlorobenzene	34571
trans-1,4-Dichloro-2-Butene	49263
Dichlorodifluoromethane	34668
1,1-Dichloroethane	34496
1,2-Dichloroethane	34531
1,1-Dichloroethylene	34501
cis-1,2-Dichloroethylene	77093
trans-1,2-Dichloroethylene	34546
1,2-Dichloropropane	34541
1,3-Dichloropropane	77173
2,2-Dichloropropane	77170

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LIST G2 (Groundwater - Semiannual) (cont.)

<u>PARAMETERS</u> (ug/L)	<u>STORETS</u>
1,1-Dichloropropene	77168
1,3-Dichloropropene	34561
cis-1,3-Dichloropropene	34704
trans-1,3-Dichloropropene	34699
Ethylbenzene	78113
Hexachlorobutadiene	39702
2-Hexanone (Methyl Butyl Ketone)	77103
Isopropylbenzene	77223
p-Isopropyltoluene	77356
Methyl Bromide (Bromomethane)	34413
Methyl Chloride (Chloromethane)	34418
Methylene Bromide (Dibromomethane)	77596
Dichloromethane	34423
Methyl Ethyl Ketone	81595
Methyl Iodide (Iodomethane)	77424
4-Methyl-2-Pentanone	78133
Naphthalene	34696
Oil (Hexane-Soluble) (mg/L)	00550
n-Propylbenzene	77224
Styrene	77128
1,1,1,2-Tetrachloroethane	77562
1,1,2,2-Tetrachloroethane	34516
Tetrachloroethylene	34475
Tetrahydrofuran	81607
Toluene	34010
Total Phenolics	32730
1,2,3-Trichlorobenzene	77613
1,2,4-Trichlorobenzene	34551
1,1,1-Trichloroethane	34506
1,1,2-Trichloroethane	34511
Trichloroethylene	39180
Trichlorofluoromethane	34488
1,2,3-Trichloropropane	77443
1,2,4-Trimethylbenzene	77222
1,3,5-Trimethylbenzene	77226
Vinyl Acetate	77057
Vinyl Chloride	39175
Xylenes	81551

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LIST G3 (Groundwater-Semiannual)

<u>PARAMETERS (ug/L)</u>	<u>STORETS</u>
Acenaphthene	34205
Acenaphthylene	34200
Anthracene	34220
Benzene	34030
Benzo(a)anthracene	34526
Benzo(a)pyrene	34247
Benzo(b)fluoranthene	34230
Benzo(ghi)perylene	34521
Benzo(k)fluoranthene	34242
Crysene	34320
Pentachlorophenol	39032
Dibenzo(a,h)anthracene	34556
Ethylbenzene	78113
Fluoranthene	34376
Indeno(1,2,3-cd)pyrene	34403
Naphthalene	34696
PCB-Total	39516
Phenanthrene	34461
Pyrene	34469
Toluene	34010
Xylenes-Total	81551

NOTE:

- i. All parameters with the "(Dissolved)" label to the right shall be determined using groundwater samples which have been filtered through a 0.45 micron filter. All other parameters shall be determined from unfiltered samples.
 - ii. Maximum allowable predicted concentrations (MAPCs) and applicable groundwater quality standards (AGQS) are given in ug/L except as otherwise noted. Also, the monitoring results should be reported in ug/L units unless otherwise indicated.
 - iii. List G1 and List G2 AGQS/MAPC values are included in Attachment 1.
13. Pursuant to 35 Ill. Adm. Code, 811.319(a)(4)(A), any of the following events shall constitute an observed increase only if the concentrations of the constituents monitored can be measured at or above the practical quantitation limit (PQL):

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- a. The concentration of any constituent in List G1 of Condition VIII.12 shows a progressive increase over eight (8) consecutive quarters.
 - b. The concentration of any constituent monitored in accordance with List G1, List G2, or List G3 of Condition VIII.12 exceeds the MAPC at an established monitoring point within the zone of attenuation.
 - c. The concentration of any organic constituent in List G2 or List G3, monitored in accordance with Condition VIII.12 exceeds the preceding measured concentration at any established point.
 - d. The concentration of any constituent monitored at or beyond the edge of the zone of attenuation (compliance boundary) exceeds its AGQS, or pursuant to 811.320(d) any constituent monitored at an upgradient well, exceeds its AGQS.
14. For each round of sampling described in Condition 10 of this Section, the operator must determine if an observed increase has occurred within 90 days of the date initial sampling. If an observed increase is identified, the operator must also notify the Illinois EPA in writing and follow the confirmation procedures of 35 Ill. Adm. Code, 811.319(a)(4)(B). Furthermore, the operator must complete the confirmation procedures within 180 days of the initial sampling event.
 15. Upon confirmation of a monitored increase and within 180 days of the initial sampling date, the operator shall submit a permit application for a significant modification to demonstrate an alternate source per 35 Ill. Adm. Code 811.319(a)(4)(b)(iii) or begin an assessment monitoring program in order to determine whether the solid waste disposal facility is the source of the contamination and to provide information needed to carry out a groundwater impact assessment in accordance with 35 Ill. Adm. Code 811.319(b).
 16. In the event that an alternative source demonstration is denied, pursuant to 35 Ill. Adm. Code 813.105, the operator must commence sampling for the constituents listed in 35 Ill. Adm. Code 811.319(b)(5), and submit an assessment monitoring plan as a significant permit modification, both within 30 days after the dated notification of Agency denial. The operator must sample the well or wells that exhibited the confirmed increase.

In the event that assessment monitoring is required as a result of organic detections in the G52 well nest, well nest G53 shall be installed and monitored as part of the assessment.

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Should the results of the assessment monitoring plan indicate impacts due to the facility, the requirements and timelines of 35 Ill. Adm. Code 811.324, 811.325 and 811.326 must be followed and address the entirety of the Uppermost Aquifer, which includes the Mahomet Aquifer.

17. The first quarterly statistical evaluations shall be performed on groundwater samples taken during the months of July – August, 2007 and the results submitted to the Illinois EPA by October 15, 2007.
18. The schedule for sample collection and submission of quarterly monitoring results is as follows:

<u>Sampling Quarter</u>	<u>Sampling Due</u>	<u>Report Due Date</u>
Jan-Feb (1st)	List G1	April 15
April-May (2nd)	List G, G1 and G2	July 15
July-Aug (3rd)	List G1	October 15
Oct-Nov (4th)	List G1 and G2	January 15

G – Well Depth

G1 - Routine Groundwater Parameters

G2 - Semiannual Groundwater Parameters

In addition, all wells installed for CWU1 and CWU2 (listed in Condition No. VIII.9) shall monitor List G3 for the 2nd and 4th quarter events.

19. Elevation of stick-up is to be surveyed and reported to the Illinois EPA:
 - a. When the well is installed (with the as-built diagrams),
 - b. Every two years thereafter, or
 - c. Whenever there is reason to believe that the elevation has changed.
20. Annually, the operator shall prepare an evaluation of the groundwater flow direction and the hydraulic gradients at the facility using the groundwater surface elevations (Storet #71993) determined for each monitoring event. This assessment shall be submitted with the monitoring results due on July 15.
21. All monitoring points shall be maintained in accordance with the approved permit application such that the required samples and measurements may be obtained.

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22. Background concentrations which exhibit a statistically significant change shall be adjusted and updated in accordance with 35 Ill. Adm. Code 811.320(d)(2) and submitted to the Illinois EPA as a permit modification.
23. Information required by Conditions VIII.10 and VIII.18 must be submitted in an electronic format. The information is to be submitted, as fixed-width text files formatted as found at www.epa.state.il.us/land/waste-mgmt/groundwater-monitoring.html.
24. Note b in Condition No. VIII.9 identifies the phases in which this landfill will be developed and the groundwater monitoring wells associated with each phase. Operating authorization allowing waste disposal to begin in a new phase will not be approved unless the operator has, in a permit application, either:
 - a. Provided documentation that the groundwater monitoring wells, associated with the new phase, have been installed, or
 - b. Satisfactorily demonstrated that any wells associated with the new phase, which have not been installed, are not necessary to adequately monitor the groundwater.
25. The operator shall develop interwell AGQS/MAPC values for all parameters listed in Attachment 1 of the permit for the Roxana Silt-Robein Member unit. The interwell values are to be calculated using a minimum of four consecutive quarters of data from upgradient wells screened within the Roxana Silt-Robein Member, and incorporating the approved statistical methods referenced in Condition VIII.12. The operator shall also provide a contaminant transport model for this zone. The data, calculations, proposed interwell values, and contaminant transport model for the Roxana Silt-Robein Member shall be submitted to the Illinois EPA in the form of an Application for Significant Permit Modification no later than September 30, 2012.

IX. LANDFILL GAS MANAGEMENT/MONITORING

1. The landfill gas monitoring plan described in Application Log No. 2005-070 is approved. Monitoring devices shall be put into service in accordance with the following schedule:
 - a. The gas monitoring probes within the waste boundary shall be installed and put into service within ninety days after final cover has been applied to the various areas where they are located.

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- b. Monitoring devices outside the waste boundary shall be put into service when waste has been disposed in the landfill near that monitoring location.
 - c. Monitoring devices within buildings shall be put into service when waste disposal begins and the building has been constructed.
 - d. Ambient air monitoring devices shall be put into service downwind of the disposal unit after initial receipt of waste.
 - e. Documentation that all the gas monitoring probes outside the waste boundary and the methane monitoring devices within the on-site buildings and ambient air monitoring devices have been installed shall be included with the application for a significant modification requesting authorization to place waste upon new liner.
2. The gas monitoring probes both inside and outside the waste boundary shall be monitored for the following parameters:
- a. Methane;
 - b. Pressure;
 - c. Nitrogen*;
 - d. Oxygen; and
 - e. Carbon Dioxide
- *NOTE: For routine monitoring, Nitrogen may be reported as the net remaining volume fraction after the other measured constituents have been accounted for.
3. The ambient air monitoring devices described in the Application Log No. 2005-070 shall be used to test the air downwind of the landfill for methane.
4. All buildings within the facility boundaries shall be monitored continuously for methane.
5. Gas monitoring shall continue for at least 30 years after closure and may be discontinued only after the conditions described in 35 Ill. Adm. Code, Section 811.310(c)(4) have been achieved.
6. Sampling and testing of the gas monitoring probes and ambient air monitoring shall be performed at least monthly throughout the remaining operating life and during the first five years after closure of the waste disposal unit. During the remainder of the post-closure care period, monitoring may be reduced to quarterly.

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7. Pursuant to 35 Ill. Adm. Code 811.311, in the event of any of the occurrences listed below, the operator must take the steps described in the last two paragraphs of this condition to ensure the protection of human health:
 - a. A methane concentration greater than 50 percent of the lower explosive limit in air is detected in any of the below ground monitoring devices outside the waste boundary;
 - b. A methane concentration greater than 50 percent of the lower explosive limit in air is detected during ambient air monitoring;
 - c. A methane concentration greater than 25 percent of the lower explosive limit in air is detected in any building on or near the facility; or
 - d. Malodors attributed to the unit are detected beyond the property boundary.

First, within two business days of the occurrence, the operator must notify the Illinois EPA in writing using the form LPC-591, pursuant to 35 Ill. Adm. Code 811.311(b)(1). The notification must identify the location of the occurrence and describe its nature (quantitatively if possible). If the gas exceedence is corrected within 30 days, a follow up LPC-591 form may be submitted to the Illinois EPA describing the correction and providing confirmation test results.

Second, if a follow up LPC-591 is not submitted, then within 180 days of the occurrence, the operator must submit to the Illinois EPA an application for a significant modification that either: 1) proposes a gas collection/management system or modifications to the existing gas collection/management system, or 2) demonstrates that the facility is not the cause of the occurrence.

8. The gas probes shall be inspected at least monthly for structural integrity and proper operation.
9. The results from gas monitoring for each calendar year shall be submitted to the Illinois EPA in the annual report required by 35 Ill. Adm. Code, Section 813.504.
10. At the end of the post-closure care period, the gas monitoring probes shall be decommissioned. The probes outside the waste boundary shall be decommissioned using the method described in the enclosed Illinois EPA monitoring well plugging procedure guidance. In decommissioning the probes within the waste disposal unit, the pipes shall be cut off at least two (2) feet below the low permeability layer and plugged. Then the low permeability layer, the protective layer and the vegetation shall be restored in the excavated areas.

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11. The development of the landfill gas collection and disposal system as proposed in application Log No. 2005-070 and as revised in application Log Nos. 2008-054 (Modification No. 9) and 2011-097 (Modification No. 23) is hereby approved. Upon completion of each phase of the landfill gas collection and disposal system the operator:
 - a. May temporarily operate the subject phase of the landfill gas collection and disposal system for a period not exceeding 180-days as a part of a "shakedown period". The temporary operation shall not be in violation of Condition No. V.2 of this permit and/or any condition included in the permit issued by the Illinois EPA's Bureau of Air; and
 - b. Shall submit an acceptance report to the Illinois EPA pursuant to the requirements of 35 Ill. Adm. Code, Sections 811.505(d) and 813.203. The acceptance report shall be submitted in the form of a permit application for significant modification and shall demonstrate that the construction of the subject phase of the landfill gas collection and disposal system has been completed in accordance with the approved designs. The permit application shall be submitted within 45-days of the commencement of the temporary operation referenced in item (a) above.
12. Modification No. 9 approved revision to the gas management system to exclude gas collection from within the CWU. However, if any of the conditions listed in 35 Ill. Adm. Code 811.311(a) are attributable to CWU, the operator shall notify the Illinois EPA in accordance with 35 Ill. Adm. Code 811.311(b) and submit a significant modification meeting the requirements of 35 Ill. Adm. Code 811.311(d) within 180 days of the occurrence.
13. The plan to address methane exceedences observed in perimeter gas probes PGP-1, PGP-2, PGP-3, PGP-4, PGP-8 and PGP-14 provided in application Log Nos. 2011-284 and 2012-042 is hereby approved subject to the following conditions:
 - a. The Illinois EPA must be provided with an evaluation of the landfill gas monitoring data and a recommended action plan. This information shall be submitted in the form of a permit application for significant modification no later than December 15, 2012 and shall also include construction acceptance report for the perimeter gas collector piping and landfill gas collection/management system; and
 - b. The requirements included in the last paragraph of Condition No. IX.7 of this permit does not apply to the methane exceedences observed in perimeter gas probes PGP-1, PGP-2, PGP-3, PGP-4, PGP-8 and PGP-14. This exemption expires December 15, 2012. All other requirements

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outlined in Condition No. IX.7 remains in effect. (Modification Nos. 25 and 27)

X. CLOSURE/POST CLOSURE CARE AND FINANCIAL ASSURANCE

1. The facility shall be closed in accordance with the closure plan provided in Application Log No. 2011-505. The closure plan includes a plan for temporary suspension of waste acceptance. Upon completion of closure activities, the operator shall notify the Illinois EPA that the site has been closed in accordance with the approved closure plan utilizing the Illinois EPA's "Affidavit for Certification of Closure of Solid Waste Landfills permitted under 35 Ill. Adm. Code Parts 813 and 814".
2. Inspections of the closed landfill shall be conducted in accordance with the approved post-closure care plan in Application Log No. 2008-054. Records of field investigations, inspections, sampling and corrective action taken are to be maintained at the site and made available to Illinois EPA personnel. During the post-closure care period, these records are to be maintained at the office of the site operator.
3. If necessary, the soil over the entire planting area shall be amended with lime, fertilizer and/or organic matter. On side slopes, mulch or some other form of stabilizing material is to be provided to hold seed in place and conserve moisture.
4. The minimum post-closure care period for this municipal solid waste landfill (MSWLF) is thirty years. When the post-closure care period has been completed, the operator shall notify the Illinois EPA utilizing the Illinois EPA's LPC-PA1 application form, entitled "General Application for Permit."
5. The owner or operator shall provide financial assurance for closure and post-closure care pursuant to 35 Ill. Adm. Code, Section 811.700(b). Financial assurance shall be required only for those areas for which authorization to operate has been obtained or is being requested.
6. The total cost estimate for closure and post-closure care of the MSW Unit and CWU approved by Modification No. 27 is \$8,038,751.00. The total cost estimates include \$3,435,469.00 for premature closure and \$4,603,282.00 for post-closure care. Cost estimates approved in Modification No. 27 account for closure and post-closure care of Phases 1A, 1B, 1C, 3A and 3B of the MSW Unit covering an area of approximately 24.17 acres; and Phase 1A of the CWU covering an area of approximately 6.14 acres.

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7. The owner or operator shall increase the total amount of financial assurance so as to equal the current cost estimate within 90 days of an increase in the current cost estimate in accordance with 35 Ill. Adm. Code, Section 811.701(b) and Condition No. X.5 of this permit.
8. The owner or operator shall adjust the cost estimates for closure, post-closure, and corrective action for inflation on an annual basis during the following time periods:
 - a. The active life of the unit for the closure cost;
 - b. The active life and post-closure care period for the post-closure cost; and
 - c. Until any corrective action program is completed in accordance with 35 Ill. Adm. Code Section 811.326, for the cost of corrective action.

Each year, no later than June 1 of that year, the owner or operator shall submit a revised cost estimate in the form of a permit application for significant modification. This application shall provide an update to the cost estimate or a certification that there are no changes to the current cost estimates.

XI. RAIL OFF-LOADING FACILITY

1. The Rail Off-Loading Facility shall be constructed, operated and maintained in accordance with the designs, plans and specifications provided in application Log No. 2007-459 and approved in Modification No. 2.
2. The Rail Off-Loading Facility shall be located within the Clinton Landfill 3 facility boundaries as shown on Drawing P-ROF1 submitted in the original application Log No. 2007-459 and approved in Modification No. 2.
3. The Rail Off-Loading Facility consists of a Gondola Car Off-Loading Area and an Intermodal Container Off-Loading Area.
4. The Gondola Car Off-Loading Area includes an overhead structure under which gondola cars will be off-loaded and an elevated platform to support equipment that will transfer wastes from the gondola cars to dump trucks. Litter screening as shown on Drawings P-ROF4 and P-ROF5, provided in application Log No. 2007-459, addendum dated February 11, 2008, shall be installed around the Gondola Car Off-Loading Area.
5. Gondola cars shall be off-loaded only within the Gondola Car Off-Loading Area.

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6. The Gondola Car Off-Loading Area and the area around it shall be cleared of litter daily. The operator shall make an effort to prevent litter from leaving the gondola car off-loading building.
7. No more than four (4) gondola cars shall remain inside the Gondola Car Off-Loading Area at the end of each working day. Gondola cars that contain waste at the end of each working day shall be securely covered to control potential odors. Wastes shall be removed from each gondola car no later than the business day following receipt. If required odor control measures described in the Operating Plan received in the June 21, 2012 addendum to application Log No. 2011-505 (Modification No. 29) shall be implemented.
8. A stable working surface shall be provided for the waste off-loading equipment as well as for the trucks used to transfer waste from the Rail Off-Loading Facility to the active face. The surficial gravel within the Gondola Car Off-Loading Area shall be inspected at least once every week. If required, the surficial gravel shall be removed and replaced with clean gravel to prevent tracking of residues out of the Gondola Car Off-Loading Area.
9. Intermodal containers shall be removed from railcars and transported to the landfill active face. Intermodal containers that cannot be emptied by the end of the operating day shall remain sealed and stored at the Intermodal Container Off-Loading Area or near the active face of Clinton Landfill 3 within the permitted waste boundary until the next working day. No more than eight (8) intermodal containers shall be stored overnight.
10. All wastes received at the Rail Off-Loading Facility (except for un-authorized wastes mentioned in Condition No. II.10) shall be disposed at Clinton Landfill 3.
11. All unauthorized waste received at the Rail Off-Loading Facility shall be managed in accordance with Condition No. II.10 of this permit.
12. Upon completion of construction of the Rail Off-Loading Facility, the operator shall:
 - a. Provide an acceptance report pursuant to 35 Ill. Adm. Code 811.505(d) on its construction to the Illinois EPA's Champaign Regional Office. Upon receipt of notification, the inspector shall be allowed fifteen working days to examine the construction. The Illinois EPA is not obligated to approve the construction or certification. The operator may start receiving waste at the Rail Off-Loading Facility if, having complied with the conditions of

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this section, the designs submitted in application Log No. 2007-459 and Condition No. II.1 of this permit, the operator is not informed of a problem by the Illinois EPA or its agents; and

- b. At the same time Illinois EPA's Champaign Regional Office is given notification that the construction of the Rail Off-Loading Facility has been completed, the Permit Section shall be provided with the information required in acceptance report pursuant to 35 Ill. Adm. Code 811.505(d) on its construction.
13. The Rail Off-Loading Facility shall be closed prior to, or concurrently with Clinton Landfill 3 final closure.
14. The Rail Off-Loading Facility shall be closed in accordance with the closure plan provided in application Log No. 2011-505 (Modification No. 29). A certification report documenting closure of the Rail Off-Loading Facility shall be submitted to the Illinois EPA in the form of an application for Significant Modification within 90-days of completion of closure.
15. Wastes shall be received at the Rail Off-Loading Facility only during the landfill operating hours specified in Condition No. II.11 of this permit.
16. Transportation of waste from the Rail Off-Loading Facility to the Clinton Landfill 3 active face shall occur on roads that are within the Clinton Landfill 3 facility boundaries.
17. Except as provided in Condition Nos. XI. 7 and XI. 9, no waste shall remain at the Rail Off-Loading Facility when the said facility is not operating.
18. All the relevant conditions of Section II of this permit, including but not limited to control of dust, litter, odor and vectors shall be complied with during the operation of the Rail Off-Loading Facility.

XII. MANAGEMENT OF EXCESSIVELY DUSTY WASTES

1. The conditions of this section apply to the management of excessively dusty wastes within a purpose built structure referred to as Waste Processing Facility.
2. The Waste Processing Facility shall be constructed, operated and maintained in accordance with the design, plans and specifications provided in application Log No. 2007-509 (Modification No. 3) and Log No. 2011-505 (Modification No. 29).

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3. The Waste Processing Facility shall be located within the waste boundaries of Clinton Landfill 3 and shall be used to process excessively dusty wastes prior disposal in Clinton Landfill 3, MSW Unit.
4. Waste Processing Facility shall not be used to manage wastes destined for disposal in CWU.
5. The Waste Processing Facility shall be of stressed membrane, metal frame construction as described in application Log No. 2007-509. The liner and leachate collection system in the Waste Processing Cell within the Waste Processing Facility shall consist of the following:
 - 3-foot thick compacted clay liner with permeability no greater than 1×10^{-7} cm/sec;
 - 60-mil textured HDPE liner;
 - 1-foot thick sand drainage layer with a permeability no less than 3×10^{-2} cm/sec;
 - 8 ounce per square yard non-woven geotextile; and
 - 6-inch thick random fill
6. The operator shall make an effort to prevent litter from leaving the Waste Processing Cell. The Waste Processing Facility and area around it shall be cleaned of litter every day.
7. A stable working surface shall be provided for trucks and mechanical mixing equipment accessing the Waste Processing Facility. The surficial aggregate within the Waste Processing Facility shall be inspected at least once every week. If required, the surficial aggregate shall be replaced with clean aggregate to prevent tracking of residues to areas outside of the Waste Processing Facility.
8. Except as allowed in Condition No. XII.9, only clean water shall be used to moisture condition the excessively dusty waste. This process shall be carried out in the Waste Processing Cell within the Waste Processing Facility using mechanical equipment to blend wastes and water together.
9. All liquids draining from the conditioning of dusty wastes shall be collected in the Liquid Collection Sump and managed as leachate. These liquids may be re-used to moisture condition subsequent batches of dusty wastes.

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10. All wastes received at the Waste Processing Facility (except for unauthorized wastes mentioned in Condition No. II.10) shall be disposed at Clinton Landfill 3, MSW Unit.
11. All unauthorized wastes received at the Waste Processing Facility shall be managed in accordance with Condition No. II.10 of this permit.
12. Upon completion of construction of the Waste Processing Facility, the operator shall submit an acceptance report, pursuant to 35 Ill. Adm. Code 811.505(d), to the Illinois EPA. The acceptance report shall be submitted in the form an application for significant modification and shall demonstrate that the construction has been completed in accordance with the approved designs. The Waste Processing Facility shall be placed in service only after approval has been obtained from the Illinois EPA.
13. As noted in application Log No. 2007-509, the Waste Processing Facility is intended to be portable in that it can be located anywhere within the permitted Clinton Landfill 3 waste boundary. The operator shall comply with the requirements of Condition No. XII.12 of this permit every time the Waste Processing Facility is relocated. Additionally, information about management of wastes and waste residues at the prior location of the Waste Processing Facility has to be provided as well.
14. The Waste Processing Facility shall be closed prior to or concurrently with the Clinton Landfill 3 final closure.
15. The Waste Processing Facility shall be closed in accordance with the closure plan provided in application Log No. 2011-505 (Modification No. 29). A certification report documenting the closure of the Waste Processing Facility shall be submitted to the Illinois EPA in the form of an application for Significant Modification within 90-days of completion of closure.
16. Wastes shall be received at the Waste Processing Facility only during the landfill operating hours specified in Condition No. II.11 of this permit.
17. No liquid wastes shall be received at the Waste Processing Facility.
18. The construction of the Waste Processing Facility approved in this permit does not relieve the permittee to file reports and/or obtain applicable permit(s) from the Illinois EPA's Bureau of Air. Furthermore, the operation of the Waste Processing Facility shall not violate any conditions included in the permit(s) issued by the Illinois EPA's Bureau of Air.

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19. The Waste Processing Facility and surrounding area shall be inspected each day during which wastes are processed or otherwise contained within the building. The integrity of the following features shall be inspected to ensure that they remain functional:
 - Waste Processing Cell, including unloading pad and leachate collection system;
 - Leachate storage tanks;
 - Waste Processing Facility roof and sidewalls; and
 - Surface water controls.
20. The operator shall make an effort to process dusty wastes delivered to the Waste Processing Facility prior to the end of the operating day. However, in no case shall the unprocessed waste be stored for more than 72 hours prior to disposal. The maximum volume of waste in storage at any time shall not exceed 120 cubic yards.
21. All relevant conditions of Section II of this permit, including but not limited to control of dust, litter, odor and vectors shall be complied with during the operation of the Waste Processing Facility.

XIII. REPORTING REQUIREMENTS

1. The annual certification shall be submitted to the Illinois EPA during operation and for the entire post-closure monitoring period, pursuant to 35 Ill. Adm. Code 813.501. The certification shall be signed by the operator or duly authorized agent, shall be filed each year by May 1 of the following year, and shall state:
 - a. All records required to be submitted to the Illinois EPA pursuant to 35 Ill. Adm. Code 858.207 and 858.308 have been timely and accurately submitted; and
 - b. All applicable fees required by the Act have been paid in full.
2. The annual report for each calendar year shall be submitted to the Illinois EPA by May 1 of the following year pursuant to 35 Ill. Adm. Code 813.504. The annual report shall include:
 - a. Information relating to monitoring data from the leachate collection system, groundwater monitoring network, gas monitoring system and any other monitoring data specified in this permit, including:

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- i. Summary of monitoring data for the calendar year;
 - ii. Dates of submittal of comprehensive monitoring data to the Illinois EPA during the calendar year;
 - iii. Statistical summaries and analysis of trends;
 - iv. Changes to the monitoring program; and
 - v. Discussion of error analysis, detection limits and observed trends.
 - b. Proposed activities including:
 - i. Amount of waste expected in the next year;
 - ii. Structures to be built within the next year; and
 - iii. New monitoring stations to be installed within the next year.
 - c. Any modification or significant modification affecting operation of the facility; and
 - d. The signature of the operator or duly authorized agent as specified in 35 Ill. Adm. Code 815.102.
3. The permittee shall submit a completed "Solid Waste Landfill Groundwater, Leachate, Facility and Gas Reporting Form" (LPC 591) as a cover sheet for any notices or reports required by the facility's permit for identification purposes. One copy of the LPC 591 form must accompany each report; however, except for electronically formatted data, the permittee must submit one (1) original and a minimum of two (2) copies of each report you submit to the Illinois EPA. The form is not to be used for applications for supplemental permit or significant modification.
4. All certifications, logs, reports, plan sheets and groundwater and leachate monitoring data, required to be submitted to the Illinois EPA by the permittee shall be mailed to the following address:

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Illinois Environmental Protection Agency
Permit Section
Bureau of Land -- #33
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

Except for electronic groundwater and leachate monitoring data, the operator shall provide the Illinois EPA with the original and two (2) copies of all certifications, logs, reports and plan sheets required by this permit.

The applicant may appeal this final decision to the Illinois Pollution Control Board pursuant to Section 40 of the Act by filing a petition for a hearing within 35 days after the date of issuance of the final decision. However, the 35-day period may be extended for a period of time not to exceed 90 days by written notice from the applicant and the Illinois EPA within the initial 35-day appeal period. If the owner or operator wishes to receive a 90-day extension, a written request that includes a statement of the date the final decision was received, along with a copy of this decision, must be sent to the Illinois EPA as soon as possible.

For information regarding the request for an extension, please contact:

Illinois Environmental Protection Agency
Division of Legal Counsel
1021 North Grand Avenue East
Post Office Box 19276
Springfield, IL 62794-9276
217/782-5544

For information regarding the filing of an appeal, please contact:

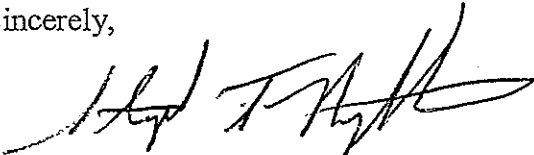
Illinois Pollution Control Board, Clerk
State of Illinois Center
100 West Randolph, Suite 11-500
Chicago, IL 60601
312/814-3620

Work required by this permit, your application or the regulations may also be subject to other laws governing professional services, such as the Illinois Professional Land Surveyor Act of 1989, the Professional Engineering Practice Act of 1989, the Professional Geologist Licensing Act, and the Structural Engineering Licensing Act of 1989. This permit does not relieve anyone from compliance with these laws and the regulations adopted pursuant to these laws. All work

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that falls within the scope and definitions of these laws must be performed in compliance with them. The Illinois EPA may refer any discovered violation of these laws to the appropriate regulating authority.

Sincerely,



Stephen F. Nightingale, P.E.
Manager, Permit Section
Bureau of Land

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Attachments: Standard Conditions

Attachment 1: AGQS/MAPC Interwell Values for Each Monitored Unit

cc: George L. Armstrong, P.E., PDC Technical Services, Inc.
The Honorable Carolyn Peters, Mayor – The City of Clinton

bcc: Bureau File
Champaign Region
Bur Filson
Ellen Robinson, Bob Mathis & Nancy Moore
Imran Syed
Kim Rawe
Mike Summers
Steve Nightingale

STANDARD CONDITIONS FOR CONSTRUCTION/DEVELOPMENT PERMITS
ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
BUREAU OF LAND

August 22, 2001

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) grants the Environmental Protection Agency authority to impose conditions on permits which it issues.

These standard conditions shall apply to all permits which the Agency issues for construction or development projects which require permits under the Bureau of Land. Special conditions may also be imposed in addition to these standard conditions.

1. Unless this permit has been extended or it has been voided by a newly issued permit, this permit will expire two years after date of issuance unless construction or development on this project has started on or prior to that date.
2. The construction or development of facilities covered by this permit shall be done in compliance with applicable provisions of Federal laws and regulations, the Illinois Environmental Protection Act, and Rules and Regulations adopted by the Illinois Pollution Control Board.
3. There shall be no deviations from the approved plans and specifications unless a written request for modification of the project, along with plans and specifications as required, shall have been submitted to the Agency and a supplemental written permit issued.
4. The permittee shall allow any agent duly authorized by the Agency upon the presentation of credentials:
 - a. to enter at reasonable times the permittee's premises where actual or potential effluent, emissions or noise sources are located or where any activity is to be conducted pursuant to this permit.
 - b. to have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit.
 - c. to inspect at reasonable times, including during any hours of operation of equipment constructed or operated under this permit, such equipment or monitoring methodology or equipment required to be kept, used, operated, calibrated and maintained under this permit.
 - d. to obtain and remove at reasonable times samples of any discharge or emission of pollutants.

- e. to enter at reasonable times and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring, or recording any activity, discharge, or emission authorized by this permit.
5. The issuance of this permit:
- a. shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are to be located;
 - b. does not release the permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the proposed facilities;
 - c. does not release the permittee from compliance with other applicable statutes and regulations of the United States, of the State of Illinois, or with applicable local laws, ordinances and regulations;
 - d. does not take into consideration or attest to the structural stability of any units or parts of the project;
 - e. in no manner implies or suggests that the Agency (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.
6. Unless a joint construction/operation permit has been issued, a permit for operating shall be obtained from the Agency before the facility or equipment covered by this permit is placed into operation.
7. These standard conditions shall prevail unless modified by special conditions.
8. The Agency may file a complaint with the Board for modification, suspension or revocation of a permit:
- a. upon discovery that the permit application contained misrepresentations, misinformation or false statements or that all relevant facts were not disclosed; or
 - b. upon finding that any standard or special conditions have been violated; or
 - c. upon any violation of the Environmental Protection Act or any Rule or Regulation effective thereunder as a result of the construction or development authorized by this permit.

SFNSTANDARD CONDITIONS

Attachment 1

AGQS/MAPC Interwell Values for Each Monitored Unit

<u>FIELD PARAMETERS</u>	<u>STORETS</u>	<u>Upper Radnor</u>	<u>Lower Radnor</u>	<u>Organic Soil</u>	<u>Roxana Silt-Robein</u>
pH	00400	6.24-7.75	5.79-7.97	5.98-8.18	
Specific Conductance	00094	1108.7	1457	1383	
Temperature of Water Sample(° F)	00011	----	----	----	----
Depth to Water (ft. below land surface)	72019	----	----	----	----
Depth to Water(ft. below meas. point)	72109	----	----	----	----
Elev. of Meas. Pt.(Top of casing ft. MSL)	72110	----	----	----	----
Elev. of Groundwater Surface(ft. MSL)	71993	----	----	----	----
Elev. of Bottom of Well (ft. MSL)	72020	----	----	----	----

<u>INDICATOR PARAMETERS</u>	<u>STORETS</u>	<u>Upper Radnor</u>	<u>Lower Radnor</u>	<u>Organic Soil</u>	<u>Roxana Silt-Robein</u>
Ammonia (as N; Dissolved) mg/L	00608	23.5	24	25	
Arsenic (Dissolved) ug/L	01000	125.4	346	170	
Boron (Dissolved) ug/L	01020	575.5	622	530	
Cadmium (Dissolved) ug/L	01025	1.0	1.0	1.0	
Chloride (Dissolved) mg/L	00941	8.5	28	33	
Chromium (Dissolved) ug/L	01030	4	4.6	15	----
Cyanide (Total) mg/L	00720	0.005	0.005	0.005	
Iron (Dissolved) ug/L	01046	8278	7600.0	12759.2	
Lead (Dissolved) ug/L	01049	1.0	1.0	2.5	
Magnesium (Dissolved) mg/L	00925	66.4	82.2	72.1	----
Manganese (Dissolved) ug/L	01056	241.4	105.9	272.9	
Mercury (Dissolved) ug/L	71890	0.2	0.2	0.20	
Nitrate (as N, Dissolved) mg/L	00618	0.290	0.14	1.5	
Phenols (Total Recoverable) ug/L	32730	5	5	5	
Sulfate (Dissolved) mg/L	00946	8.4	15	76	
TDS (180°C; Dissolved) mg/L	70300	692.7	870	787	
TOC (Total) mg/L	00680	11.0	14.2	46.0	
Zinc (Dissolved) ug/L	01090	36.52	22	16	

<u>PARAMETERS (ug/L)</u>	<u>STORETS</u>	<u>Upper Radnor</u>	<u>Lower Radnor</u>	<u>Organic Soil</u>	<u>Roxana Silt-Robein</u>
<u>UNFILTERED (totals)</u>					
Acenaphthene	34205	2.0	2.0	2.0	
Acenaphthylene	34200	2.0	2.0	2.0	
Acetone	81552	10.0	10.0	10.0	
Acrolein	34210	50.0	50.0	50.0	
Acrylonitrile	34215	50.0	50.0	50.0	
# Alachlor	77825	0.4	0.4	0.4	
# Aldicarb	39053	0.4	0.4	0.4	
@ Aldrin	39330	0.05	0.05	0.05	
Aluminum	01105	454.413	220069	178253	
Ammonia (as N) (mg/L)	00610	22.0	17.0	18.0	
Anthracene	34220	2.0	2.0	2.0	
# Antimony	01097	3.0	3.0	3.0	
# Arsenic	01002	598.4	128.7	113.4	
Aroclor 1016	79683	0.5	0.5	0.5	
Aroclor 1221	79684	0.5	0.5	0.5	
Aroclor 1232	79685	0.5	0.5	0.5	
Aroclor 1242	79686	0.5	0.5	0.5	
Aroclor 1248	79687	0.5	0.5	0.5	
Aroclor 1254	79688	0.5	0.5	0.5	

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<u>PARAMETERS</u> (ug/L)	<u>STORETS</u>	<u>Upper Radnor</u>	<u>Lower Radnor</u>	<u>Organic Soil</u>	<u>Roxana Silt-Robein</u>
<u>UNFILTERED</u> (totals)					
Aroclor 1260	79689	0.5	0.5	0.5	
# Atrazine	39033	0.2	0.2	0.2	
# Barium	01007	2203.2	1050	541.1	
# Benzene	34030	1.0	1.0	1.0	
Benzo(a)anthracene	34526	0.13	0.13	0.13	
# Benzo(a)Pyrene	34247	0.2	0.2	0.2	
Benzo(b)fluoranthene	34230	0.18	0.18	0.18	
Benzo(ghi)perylene	34521	0.2	0.2	0.2	
Benzo(k)fluoranthene	34242	0.2	0.2	0.2	
# Beryllium	01012	27.0	15.5	2.6	
BOD (mg/L)	00310	67.0	42.6	45.4	
# Boron	01022	1198.7	736.2	564.1	
*Bromobenzene	81555	1.0	1.0	1.0	
*Bromochloromethane	77297	1.0	1.0	1.0	
*Bromodichloromethane	32101	1.0	1.0	1.0	
*Bromoform	32104	1.0	1.0	1.0	
*Bromomethane	34413	2.0	2.0	2.0	
*n-Butylbenzene	77342	1.0	1.0	1.0	
*sec-Butylbenzene	77350	1.0	1.0	1.0	
*tert-Butylbenzene	77353	1.0	1.0	1.0	
# Cadmium	01027	1.0	1.3	1.0	
Calcium (mg/L)	00916	1516.3	774.1	256.3	
# Carbofuran	81405	1.5	1.5	1.5	
Carbon Disulfide	77041	4.0	8.0	26.0	
# Carbon Tetrachloride	32102	1.0	1.0	1.0	
COD (mg/L)	00335	7.0	36.3	109.5	
# Chlordane	39350	0.5	0.5	0.5	
# Chloride (mg/L)	00940	7.8	5.7	13.0	
#*Chlorobenzene	34301	1.0	1.0	1.0	
*Chloroethane	34311	2.0	2.0	2.0	
*Chloroform	32106	1.0	1.0	1.0	
*Chloromethane	34418	2.0	2.0	2.0	
*o-Chlorotoluene	77275	1.0	1.0	1.0	
*p-Chlorotoluene	77277	1.0	1.0	1.0	
# Chromium	01034	810.2	508.9	345.8	
Chrysene	34320	0.2	0.2	0.2	
*Chlorodibromomethane	32105	1.0	1.0	1.0	
# Cobalt	01037	330.6	158.3	26.0	
# Copper	01042	959.3	324.9	351.1	
p-Cresol	77146	10.0	10.0	10.0	
# Cyanide (mg/L)	00720	0.005	0.005	0.005	
# Dalapon	38432	1.5	1.5	1.5	
@ DDT	39370	0.1	0.1	0.1	
Dibenzo(a,h)anthracene	34556	2.0	2.0	2.0	
*Dibromomethane	77596	1.0	1.0	1.0	
*m-Dichlorobenzene	34566	1.0	1.0	1.0	
#*o-Dichlorobenzene	34536	1.0	1.0	1.0	
# p-Dichlorobenzene	34571	1.0	1.0	1.0	
*Dichlorodifluoromethane	34668	2.0	2.0	2.0	
#*Dichloromethane	34423	7.0	7.0	7.0	
@ Dieldrin	39380	0.1	0.1	0.1	
Diethyl Phthalate	34336	10.0	10.0	10.0	
Dimethyl Phthlate	34341	10.0	10.0	10.0	
Di-N-Butyl Phthlate	39110	10.0	10.0	10.0	
# Dinoseb (DNBP)	81287	0.2	0.2	0.2	

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Exhibit E - Citizens' Complaint

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<u>PARAMETERS</u> (ug/L)	<u>STORETS</u>	<u>Upper Radnor</u>	<u>Lower Radnor</u>	<u>Organic Soil</u>	<u>Roxana Silt-Robein</u>
<u>UNFILTERED</u> (totals)					
# Endothall	38926	40.0	40.0	40.0	
# Endrin	39390	0.1	0.1	0.1	
# Di(2-Ethylhexyl)Phthalate	39100	22.0	7.6	7.4	
#*Ethylbenzene	78113	1.0	1.0	1.0	
#*Ethylene Dibromide (EDB)	77651	0.05	0.05	0.05	
Fluoranthene	34376	0.2	0.2	0.2	
# Fluoride (mg/L)	00951	0.80	0.60	0.58	
# Heptachlor	39410	0.05	0.05	0.05	
# Heptachlor Epoxide	39420	0.05	0.05	0.05	
*Hexachlorobutadiene	39702	10.0	10.0	10.0	
# Hexachlorocyclopentadiene	34386	10.0	10.0	10.0	
Ideno(1,2,3-cd)pyrene	34403	2.0	2.0	2.0	
Iodomethane	77424	1.0	1.0	1.0	
# Iron	01045	825948	475695	110816	
Isophorone	34408	10.0	10.0	10.0	
*Isopropylbenzene	77223	1.0	1.0	1.0	
*p-Isopropyltoluene	77356	1.0	1.0	1.0	
# Lead	01051	910.6	309.7	46.0	
# Lindane	39782	0.05	0.05	0.05	
Magnesium (mg/L)	00927	706.6	1300	125.7	
# Manganese	01055	13939.0	7858	2013	
# Mercury	71900	0.2	0.2	0.2	
# Methoxychlor	39480	0.5	0.5	0.5	
*Naphthalene	34696	10.0	10.0	10.0	
# Nickel	01067	885.6	1400	284	
# Nitrate-Nitrogen (mg/L)	00620	0.02	0.02	0.4	
@ Oil(Hexane-Soluble) (mg/L)	00550	5.0	25.0	19.0	
@ Parathion	39540	0.2	0.2	0.2	
# Pentachlorophenol	39032	0.05	0.05	0.05	
# pH	00400	6.24-7.75	6.09-7.51	6.32-7.48	
Phenanthrene	34461	2.0	2.0	2.0	
# Phenols	32730	0.005	0.005	0.005	
# Picloram	39720	0.2	0.2	0.2	
# Polychlorinated Biphenyls	39516	0.5	0.5	0.5	
Potassium (mg/L)	00937	141.7	2300.0	19.8	
*n-Propylbenzene	77224	1.0	1.0	1.0	
Pyrene	34469	0.2	0.2	0.2	
# Selenium	01147	17.9	10.8	2.2	
# Silver	01077	5.0	5.0	5.0	
# Simazine	39055	0.2	0.2	0.2	
Sodium (mg/L)	00929	25.0	7700.0	61.7	
#*Styrene	77128	1.0	1.0	1.0	
# Sulfate (mg/L)	00945	6.4	6.5	38.2	
TOC (mg/L)	00680	11.0	14.2	46.0	
#*Tetrachloroethylene	34475	1.0	1.0	1.0	
Tetrahydrofuran	81607	20.0	20.0	20.0	
# Thallium	01059	1.7	2.5	1.0	
#*Toluene	34010	1.0	1.0	1.0	
# Toxaphene	39400	1.5	1.5	1.5	
# Trichloroethylene	39180	1.0	1.0	1.0	
*Trichlorofluoromethane	34488	1.0	1.0	1.0	
Vanadium	01087	1196.74	486.4	75.0	
# Vinyl Chloride	39175	2.0	2.0	2.0	
Vinyl Acetate	77057	5.0	5.0	5.0	
# Xylenes	81551	3.0	3.0	3.0	

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Exhibit E - Citizens' Complaint

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PARAMETERS (ug/L)	STORETS	Upper Radnor	Lower Radnor	Organic Soil	Roxana Silt-Robein
<u>UNFILTERED</u> (totals)					
*m,p-Xylene	85795	1.0	1.0	1.0	
*o-Xylene	77135	1.0	1.0	1.0	
# Zinc	01092	1808.2	1100	188.7	
*1,1,1,2-Tetrachloroethane	77562	1.0	1.0	1.0	
# 1,1,1-Trichloroethane	34506	1.0	1.0	1.0	
*1,1,2,2-Tetrachloroethane	34516	1.0	1.0	1.0	
#*1,1,2-Trichloroethane	34511	1.0	1.0	1.0	
*1,1-Dichloroethane	34496	1.0	1.0	1.0	
# 1,1-Dichloroethylene	34501	1.0	1.0	1.0	
*1,1-Dichloropropene	77168	1.0	1.0	1.0	
*1,2,3-Trichlorobenzene	77613	1.0	1.0	1.0	
*1,2,3-Trichloropropane	77443	1.0	1.0	1.0	
#*1,2,4-Trichlorobenzene	34551	1.0	1.0	1.0	
*1,2,4-Trimethylbenzene	77222	1.0	1.0	1.0	
#*1,2-Dibromo-3-Chloropropane	38760	0.05	0.05	0.05	
#*cis-1,2-Dichloroethylene	77093	1.0	1.0	1.0	
#*trans-1,2-Dichloroethylene	34546	1.0	1.0	1.0	
# 1,2-Dichloroethane	34531	1.0	1.0	1.0	
#*1,2-Dichloropropane	34541	1.0	1.0	1.0	
*1,3,5-Trimethylbenzene	77226	1.0	1.0	1.0	
*1,3-Dichloropropane	77173	1.0	1.0	1.0	
*1,3-Dichloropropene	34561	1.0	1.0	1.0	
cis-1,3-Dichloropropene	34704	1.0	1.0	1.0	
trans-1,3-Dichloropropene	34699	1.0	1.0	1.0	
trans-1,4-Dichloro-2-Butene	49263	1.0	1.0	1.0	
*2,2-Dichloropropane	77170	1.0	1.0	1.0	
# 2,4,5-TP (Silvex)	39760	0.05	0.05	0.05	
# 2,4-D 39730	0.1	0.1	0.1	1.0	
2-Butanone	81595	5.0	5.0	5.0	
2-Hexanone	77103	5.0	5.0	5.0	
4-Methyl-2-Pentanone	78133	5.0	5.0	5.0	

NOTE:

- i. The preceding list of parameters (G2) includes all those found in Attachment 1 to Appendix C to LPC-PA2. The 51 constituents from 40 CFR 141.40 and the parameters from 35 Ill. Adm. Code 620.410 and the parameters from 35 Ill. Adm. Code 302, designated with (*), (#) and (@) respectively are required to be monitored annually and may not be deleted.
- ii. All parameters with the "(Dissolved)" label to the right shall be determined using groundwater samples which have been filtered through a 0.45 micron filter. All other parameters shall be determined from unfiltered samples.
- iii. Maximum allowable predicted concentrations (MAPCs) and applicable groundwater quality standards (AGQS) are given in ug/L except as otherwise noted. Also, the monitoring results should be reported in ug/L units unless otherwise indicated.

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