ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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217/524-3300

January 8, 2010

CERTIFIED MAIL
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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

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

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

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

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.

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.

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.

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.

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:

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,

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;

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

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 x 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;

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.

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.

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;

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:

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.

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 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 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.

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.

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;

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 $\leq$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.

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;

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.

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.

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:

Leachate Monitoring Points

Applicant Designation	Illinois EPA Designation
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

Leachate Monitoring Parameters	STORET
pH (S.U.)	00400

LIST L1

Leachate Monitoring Parameters	STORET
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

LIST L1

Leachate Monitoring Parameters	STORET
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

LIST L1

Leachate Monitoring Parameters	STORET
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
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

LIST L1

Leachate Monitoring Parameters	STORET
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

LIST L1

Leachate Monitoring Parameters	STORET
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-Dixoins	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-Dichlorpropene	34699
Trichloroethylene	39180

LIST L1

Leachate Monitoring Parameters	STORET
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

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

LIST L2

RCRA Parameters for Leachate and Condensate

RCRA PARAMETERS	STORETS	
Reactivity		
Reactive Cyanide	99040	
Reactive Sulfide	99042	
Toxicity		
	Total conc. (ug/l)	TCLP conc. (mg/L)
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

LIST L2

RCRA Parameters for Leachate and Condensate

RCRA PARAMETERS	STORETS	
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.

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

Sampling Period	Sampling Points	Lists	Report Due Date
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:

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.

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.

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

Roxana Silt-Robein Member Wells

Wells Within Zone of Attenuation

Applicant Designation	Illinois 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

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

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

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)

GROUNDWATER MONITORING PARAMETER	STORETS
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)

FIELD PARAMETERS	STORETS
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

INDICATOR PARAMETERS	STORETS
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.

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)

PARAMETERS (ug/L)	STORETS
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

LIST G2 (Groundwater - Semiannual) (cont.)

PARAMETERS (ug/L)	STORETS
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

LIST G2 (Groundwater - Semiannual) (cont.)

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

LIST G3 (Groundwater-Semiannual)

PARAMETERS (ug/L)	STORETS
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):

    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.

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:

Sampling Quarter	Sampling Due	Report Due Date
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.

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.

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.

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

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.

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

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

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.

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.

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.

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.

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.

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

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
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.

Attachment 1
AGQS/MAPC Interwell Values for Each Monitored Unit

FIELD PARAMETERS	STORETS	Upper Radnor	Lower Radnor	Organic Soil	Roxana Silt-Robein
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	----	----	----	----

INDICATOR PARAMETERS	STORETS	Upper Radnor	Lower Radnor	Organic Soil	Roxana Silt-Robein
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	

PARAMETERS (ug/L)	STORETS	Upper Radnor	Lower Radnor	Organic Soil	Roxana Silt-Robein
UNFILTERED (totals)					
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	

PARAMETERS (ug/L)	STORETS	Upper Radnor	Lower Radnor	Organic Soil	Roxana Silt-Robein
UNFILTERED (totals)					
# 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	

PARAMETERS (ug/L)	STORETS	Upper Radnor	Lower Radnor	Organic Soil	Roxana Silt-Robein
UNFILTERED (totals)					
# 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	
# Hexachlorcyclopentadiene	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	
# Methoxyclor	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
UNFILTERED (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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