

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

PEOPLE OF WILLIAMSON COUNTY *ex rel.*  
STATE'S ATTORNEY CHARLES GARNATI,  
and THE WILLIAMSON COUNTY BOARD,  
Petitioners,

v.

KIBLER DEVELOPMENT CORPORATION,  
MARION RIDGE LANDFILL, INC., and  
ILLINOIS ENVIRONMENTAL PROTECTION  
AGENCY,

Respondents.

No. **PCB08-93**

(Permit Appeal - Land)

**RECEIVED**  
CLERK'S OFFICE  
MAY 29 2008  
STATE OF ILLINOIS  
Pollution Control Board

NOTICE OF FILING

TO:

Douglas Scott, Director  
Illinois Environmental Protection Agency  
1021 North Grand Avenue East  
Springfield, Illinois 62701

Melanie Jarvis  
Illinois Environmental Protection Agency  
1021 North Grand Avenue East  
P.O. Box 19276  
Springfield, Illinois 62794-9276

Kibler Development Corporation  
c/o Registered Agent, Stephan Chodera  
290 South Main Place #101  
Carol Stream, Illinois 60188

Marion Ridge Landfill, Inc.  
c/o Registered Agent, Stephan Chodera  
290 South Main Place  
Carol Stream, Illinois 60188

Patrick Mazza, President  
Kibler Development Corporation  
Marion Ridge Landfill, Inc.  
290 South Main Place  
Carol Stream, Illinois 60188

Stephen Hedinger  
Hedinger Law Office  
2601 South Fifth Street  
Springfield, Illinois 62703

PLEASE TAKE NOTICE that on May 29, 2008, I filed with the Illinois Pollution Control Board, the following: a Petition for Review of Permit & Permit Conditions (with the petition fee), this Notice of Filing, and my Appearance, copies of which are attached hereto and served upon you.

Michael John Ruffley  
Assistant State's Attorney  
200 Jefferson Williamson County Courthouse  
Marion, IL 62959  
(618) 997-5449

PEOPLE OF WILLIAMSON COUNTY *ex rel.* STATE'S  
ATTORNEY CHARLES GARNATI, and THE  
WILLIAMSON COUNTY BOARD.

By: Michael John Ruffley

Attorney for Petitioners

PROOF OF SERVICE

I, Christine Clayton, a non-attorney, under penalties of perjury states that she served the foregoing Notice of Filing, along with copies of document(s) set forth in this Notice, on the above listed persons at the above listed addresses this 29<sup>th</sup> day of May 2008, *via* certified mail, return receipt requested.

Christine Clayton

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

PEOPLE OF WILLIAMSON COUNTY *ex rel.*  
STATE'S ATTORNEY CHARLES GARNATI,  
and THE WILLIAMSON COUNTY BOARD,  
Petitioners,

v.

KIBLER DEVELOPMENT CORPORATION,  
MARION RIDGE LANDFILL, INC., and  
ILLINOIS ENVIRONMENTAL PROTECTION  
AGENCY,

Respondents.

No.

PLS08-93

(Permit Appeal - Land)

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MAY 29 2008

STATE OF ILLINOIS  
Pollution Control Board

APPEARANCE

I hereby file my appearance in this proceeding on behalf of Petitioners, People of Williamson County *ex rel.* State's Attorney Charles Garnati and the Williamson County Board.

Michael John Ruffley  
Assistant State's Attorney Michael John Ruffley

Name Michael John Ruffley, Assistant State's Attorney  
Attorney for Petitioners  
Address 200 Jefferson Williamson County Courthouse  
City Marion, IL 62959  
Telephone (618) 997-5449

**BEFORE THE ILLINOIS POLLUTION CONTROL BOARD**

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STATE'S ATTORNEY CHARLES GARNATI,  
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No.

PCB08-93

(Permit Appeal - Land)

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MAY 29 2008

STATE OF ILLINOIS  
Pollution Control Board

**PETITION FOR REVIEW OF PERMIT & PERMIT CONDITIONS**

NOW COME Petitioners PEOPLE OF WILLIAMSON COUNTY and the WILLIAMSON COUNTY BOARD, by and through the Williamson County State's Attorney and Assistant State's Attorney Michael John Ruffley, and file this Petition for a review of the decision of the Illinois Environmental Protection Agency ("Illinois EPA") granting with conditions the application for a permit to modify Permit, No. 2000-199-LF. In support of this Petition, Petitioners state as follows:

1. This Petition is filed pursuant to Section 5/3-9005(a)(1) of the Illinois Counties Code and Sections 105.204(f) of the Illinois Pollution Control Board Regulations. (55 ILCS 5/3-9005(a)(1), 35 IAC 105.204(f)).

2. This Petition is filed by the State's Attorney of Williamson County, Charles Garnati, in his official capacity, on behalf of the People of Williamson County and the Williamson County Board. This Board and Illinois Court have acknowledged the particular duties of State's Attorneys' embodied in the Illinois Counties Code that give them standing in actions that, ordinarily, other third-parties lack. *E.g., Land and Lakes Co. v. PCB*, 245 Ill.App.3d 361, 616 N.E.2d 349, 354-355 (3<sup>rd</sup> Dist. 1993)(State's Attorney allowed to intervene in permit appeal); *Pioneer Processing Inc. v. EPA*, 102 Ill.2d 119, 464 N.E.2d 238 (S.Ct. 1984)(Attorney General

allowed to seek review of a Board decision in a landfill permit appeal); *AFSCME v. Ryan, et al.*, 347 Ill.App.3d 732, 807 N.E.2d 1235 (5<sup>th</sup> Dist. 2004)(without specific statutory authority under the Illinois Health Facilities Planning Act, State's Attorney allowed to enjoin closure of state mental health facility and require it to follow procedures of that act); *Saline County v. IEPA*, PCB 02-108 (April 18, 2002)(State's Attorney intervened in permit appeal).

3. The State's Attorney is a constitutional officer whose duties and powers largely parallel those of the Attorney General. *People ex rel. Kunstman v. Nagano*, 389 Ill. 231, 249, 59 N.E.2d 96, 104 (1945). One important duty of the State's Attorney is to "commence and prosecute all actions, suits, indictments and prosecutions, civil and criminal, in the circuit court for his county, in which the people of the State or county may be concerned." 55 ILCS 5/3-9005(a)(1). There is a strong public interest in a healthful environment. *See*, Ill. Const. 1970, art. XI, sec. 1. The Williamson County State's Attorney has the duty and authority to represent the interests of the people of Williamson County and the County Board to, among other things, protect their interest in a healthful environment. As discussed further below, the grounds for this petition, including but not limited to the conditions by Illinois EPA allowing a landfill to be developed that is not what the County Board approved pursuant to Section 39.2 of the Illinois Environmental Protection Act ("Act"). (415 ILCS 5/39.2).

4. Although this Board has also held in the past that third-parties have no standing under Section 40(a)(1) of the Illinois Environmental Protection Act to file a petition for review of Illinois EPA municipal solid waste landfill permit decisions, that precedent is not applicable as it has not involved a State's Attorney's petition for review. *E.g., City of Waukegan, et al. v. IEPA, et al.*, PCB 02-173 (May 2, 2002), *citing, Landfill Inc. v. PCB*, 74 Ill.2d 541, 387 N.E.2d 258 (1978).

5. The subject of the application for a permit to modify is the Kibler Development Corporation and Marion Ridge Landfill, Inc. facility located in Williamson County, Illinois. Interestingly, the application sought to resolve two pending permit appeals and was approved with conditions by Illinois EPA nearly two weeks in advance of Illinois EPA's regulatory deadline for review. The first appeal (PCB 05-35) involves permit approval with conditions, among other things, correctly limiting the development of the facility until it complied with FAA setback requirements. The second appeal (PCB 07-43) involves a permit denial of proposed modifications to the permit by Kibler Development Corporation and Marion Ridge Landfill, Inc. that would, in essence, change the type of waste allowed to be accepted at the landfill (essentially limiting it to non-putrescible waste).

6. The subject permit approval with conditions, among other things, changes the type of waste allowed to be accepted at the landfill to non-putrescible waste, unless the FAA approves the non-applicability or a variance from its setback requirements. However, for this, and the other reasons identified below, Illinois EPA has modified the permit to allow a landfill that was not sited by Williamson County. Thus, it is in the public interest of Williamson County to seek the review of the subject permit approval with conditions, to, among other things, ensure that the siting decision of the County is honored by Illinois EPA and that a facility which was not the subject of the public site location hearing is permitted by Illinois EPA in derogation of the County Board's decision making authority and due process, and of the public's interest to participate in such a proceeding.

7. The Illinois EPA approved with conditions the subject permit modification on April 25, 2008 (the decision deadline was June 8, 2008. Pursuant to Section 105.210(a), a copy of the permit is attached to this Petition as **Exhibit A**.

8. Pursuant to Section 105.210(c), the following subparagraphs set forth the grounds for this petition.

- a. Illinois EPA modified the development permit of the subject landfill to extend and change the boundaries of what was approved by the Williamson County Board, including but not limited to changing the type of waste accepted at the facility. These changes have potential impacts to Criterion 1, 2, 5, 6 and 8 of Section 39.2 of the Act.
- b. Although the required notification form is referenced in the subject permit application by Kibler Development Corporation and Marion Ridge Landfill, Inc. as being sent to the County and State's Attorney, on information and belief, neither the County nor State's Attorney received that application from Kibler Development Corporation, Marion Ridge Landfill, Inc. or its agents.
- c. The permit allows development of a facility over a public roadway for which Kibler Development Corporation and Marion Ridge Landfill, Inc. have not sought vacation from the County, that has not been vacated and, at this time, may not be feasible to vacate. Moreover, if that public roadway is not vacated, it requires a substantially different design, construction and operational plans, changes the facility capacity, and likely different traffic patterns, impacting Criterion 2, 3, 5, and 6 of Section 5/39.2 of the Act.
- d. The Illinois EPA in approving with conditions the permit modification had deviated from its precedent to deny modification to permits outside the scope of the sited boundaries.

- e. The Illinois EPA wrongfully determined that siting approval was "not applicable" for a request to modify a development permit and failed to seek confirmation from Williamson County Board whether the applicants' requested modifications were or were not a deviation from the sited facility, depriving the Petitioners of their rights to participate in that process.
- f. The Illinois EPA's issuance of the permit modification with conditions was arbitrary, unreasonable, and lacks any basis in law or fact.
- g. The Illinois EPA has no authority or jurisdiction over to issue a development permit for a facility other than what received site location approval.
- h. The Petitioners reserve the right to raise additional bases for review as they become apparent and reserve their right to bring a jurisdictional dispute to Circuit Court.

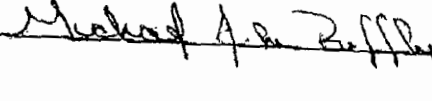
WHEREFORE, Petitioners, People of Williamson County *ex rel.* Charles Garnarti and the Williamson County Board respectful request the Board enter an order allowing this Petition and reversing Illinois EPA's approval with conditions of the subject permit modification and denying that permit modification. If this Board finds that the Petitioners herein do not have standing based on the precedent referenced in Paragraph 4, above, the Petitioners respectfully request that the Board clearly and specifically acknowledge the jurisdictional ground of standing being the sole reason for the denial, as was done, for example, in *City of Waukegan, et al. v. IEPA, et al.*, PCB 02-173 (May 2, 2002), and allowing for the future enforcement or other action by the State's Attorney or County Board.

Dated: May 29, 2008

Respectfully submitted,

PEOPLE OF WILLIAMSON COUNTY *ex rel.*  
STATE'S ATTORNEY CHARLES GARNATI, and  
THE WILLIAMSON COUNTY BOARD,

Michael John Ruffley  
Assistant State's Attorney  
200 Jefferson Williamson County Courthouse  
Marion, IL 62959  
(618) 997-5449

By: 





## ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 - (217) 782-3397  
 JAMES R. THOMPSON CENTER, 100 WEST RANDOLPH, SUITE 11-300, CHICAGO, IL 60601 - (312) 814-6026

ROD R. BLAGOJEVICH, GOVERNOR    DOUGLAS P. SCOTT, DIRECTOR

217/524-3300

April 25, 2008

Owner

Kibler Development Corporation  
 Attn: Mr. Patrick Mazza  
 290 South Main Place  
 Carol Stream, Illinois 60188

Certified Mail

7007 0220 0000 0039 5001  
 7007 0220 0000 0040 2518

Operator

Marion Ridge Landfill, Inc.  
 Attn: Mr. Patrick Mazza  
 290 South Main Place  
 Carol Stream, Illinois 60188

Re: 1990555136 -- Williamson County  
 Marion Ridge Landfill  
 Permit No. 2000-199-LF  
 Modification No. 1  
 Log No. 2008-090  
 Expiration Date: July 15, 2009  
 Permit Landfill 811 File  
 Permit Approval

**RELEASABLE**

MAY 15 2008

**REVIEWER MD**

Dear Mr. Mazza:

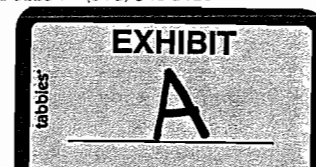
Permit was hereby granted to Kibler Development Corporation as owner and Marion Ridge Landfill, Inc. as operator, allowing modification of the above referenced existing municipal solid waste and non-hazardous special waste landfill all in accordance with the application and plans identified as Log No. 2000-199. 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 designated in the heading above.

Permit No. 2000-199-LF approved:

- A. The development of this landfill in accordance with the requirements of Title 35, Illinois Administrative Code (hereinafter 35 IAC), Subtitle G, Parts 811 and 812, pursuant to 35 IAC, Section 813.107;
- B. The development of a new MSWLF unit consisting of an approximately 358 acre facility with 189 acres for disposal with an "in-place" disposal capacity of approximately 37,152,000 cubic yards, including daily and intermediate cover, but excluding final cover. The maximum final elevation shall be approximately 640 feet above mean sea level;
- C. The lower waste boundaries and the waste footprint approved by this permit are shown on the drawing entitled "Sheet 6: Liner - Leachate collection system".  
 The final contours approved by this permit are shown on the drawing entitled

ROCKFORD - 4302 North Main Street, Rockford, IL 61103 - (815) 987-7760    •    DES PLAINES - 9511 W. Harrison St., Des Plaines, IL 60016 - (847) 294-4000  
 ELGIN - 595 South State, Elgin, IL 60123 - (847) 608-3131    •    PEORIA - 5415 N. University St., Peoria, IL 61614 - (309) 693-5463  
 BUREAU OF LAND - PEORIA - 7620 N. University St., Peoria, IL 61614 - (309) 693-5462    •    CHAMPAIGN - 2125 South First Street, Champaign, IL 61820 - (217) 278-5800  
 SPRINGFIELD - 4500 S. Sixth Street Rd., Springfield, IL 62706 - (217) 786-6892    •    COLLINSVILLE - 2009 Mall Street, Collinsville, IL 62234 - (618) 346-5120  
 MARION - 2309 W. Main St., Suite 116, Marion, IL 62959 - (618) 993-7200

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"Sheet 8: Final site conditions"; furthermore, the upper waste boundaries approved by this permit are defined by the final contours within the waste footprint minus the design thickness of the final cover system (i.e. 4.5 feet). Both sheets are in the August 30, 2002 addendum to Permit Application Log No. 2000-199; and

- D. Acceptance of special waste streams without individual special waste stream authorizations, upon obtaining a permit allowing waste disposal, in accordance with the special conditions listed in Part III of this permit.

Modification No. 1 to Permit No. 2000-199-LF is hereby granted to Kibler Development Company as owner and Marion Ridge Landfill, Inc. as operator, approving a modification of an existing municipal solid waste and non-hazardous special waste landfill, all in accordance with the application prepared by Steven F. Hedinger, esq., and signed and sealed by Michael W. Rapps, P.E., signature dated March 6, 2008.

The application, Illinois EPA Log No. 2008-090, was dated and received March 10, 2008.

Specifically, Modification No. 1 approves revisions to the permit's special conditions as proposed by the permittee to settle two permit appeals, Illinois Pollution Control Board Case Nos. PCB05-35 and PCB07-43.

Additionally, the Illinois EPA is modifying the permit pursuant to 35 Ill. Adm. Code Section 813.201(b)(1)(D) in response to Illinois Pollution Control Board rulemaking Docket No. R2007-008 and Permit Section procedures: Condition I.12 was modified to require use of GRI standards for geomembrane testing; condition V.10 was added requiring submittal of compliance with Section 39(i) of the Act; and the leachate monitoring section was revised to comply with the new regulations.

Docket No. R2007-008 is available online at <http://www.ipcb.state.il.us/Cool/External/CaseView2.asp?referer=coolsearch&case=13041>

The compliance form for 39(i) certification is at <http://www.epa.state.il.us/land/regulatory-programs/permits-and-management/forms/index.html>

Except for the changes described in the following table, the special conditions in the permit letter for Modification No. 1 to Permit No. 2000-199-LF are identical to the special conditions in the permit letter for Permit No. 2000-199-LF, issued July 23, 2004.

Condition in Permit No. 2000-199-LF	Condition in Modification No. 1	Description of change
I.12	I.12	Revised to require use of GRI standards for geomembrane testing

N/A	II.25	New condition requiring FAA approval or exemption before accepting MSW
V.9	V.9	Revised to note permission is only required for inhabited structures in place before permitting
N/A	V.10	New condition requiring submittal of 39(i) compliance forms
VII.3	N/A	Deleted obsolete condition requiring adding parameters found to groundwater sampling lists
VII.4	VII.3	Renumbered, added note about points not yet constructed
VII.5	VII.4	Renumbered, Revised lists L1 and L2, and deleted list L3.
VII.6	VII.5	Renumbered, revised sampling schedule
VII.7	N/A	Deleted obsolete condition requiring quarterly monitoring for 8 quarters
N/A	VII.6	New condition that used to be a note on the sampling schedule requiring electronic submittal of leachate monitoring data

Please be aware that 49 United States Code (“U.S.C.”) Section 44718(d)(1) states: “No person shall construct or establish a municipal solid waste landfill (as defined in section 258.2 of title 40, Code of Federal Regulations, as in effect on the date of the enactment of this subsection) that receives putrescible waste (as defined in section 257.3-8 of such title) within 6 miles of a public airport that has received grants under chapter 471 and is primarily served by general aviation aircraft and regularly scheduled flights of aircraft designed for 60 passengers or less unless the State aviation agency of the State in which the airport is located requests that the Administrator of the Federal Aviation Administration exempt the landfill from the application of this subsection and the Administrator determines that such exemption would have no adverse impact on aviation safety.” At their closest points, Marion Ridge Landfill’s facility boundaries and the runways of the Williamson County Regional Airport appear to be separated by approximately 2.2 miles. If the Marion Ridge Landfill and the Williamson County Regional Airport meet the

criteria described in Section 44718(d)(1) of 49 U.S.C., to demonstrate compliance with Section 44718(d)(1), the landfill operator would need to be able to prove that the Illinois Department of Transportation/Division of Aeronautics requested an exemption for the landfill and the Administrator of the Federal Aviation Administration granted the exemption, before construction of the landfill began. The above paragraph is not intended to create an enforceable duties or obligations under this permit, but rather is merely an identification of federal law which the Illinois EPA believes may be, or may become, relevant to this facility.

Pursuant to Section 39(a) of Illinois Environmental Protection Act (Act) [415 ILCS 5/39(a)] and 35 IAC, 813.104(b), this permit is issued subject to the development, operating and reporting requirements for non-hazardous waste landfills in 35 IAC, 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 IAC, 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 slurry trenches or cutoff walls;
  - d. Installation of the leachate drainage, collection and management systems;
  - e. Placement of final cover;
  - f. Installation of gas control facilities; and
  - g. Construction of ponds, ditches, lagoons and berms.
3. The permittee shall designate an independent third party contractor as the Construction Quality Assurance (CQA) Officer(s). The CQA Officer(s) shall be an Illinois Certified Professional Engineer who is independent from and not under the control or influence of the operator, any employee of the operator, or any

other corporation, company or legal entity that is a subsidiary, affiliate, parent corporation or holding corporation associated with the operator.

4. Except as provided below, the CQA Officer(s) designated pursuant to Condition I.3. shall personally be present during all construction and testing that is subject to CQA certification pursuant to 35 IAC, 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 IAC, 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 permeability test shall be performed for every 10,000 cubic yards of liner soil placed.
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 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 IAC, 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. Applications for operating authorization shall not be made for areas of less than 1.5 acre increments of constructed liner.
10. 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.

11. 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.
12. Effective upon issuance of Modification No. 1 (Log No. 2008-090), all conformance testing of the geomembrane used shall meet the requirements in the Geosynthetic Research Institute's Test Method GM 13 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.

## II. OPERATING CONDITIONS

1. Pursuant to 35 IAC, 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 Illinois Environmental Protection Act (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.
  - m. failure to submit any cost estimate or any financial assurance mechanism for the facility as required by the Act or Board regulations.
3. Moveable, temporary fencing shall be used to prevent blowing litter when the refuse is above the natural ground line.
4. At the end of each day of operation, all exposed waste shall be covered with:
- a. Clean soil at least six (6) inches thick (i.e., conventional daily cover); or
  - b. An alternate cover as described below.
5. Geotextile fabric, plastic panels, degradable plastic sheeting, Sanifoam, Rusmar Foam, and ConCover-Foam are approved as alternate daily cover pursuant to 35 IAC, 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 IAC 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, plastic panels, and degradable plastic sheeting shall be anchored adequately to prevent wind damage. If the alternate daily cover is torn during or after placement they must be repaired immediately or the damaged area must be covered with six inches of daily cover soil. If tires are used as weights for the alternate daily cover, they shall be converted tires, in accordance with 35 IAC, Part 848: Management of Used and Waste Tires.
  - f. A continuous layer of a minimum of one inch thickness of SaniBlanket, 3 inches thickness of Rusmar Foam, or a quarter-inch thickness of ConCover Foam shall be applied to the top of the waste. Application of foam during inclement weather is not allowed unless the foam cover installed meets these requirements. The foams shall only be used when the temperatures are within the manufacturer's recommended range.
  - g. 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.
  - h. 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 low permeability layer shall consist of an 18 inch layer of soil covered with a 40-mil geomembrane. The final protective layer shall consist of either a 12 inch drainage layer of with a hydraulic conductivity  $\geq 10^{-3}$  cm/sec covered with 18 inches of soil and 6 inches of topsoil, or a geo-composite layer covered with 30 inches of soil and 6 inches of topsoil. At a minimum, the top six inches of the protective soil must be capable of supporting vegetation. The total thickness of the final protective layer shall not be less than three feet.



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 IAC, 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 debris from construction-demolition shall be managed in accordance with the National Emission Standards for Hazardous Air Pollutants (NESHAPS) regulations.
10. Management of Authorized 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 IAC, Subtitle M.
  - d. Tires found to be mixed with municipal waste shall be removed and managed in accordance with 35 IAC, Part 848.
  - e. White good components mixed with municipal waste shall be removed and managed in accordance with Section 22.28 of the Act.
  - f. This facility is prohibited from disposing any waste containing polychlorinated bi-phenyls (PCBs) in concentration greater than allowed, pursuant to the Toxic Substance Control Act (TSCA).
  - g. No liquid waste (special or non-special) as determined by the Paint Filter Test shall be disposed unless the waste is from a household or is in a small container similar in size to that normally found in household waste and the container was designed for use other than storage. The prohibition applies to on-site generated wastes except for leachate or gas

- condensate that is specifically approved by permit for recirculation into the landfill. 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.
  - 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 AM to 6:00 PM, Monday through Friday, and 6:00 AM to 2:00 PM on Saturday. Adequate lighting shall be provided for outdoor activities at the landfill occurring before sunrise and 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-FOS Marion 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 IAC, 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 IAC, 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 fire safety 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 IAC, Section 811.109(b)(1) through (5).
24. This permit is for development only. No waste shall be accepted until the Illinois EPA issues a significant modification to operate.
25.
  - a. As an express condition of this permit, the landfill at no time may accept for disposal any putrescible waste (within the meaning of that term as used by 49 U.S.C. 44718(d)(1)) until such time that the landfill owner and/or operator received either (i) the exemption by the Administrator of the Federal Aviation Administration described in 49 U.S.C 44718(d)(1), or (ii) a court order or written agreement by the Federal Aviation Administration stating that 49 U.S.C. 44718(d)(1) does not apply to this landfill for any reason, including grandfathering described in 49 U.S.C. 44718(d)(2).
  - b. This condition may also be included in any operating permit that may be issued for this facility if neither of the documents described in paragraphs (a)(i) or (a)(ii) above have been received prior to issuance of the operating permit.

- c. At such time, if ever, the landfill owner and/or operator receives one of the documents described in paragraphs (a)(i) or (a)(ii) above, the landfill owner and/or operator shall forward the document to the Illinois EPA, Bureau of Land, Permit Section, for review and inclusion with the facility's permit file. Thirty days following submittal of the document to the Illinois EPA, the landfill may begin to accept putrescible waste for disposal and to operate as a putrescible waste landfill in a lined area in which the Illinois EPA has approved a CQA (Construction Quality Assurance) Acceptance Report.

### III. 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 IAC, 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) and a preacceptance analysis from each generator for each waste to be accepted. In addition, the Annual Generator Special Waste and Recertification of for Disposal of Special Waste form, 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 IAC, 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 IAC, 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 IAC, 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 IAC 721.124(a), no manufactured gas plant waste shall be disposed in a non-hazardous waste landfill, unless: i) the waste has been tested in accordance with subsection (d) of this special condition, and ii) the analysis has demonstrated that the waste does not exceed the regulatory levels for any contaminant given in the table contained in 35 IAC 721.124(b).

- g. Pursuant to 35 IAC 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.
  - c. All containers must meet the definition of empty as described in 35 IAC, 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 IAC, Section 811.404(a).

8. The Annual Generator Special Waste Recertification for Disposal Special Waste form shall be utilized for the special waste recertification requirements of 35 IAC, 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 IAC, Section 811.405.

#### 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 IAC, 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 IAC, Part 812 or 813:



- a. Any location restriction demonstration required by 35 IAC, Sections 811.302, 812.109, and 812.303;
- b. Inspection records, training procedures, and notification procedures required by 35 IAC, Section 811.323;
- c. Gas monitoring results and any remediation plans required by 35 IAC, 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 IAC, Section 811.107(m);
- e. Any demonstration, certification, monitoring results, testing, or analytical data relating to the groundwater monitoring program required by 35 IAC, 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 IAC, 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 IAC Part 811, Subpart G.

V. GENERAL CONDITIONS

1. The issuance of this permit 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, including, but not limited to, the Ford Act.
2. 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 Pollution Control.
3. It should be noted that the issuance of this permit does not relieve the Permittee of the responsibility of complying with the provisions of the State of Illinois Rules and Regulations, 35 IAC, Subtitle B, Air Pollution Control, Chapter 1. The Illinois EPA's - Bureau of Air - Division of Air Pollution Control has determined that this project requires both a Construction and Operating permit in accordance with 35 IAC Section 201. If you have any questions regarding this requirement, contact the Illinois EPA's Bureau of Air, Division of Air Pollution Control, Permit Section at 217-782-2113.

4. 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.
5. Pursuant to 35 IAC, 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.
6. Pursuant to 35 IAC, 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.
7. Current, valid Prior Conduct Certification pursuant to 35 IAC Part 745 is required for all operators of landfills that require a permit.
8. Landfill Operator Certification pursuant to 68 IAC Part 870 is required for operation of a landfill.
9. The operator shall conduct a survey of the waste boundaries and adjacent properties before starting construction of the liner. No part of a unit may be located closer than 152 meters (500 feet) from an occupied dwelling, school, or hospital that was occupied on the date when the operator first applied for a permit to develop the unit or the facility containing the unit, unless the owner of such dwelling, school, or hospital provides permission to the operator, in writing, for a closure distance. 35 IAC 811302(d)
10. Effective upon issuance of Modification No. 1 (Log No. 2008-090), the permittee(s) shall submit a 39(i) certification and supporting documentation within 30 days of issuance of Modification No. 1 and thereafter 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, as a 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 IAC, Part 309, and meet the requirements of 35 IAC, Part 304 unless permitted otherwise.
2. All surface water control structures other than temporary diversions for intermediate phases shall be operated until the final cover is placed and erosional stability is provided by the final protective layer of the final cover system.
3. Runoff from undisturbed areas resulting from precipitation events less than or equal to the 25-year, 24-hour precipitation event shall be diverted around disturbed areas where possible and not commingled with runoff from disturbed areas.
4. Site surface drainage, during development, during operation and after the site is closed, shall be managed in accordance with the approved drainage control plan detailed in Permit Application Log No. 2000-199. Stormwater management structures shall be constructed prior to disturbing any portion of a drainage area identified in Application Log No. 2000-199.

#### VII. LEACHATE MANAGEMENT/MONITORING

1. Pursuant to 35 IAC, 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 811.309(h)(4) and (h)(5). Collection and disposal of leachate may cease only when the conditions described in 35 IAC, Section 811.309(h)(2) have been achieved. The leachate recirculation plan proposed in Log No. 2000-199 is approved. Note that the leachate recirculation in each area must cease before final cover is installed in that area. Leachate removed from this landfill shall be treated at a permitted facility in accordance with the leachate management plan proposed in Permit Application Log No. 2000-199.

cover is installed in that area. Leachate removed from this landfill shall be treated at a permitted facility in accordance with the leachate management plan proposed in Permit Application Log No. 2000-199.

2. Pursuant to 35 IAC, Sections 811.307(a) and (b), 811.308(a) and (h), and 811.309(a), leachate shall be pumped from the side slope riser sump(s) before the level of leachate rises above the invert of the collection pipe(s) at its lowest point(s). Leachate removal as such shall be performed throughout the period that the leachate collection/management system must be operated in accordance with Permit Application Log No. 2000-199.
3. The following monitoring points are to be used in the Leachate Monitoring Program for this facility:

Leachate Monitoring Points

<u>Applicant Designation</u>	<u>Illinois EPA Designation</u>
Leachate Manhole 1	@L301
Leachate Manhole 2	@L302
Leachate Manhole 3	@L303
Leachate Manhole 4	@L304
Leachate Manhole 5	@L305
Leachate Manhole 6	@L306
Leachate Manhole 7	@L307
*G99L	@*L308

@ indicates leachate monitoring points not yet placed into service.

\*In the event that monitored concentrations in L308 constitute a significant increase as defined in VIII.13.c.or d., the operator shall follow the resampling and/or assessment procedures of VIII.14 and VIII.15.

4. Pursuant to 35 IAC, 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 submitted with the quarterly groundwater reports.

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

## LIST LI

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

## LIST LI

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

<u>Leachate Monitoring Parameters</u>	<u>STORET</u>
Bicarbonate (mg/L as CaCO <sub>3</sub> )	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 LI

<u>Leachate Monitoring Parameters</u>	<u>STORET</u>
Dibenzo (a,h) Anthracene	34556
Dibromochloromethane	32105
Dibromomethane	77596
Dichlorodifluoromethane	34668
Dichloromethane	34423
Dieldrin	39380
Diethyl Phthalate	34336
Dimethyl Phthalate	34341
Endosulfan I	34361
Endosulfan II	34356
Endosulfan Sulfate	34351
Endrin	39390
Endrin Aldehyde	34366
Ethyl Acetate	81585
Ethylbenzene	78113
Ethylene Dibromide (EDB)	77651
Fluoranthene	34376
Flourene	34381
Fluoride (mg/L)	00951
Heptachlor Epoxide	39420
Heptachlor	39410
Hexachlorobenzene	39700
Hexachlorobutadiene	39702
Hexachlorocyclopentadiene	34386
Hexachloroethane	34396
Ieno (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 LI

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

## LIST LI

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

## LIST L2

## RCRA Parameters for Leachate and Condensate

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

## LIST L2

## RCRA Parameters for Leachate and Condensate

<u>RCRA PARAMETERS</u>	<u>STORETS</u>	
	<u>Reactivity</u>	
Reactive Cyanide	99040	
Reactive Sulfide	99042	
	<u>Toxicity</u>	
	<u>Total</u>	<u>TCLP</u>
	<u>conc.</u>	<u>conc.</u>
	<u>(ug/l)</u>	<u>(mg/L)</u>
Arsenic	1002	99012
Barium	1007	99014
Cadmium	1027	99016
Chromium	1034	99018
Lead	1051	99020
Mercury	71900	99022
Selenium	1147	99024
Silver	1077	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

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

Notes for all leachate monitoring parameters:

- a. 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.
- b. All parameters shall be determined from unfiltered samples.
- c. The monitoring results should be reported in ug/l units unless otherwise indicated.

Notes for List L2 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. For List L2 parameters, either procedure may be utilized (i.e., total or TCLP), but any constituent whose total concentration exceeds the TCLP limit specified in

35 IAC, 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.

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

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

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 in Attachment A. Additional guidance regarding the submittal of the information in an electronic format can be found at [www.epa.state.il.us/land/waste-mgmt/groundwater-monitoring.html](http://www.epa.state.il.us/land/waste-mgmt/groundwater-monitoring.html).

#### 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 Attachment L of the permit application, Log No. 2000-199 and screened in the constructed subgrade layer (equivalent to the Herrin No. 6 coal) and the Springfield-Harrisburg No. 5 coal identified as potential contaminant pathway(s) within the zone of attenuation. All wells as listed in Condition V.9 must be installed prior to application for operating authorization.
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 in permit application Log No. 2000-199.
9. The following monitoring points are to be used in the groundwater detection monitoring program for this facility:

Upgradient Wells

<u>Applicant Designation</u>		<u>Illinois EPA Designation</u>
	<u>Phase 1A: 500 series</u>	
G501		G501
G502		G502
	<u>Phase 1A: 600 series</u>	
G601		G601
G602		G602
G637		G637

Wells Within Zone of Attenuation

<u>Applicant Designation</u>		<u>Illinois EPA Designation</u>
	<u>Phase 4: 500 series</u>	
G503		G503
G504		G504
G505		G505
G506		G506
G507		G507
G508		G508
G509		G509
G510		G510
	<u>Phase 5: 500 series</u>	
G511		G511
G512		G512
G513		G513
G514		G514
G516		G516
G517		G517
	<u>Phase 1A: 600 series</u>	
G603		G603
G604		G604
G605		G605
G606		G606
G608		G608
G609		G609
G610		G610

	<u>Phase 1C: 600 series</u>	
G611		G611
G612		G612
G613		G613

	<u>Phase 2: 600 series</u>	
G614		G614
G615		G615
G616		G616
G617		G617

	<u>Phase 5: 600 series</u>	
G618		G618
G619		G619
G620		G620
G621		G621
G622		G622
G623		G623
G624		G624
G625		G625
G627		G627
G628		G628
G629		G629

	<u>Phase 4: 600 series</u>	
G630		G630
G631		G631
G632		G632
G633		G633
G634		G634
G635		G635
G636		G636

Compliance Boundary Well(s)

Applicant Designation

Illinois EPA Designation

	<u>Phase 5: 500 series</u>	
G515		G515

	<u>Phase 1A: 600 series</u>	
G607		G607



Phase 5: 600 series

G626

G626

- The 500 series wells are screened in the deeper Springfield-Harrisburg No. 5 coal seam.
  - The 600 series wells are screened in the shallower Subgrade layer, which is equivalent to the Herrin No. 6 coal seam.
  - All monitoring wells are to be installed in conjunction with the phasing schedule in Section 12.1 of permit application Log No. 2000-199, and at a minimum of one year prior to placement of waste in the respective phase of the facility.
  - Existing upgradient well G601 will remain in the monitoring well network, but is scheduled for replacement during construction of the subgrade layer during Phase 2. Final determination of the replacement will be submitted to the Illinois EPA for approval in the form of a significant modification to permit.
10. The monitoring program, approved by Permit No. 2000-199, 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 V.9, test the samples for the parameters listed in Condition V.12 (Lists G1 and G2), and report the results to the Illinois EPA, all in accordance with the schedule in Condition V.17.
11. The applicable groundwater quality standards (AGQS) and the maximum allowable predicted concentrations (MAPC), as listed in Condition 12 below, are subject to the following conditions:
- a. Temperature and the field parameters involving depth or elevation are not considered groundwater constituents and do not need AGQS.
  - b. For constituents which have not been detected in the groundwater, the practical quantitation limit (PQL) shall be used as the AGQS.
  - c. MAPCs are only applicable to those wells within the zone of attenuation.
  - d. AGQS are only applicable to upgradient/background and compliance boundary wells.
12. AGQS and MAPC values must be determined for all of the parameters which appear in either Lists G1 or G2 (not including groundwater depth or elevations). The AGQS values shall be calculated using four (4) consecutive quarters of groundwater monitoring data and employing the statistical method described in Section 5.3 of permit application, Log No. 2000-199.

## LIST G1 (Groundwater - Quarterly)

<u>FIELD PARAMETERS</u>	<u>STORETS</u>	<u>500 series</u> <u>AGQS/MAPC</u>	<u>600 series</u> <u>AGQS/MAPC</u>
pH	00400	5.38-9.15	3.59-9.61
Specific Conductance (um/homs)	00094	7,587.72	6,045.10
Temperature of Water Sample (° F)	00011	----	----
Depth to Water (ft. below land surface)	72019	----	----
Depth to Water (ft. below measuring point)	72109	----	----
Elevation of Measuring Point (Top of casing ft. MSL)	72110	----	----
Elevation of Groundwater Surface (ft. MSL)	71993	----	----
Elevation of Bottom of Well (ft. MSL)	72020	----	----
<u>INDICATOR PARAMETERS</u>	<u>STORETS</u>	<u>500 series</u> <u>AGQS/MAPC</u>	<u>600 series</u> <u>AGQS/MAPC</u>
Ammonia (as Nitrogen; Dissolved) mg/L	00608	7.62	0.848
Arsenic (Dissolved) ug/L	01000	160	5
Boron (Dissolved) ug/L	01020	2,820	658
Cadmium (Dissolved) ug/L	01025	77	1
Chloride (Dissolved) mg/L	00941	163.93	16.05
Cyanide (Total) mg/L	00720	0.003	0.003
Iron (Dissolved) ug/L	01046	1,084,140	34,520
Lead (Dissolved) ug/L	01049	610	13
Manganese (Dissolved) ug/L	01056	19,180	5,020
Mercury (Dissolved) ug/L	71890	0.033	0.033
Nitrate (as Nitrogen, Dissolved) mg/L	00618	0.472	2.11
Phenols (Total Recoverable) ug/L	32730	3.7	3.7
Sulfate (Dissolved) mg/L	00946	3,272.97	1,289.54
Total Dissolved Solids (TDS, 180°C; Dissolved) mg/L	70300	21,678.5	2,672.88
Total Organic Carbon (TOC; Total) mg/L	00680	11.49	7.98
Zinc (Dissolved) ug/L	01090	4,490	884

## 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.

## LIST G2 (Groundwater - Annual)

<u>PARAMETERS</u> (ug/L)	<u>STORETS</u>	<u>500 series</u> <u>AGQS/MAPC</u>	<u>600 series</u> <u>AGQS/MAPC</u>
<u>UNRECORDED</u> (totals)			
Acetone	81552	4.78	4.78
Acrolein	34210	2.4	2.4
Acrylonitrile	34215	1.69	1.69
# Alachlor	77825	0.2	0.2
# Aldicarb	39053	0.043	0.043
@ Aldrin	39330	0.008	0.008
Aluminum	01105	453,040	278,770
Ammonia (as N) (mg/L)	00610	7.54	1.12
# Antimony	01097	0.024	0.024
# Arsenic	01002	91	46
# Atrazine	39033	0.036	0.036
# Barium	01007	5,480	1,690
# Benzene	34030	0.2	0.2
# Benzo(a)Pyrene	34247	0.12	0.12
# Beryllium	01012	29	7
BOD (mg/L)	00310	47.05	13.23
# Boron	01022	1,980	374
*Bromobenzene	81555	0.15	0.15
*Bromochloromethane (chlorobromomethane)	77297	0.29	0.29
*Bromodichloromethane	32101	0.17	0.17
*Bromoform (Tribromomethane)	32104	0.3	0.3
*Bromomethane (Methyl Bromide)	34413	0.47	0.47
*n-Butylbenzene	77342	0.13	0.13
*sec-Butylbenzene	77350	0.14	0.14
*tert-Butylbenzene	77353	0.14	0.14
# Cadmium	01027	31	6
Calcium (mg/L)	00916	764.05	485.46
# Carbofuran	81405	0.016	0.016
Carbon Disulfide	77041	0.43	0.43
# Carbon Tetrachloride	32102	0.16	0.16
Chemical Oxygen Demand (COD) (mg/L)	00335	48	120
# Chlordane	39350	0.11	0.11
# Chloride (mg/L)	00940	198.32	16.03
#*Chlorobenzene	34301	0.14	0.14

## LIST G2 (Groundwater - Annual) (cont.)

<u>PARAMETERS</u> (ug/L)	<u>STORETS</u>	<u>500 series</u> <u>AGQS/MAPC</u>	<u>600 series</u> <u>AGQS/MAPC</u>
<u>UNFILTERED</u> (totals)			
*Chloroethane (Ethyl Chloride)	34311	0.42	0.42
*Chloroform (Trichloromethane)	32106	0.33	0.33
*Chloromethane (Methyl Chloride)	34418	0.36	0.36
*o-Chlorotoluene	77275	0.14	0.14
*p-Chlorotoluene	77277	0.19	0.19
# Chromium	01034	1,260	454
*Chlorodibromomethane (Dibromochloromethane)	32105	0.2	0.2
# Cobalt	01037	160	106
# Copper	01042	779	506
p-Cresol	77146	0.57	0.57
# Cyanide (mg/L)	00720	0.003	0.003
# Dalapon	38432	0.16	0.16
@ DDT	39370	0.0086	0.0086
*Dibromomethane (Methylene Bromide)	77596	0.28	0.28
*m-Dichlorobenzene (1,3 Dichlorobenzene)	34566	0.19	0.19
##*o-Dichlorobenzene (1,2 Dichlorobenzene)	34536	0.13	0.13
# p-Dichlorobenzene (1,4 Dichlorobenzene)	34571	0.12	0.12
*Dichlorodifluoromethane	34668	0.15	0.15
##*Dichloromethane (Methylene Chloride)	34423	0.32	0.32
@ Dieldrin	39380	0.0041	0.0041
Diethyl Phthalate	34336	0.91	0.91
Dimethyl Phthlate	34341	0.67	0.67
Di-N-Butyl Phthlate	39110	1.2	1.2
# Dinoseb (DNBP)	81287	0.11	0.11
# Endothall	38926	-	-
# Endrin	39390	0.0023	0.0023
# Di(2-Ethylhexyl)Phthalate	39100	-	-
##*Ethylbenzene	78113	0.13	0.13
##*Ethylene Dibromide (EDB)(1,2-Dibromo ethane)	77651	0.009	0.009
# Fluoride (mg/L)	00951	4.29	0.851
# Heptachlor	39410	0.0021	0.0021
# Heptachlor Epoxide	39420	0.0027	0.0027
*Hexachlorobutadiene	39702	1.2	1.2
# Hexachlorocyclopentadiene	34386	2.3	2.3
Iodomethane (Methyl Iodide)	77424	0.17	0.17
# Iron	01045	850,640	375,550
Isophorone	34408	0.69	0.69

## LIST G2 (Groundwater - Annual) (cont.)

<u>PARAMETERS</u> (ug/L)	<u>STORETS</u>	<u>500 series</u> <u>AGQS/MAPC</u>	<u>600 series</u> <u>AGQS/MAPC</u>
<u>UNFILTERED</u> (totals)			
*Isopropylbenzene	77223	0.11	0.11
*p-Isopropyltoluene	77356	0.15	0.15
# Lead	01051	310	476
# Lindane	39782	0.0016	0.0016
Magnesium (mg/L)	00927	294.88	242.11
# Manganese	01055	11,480	10,010
# Mercury	71900	0.033	0.033
# Methoxychlor	39480	0.01	0.01
*Naphthalene	34696	1.5	1.5
# Nickel	01067	1,330	376
# Nitrate-Nitrogen (mg/L)	00620	2.38	0.487
@ Oil(Hexane-Soluble or Equivalent) (mg/L)	00550	0.665	0.665
@ Parathion	39540	0.029	0.029
# Pentachlorophenol	39032	0.048	0.048
# pH	00400	5.38-9.15	3.59-9.61
# Phenols	32730	62	3.7
# Picloram	39720	0.16	0.16
# Polychlorinated Biphenyls	39516	0.5	0.5
Potassium (mg/L)	00937	138.03	41.04
*n-Propylbenzene	77224	0.14	0.14
# Selenium	01147	106	26
# Silver	01077	1.5	1.5
# Simazine	39055	0.037	0.037
Sodium (mg/L)	00929	664.55	209.38
#*Styrene	77128	0.13	0.13
# Sulfate (mg/L)	00945	2,970.21	1,205.01
TOC (mg/L)	00680	11.49	7.98
#*Tetrachloroethylene (Perchloroethylene)	34475	0.24	0.5
Tetrahydrofuran	81607	1.6	1.6
# Thallium	01059	7	4
#*Toluene	34010	0.18	0.18
# Toxaphene	39400	0.32	0.32
# Trichloroethylene (Trichloroethene)	39180	0.53	0.53
*Trichlorofluoromethane	34488	0.14	0.14
Vanadium	01087	1,100	260
# Vinyl Chloride	39175	0.27	0.27
Vinyl Acetate	77057	0.2	0.2

## LIST G2 (Groundwater - Annual) (cont.)

<u>PARAMETERS</u> (ug/L)	<u>STORETS</u>	<u>500 series</u> <u>AGQS/MAPC</u>	<u>600 series</u> <u>AGQS/MAPC</u>
<u>UNFILTERED</u> (totals)			
# Xylenes	81551	0.34	0.34
*m-Xylene	77134	0.24	0.24
*o-Xylene	77135	0.19	0.19
*p-Xylene	77133	0.24	0.24
# Zinc	01092	1,920	1,060
*1,1,1,2-Tetrachloroethane	77562	0.26	0.26
# 1,1,1-Trichloroethane (Methylchloroform)	34506	0.1	0.1
*1,1,2,2-Tetrachloroethane	34516	0.43	0.43
##*1,1,2-Trichloroethane	34511	0.28	0.28
*1,1-Dichloroethane	34496	0.15	0.15
# 1,1-Dichloroethylene	34501	0.43	0.43
*1,1-Dichloropropene	77168	0.25	0.25
*1,2,3-Trichlorobenzene	77613	0.25	0.25
*1,2,3-Trichloropropane	77443	0.3	0.3
##*1,2,4-Trichlorobenzene	34551	0.31	0.31
*1,2,4-Trimethylbenzene	77222	0.15	0.15
##*1,2-Dibromo-3-Chloropropane (DBCP)	38760	0.013	0.013
##*cis-1,2-Dichloroethylene	77093	0.23	0.23
##*trans-1,2-Dichloroethylene	34546	0.41	0.41
# 1,2-Dichloroethane	34531	0.34	0.34
##*1,2-Dichloropropane (Propylene Dichloride)	34541	0.18	0.18
*1,3,5-Trimethylbenzene	77226	0.13	0.13
*1,3-Dichloropropane	77173	0.21	0.21
*1,3-Dichloropropene	34561	0.16	0.16
cis-1,3-Dichloropropene	34704	0.16	0.16
trans-1,3-Dichloropropene	34699	0.22	0.22
trans-1,4-Dichloro-2-Butene	49263	0.64	0.64
*2,2-Dichloropropane	77170	0.22	0.22
# 2,4,5-TP (Silvex)	39760	0.047	0.047
# 2,4-Dichlorophenoxyacetic Acid (2,4-D)	39730	0.092	0.092
.2-Butanone(Methyl Ethyl Ketone)	81595	0.69	0.69
2-Hexanone (Methyl Butyl Ketone)	77103	0.39	0.39
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	78133	1.73	1.73

NOTE:

- i. All parameters with the "(Dissolved)" label to the right shall be determined using groundwater samples which have been filtered through a 0.45 micron filter. All other parameters shall be determined from unfiltered samples.
  - ii. Maximum allowable predicted concentrations (MAPCs) and applicable groundwater quality standards (AGQS) are given in ug/L except as otherwise noted. Also, the monitoring results should be reported in ug/L units unless otherwise indicated.
  - iii. The preceding list of parameters (G2) includes all those found in Attachment 1 to Appendix C to LPC-PA2. The 51 constituents from 40 CFR 141.40 and the parameters from 35 Ill. Adm. Code 620.410 and the parameters from 35 Ill. Adm. Code 302, designated with (\*), (#) and (@) respectively are required to be monitored annually and may not be deleted.
13. Pursuant to 35 Ill. Adm. Code, 811.319(a)(4)(A), any of the following events shall constitute an observed increase only if the concentrations of the constituents monitored can be measured at or above the practical quantitation limit (PQL):
- a. The concentration of any constituent in List G1 of Condition V.12 shows a progressive increase over four (4) consecutive quarters.
  - b. The concentration of any constituent monitored in accordance with List G1 or List G2 of Condition V.12 exceeds the MAPC at an established monitoring point within the zone of attenuation.
  - c. The concentration of any organic constituent in List G2, monitored in accordance with Condition V.12 exceeds the preceding measured concentration at any established point.
  - d. The concentration of any constituent monitored at or beyond the edge of the zone of attenuation (compliance boundary) exceeds its AGQS, or pursuant to 811.320(d)(1) any constituent monitored at an upgradient well, exceeds its AGQS.
14. For each round of sampling described in Condition 10 of this Section, the operator must determine if an observed increase has occurred within 45 days of the date the samples were collected. If an observed increase is identified, the operator must also notify the Illinois EPA in writing within 10 days and follow the confirmation procedures of 35 Ill. Adm. Code, 811.319(a)(4)(B). Furthermore, the operator must complete the confirmation procedures within 90 days of the initial sampling event.

15. Within 90 days of confirmation of any monitored increase, the operator shall submit a permit application for a significant modification to begin an assessment monitoring program in order to determine whether the solid waste disposal facility is the source of the contamination and to provide information needed to carry out a groundwater impact assessment in accordance with 35 Ill. Adm. Code 811.319(b).
16. The first quarterly statistical evaluations shall be performed on groundwater samples taken during the first quarterly sampling event after issuance of operating authorization and the results submitted to the Illinois EPA in accordance with the schedule in condition VIII.17.
17. The schedule for sample collection and submission of quarterly monitoring results is as follows:

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

G1 - Routine Groundwater Parameters  
 G2 - Annual Groundwater Parameters

18. Elevation of stick-up is to be surveyed and reported to the Illinois EPA:
  - a. When the well is installed (with the as-built diagrams),
  - b. Every two years thereafter, or
  - c. Whenever there is reason to believe that the elevation has changed.
19. Annually, the operator shall prepare an evaluation of the groundwater flow direction and the hydraulic gradients at the facility using the groundwater surface elevations (Storet #71993) determined for each monitoring event. This assessment shall be submitted with the monitoring results due on July 15.
20. All monitoring points shall be maintained in accordance with the approved permit application such that the required samples and measurements may be obtained.
21. Background concentrations which exhibit a statistically significant change shall be adjusted and updated in accordance with 35 Ill. Adm. Code 811.320(d)(1) and



submitted to the Illinois EPA as an application for a significant modification to the permit.

22. Information required by Conditions VIII.10 and VIII.17 must be submitted in an electronic format. The information is to be submitted, as fixed-width text files formatted as found at [www.epa.state.il.us/land/waste-mgmt/groundwater-monitoring.html](http://www.epa.state.il.us/land/waste-mgmt/groundwater-monitoring.html).

#### IX. LANDFILL GAS MANAGEMENT/MONITORING

1. The landfill gas monitoring plan described in Application Log No. 2000-199 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 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. 2000-199 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 IAC, 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 IAC, Section 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. Please note that this project includes air emission units which may require a permit from the Illinois EPA Bureau of Air. Pursuant to 35 IAC, Sections 201.142 and 143, this project requires a construction permit prior to construction and an operating permit prior to operation of the emission units referenced above. You may apply for both a construction and operating permit simultaneously. If you have any questions regarding these requirements, contact the Illinois EPA's Bureau of Air, Division of Air Pollution Control, Permit Section at 217-782-2113.

9. The gas probes shall be inspected at least monthly for structural integrity and proper operation.
10. The results from gas monitoring for each calendar year shall be submitted to the Illinois EPA in the annual report required by 35 IAC, Section 813.504.
11. 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.
12. The design of the landfill gas collections system consisting of 86 vertical extraction wells, 9 driplegs, a blower/flare unit, and associated pipes and valves was approved in Permit No. 2000-199-LF. No part of the system shall be operated until the CQA acceptance report, in the form of a significant modification, is approved by the Illinois EPA.

X. CLOSURE/POST CLOSURE CARE AND FINANCIAL ASSURANCE

1. The facility shall be closed in accordance with the closure plan in Application Log No. 2000-199. 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 IAC, 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. 2000-199. 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 IAC, Section 811.700(b). Financial assurance shall be required only for those areas for which authorization to operate has been obtained or is being requested.

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

6. The total cost estimate for closure and post closure care for this facility approved by this permit is \$4,445,110. Financial assurance shall be submitted to the Illinois EPA prior to waste placement.
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 IAC, Section 811.701(b).
8. The owner or operator shall adjust the cost estimates for closure, post-closure, and corrective action for inflation on an annual basis during the following time periods:
  - a. The active life of the unit for the closure cost;
  - b. The active life and post-closure care period for the post-closure cost; and
  - c. Until any corrective action program is completed in accordance with 35 IAC, Section 811.326, for the cost of corrective action.

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

XI. REPORTING REQUIREMENTS

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

Each monitoring point shall be labeled on the map with its Illinois EPA designation. The designations provided in this permit letter 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, unless otherwise designated in this permit by the Illinois EPA.

2. The annual certification shall be submitted to the Illinois EPA during operation and for the entire post-closure monitoring period, pursuant to 35 IAC 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 IAC 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 IAC 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:
    - 1) Summary of monitoring data for the calendar year;
    - 2) Dates of submittal of comprehensive monitoring data to the Illinois EPA during the calendar year;

- 3) Statistical summaries and analysis of trends;
    - 4) Changes to the monitoring program; and
    - 5) Discussion of error analysis, detection limits and observed trends.
  - b. Proposed activities including:
    - 1) Amount of waste expected in the next year;
    - 2) Structures to be built within the next year; and
    - 3) 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 IAC 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:

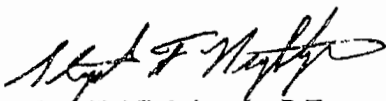
Illinois Environmental Protection Agency  
Permit Section  
Bureau of Land -- #33  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

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 and 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

CSL  
SFN:TWH:bjh\082541s.doc  
TWH

Attachment: Standard Conditions

cc: Michael W. Rapps, P.E.  
Stephen F. Hedinger

bcc: Bureau File  
Marion Region  
DLC - Melanie Jarvis  
Hope Wright  
Bur Filson  
Tom Hubbard

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.