Attention:

Waste Management of Illinois, Inc.
Cottonwood Hills Recycling and Disposal Facility
Attn: Ernest H. Dennison, District Engineer
601 Madison Road
East St. Louis, Illinois 62201

State of Illinois

CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

Source:

Cottonwood Hills Recycling and Disposal Facility
10400 Hillstown Road
Marissa, Illinois 62257

I.D. No.: 163075AAL
Permit No.: 01040051

Permitting Authority:

Illinois Environmental Protection Agency
Bureau of Air, Permit Section
217/785-1705

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19506, SPRINGFIELD, ILLINOIS 62794-9506 - (217) 782-2113

PAT QUINN, GOVERNOR LISA BONNETT, DIRECTOR

CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

Type of Application:	Renewal
Purpose of Application:	Renew Existing CAAPP Permit for 5 Years
ID No.:	163075AAL
Permit No.:	01040051
Statement of Basis No.:	01040051-14-09
Date Application Received:	January 29, 2007
Date Issued:	December 23, 2014
Expiration Date:	December 23, 2019
Renewal Submittal Date:	9 Months Prior to Expiration Date
Source Name:	Cottonwood Hills Recycling and Disposal Facility
Address:	10400 Hillstown Road
City:	Marissa
County:	St. Clair
ZIP Code:	62257

This permit is hereby granted to the above-designated source authorizing operation in accordance with this CAAPP permit, pursuant to the above referenced application. This source is subject to the conditions contained herein. For further information on the source see Section 1 and for further discussion on the effectiveness of this permit see Condition 2.3(g).

If you have any questions concerning this permit, please contact Michael Davidson at 217/785-1705.

Raymond E. Pilapil

Raymond E. Pilapil
Acting Manager, Permit Section
Division of Air Pollution Control

REP:MTR:MED:psj

cc: IEPA, Permit Section
IEPA, FOS, Region 3
Lotus Notes Database

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Section 1 - Source Information

1. Addresses

Source

Cottonwood Hills RDF
10400 Hillstown Road
Marissa, Illinois 62257

Owner

Waste Management of Illinois, Inc.
601 Madison Road
East St. Louis, Illinois 62201

Operator

Waste Management of Illinois, Inc.
601 Madison Road
East St. Louis, Illinois 62201

Permittee

The Owner and Operator of the source as identified in this table.

2. Contacts

Certified Officials

The source shall submit an Administrative Permit Amendment for any change in the Certified Officials, pursuant to Section 39.5(13) of the Act.

	Name	*Title*
Responsible Official	Michael J. Watson	President of Waste Management of Illinois
Delegated Authority	Ernest H. Dennison	District Engineer

Other Contacts, e.g., Source, Technical, Correspondence, and Billing Contact.

Name	*Phone No.*	*Email*
Ernest H. Dennison	314-568-2025	ddenniso@wm.com

3. Single Source

The source identified in Condition 1.1 above shall be defined to include all the following additional source(s):

I.D. No.	*Permit No.*	*Single Source Name and Address*
N/A	N/A	N/A

Section 2 - General Permit Requirements

1. Prohibitions

a. It shall be unlawful for any person to violate any terms or conditions of this permit issued under Section 39.5 of the Act, to operate the CAAPP source except in compliance with this permit issued by the IEPA under Section 39.5 of the Act or to violate any other applicable requirements. All terms and conditions of this permit issued under Section 39.5 of the Act are enforceable by USEPA and citizens under the Clean Air Act, except those, if any, that are specifically designated as not being federally enforceable in this permit pursuant to Section 39.5(7)(m) of the Act. [Section 39.5(6)(a) of the Act]

b. After the applicable CAAPP permit or renewal application submittal date, as specified in Section 39.5(5) of the Act, the source shall not operate this CAAPP source without a CAAPP permit unless the complete CAAPP permit or renewal application for such source has been timely submitted to the IEPA. [Section 39.5(6)(b) of the Act]

c. No Owner or Operator of the CAAPP source shall cause or threaten or allow the continued operation of an emission source during malfunction or breakdown of the emission source or related air pollution control equipment if such operation would cause a violation of the standards or limitations applicable to the source, unless this CAAPP permit granted to the source provides for such operation consistent with the Act and applicable Illinois Pollution Control Board regulations. [Section 39.5(6)(c) of the Act]

d. Pursuant to Section 39.5(7)(g) of the Act, emissions from the source are not allowed to exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act or the regulations promulgated thereunder, consistent with Section 39.5(17) of the Act and applicable requirements, if any.

2. Emergency Provisions

Pursuant to Section 39.5(7)(k) of the Act, the Owner or Operator of the CAAPP source may provide an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations under this CAAPP permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:

a. i. An emergency occurred and the source can identify the cause(s) of the emergency.

ii. The source was at the time being properly operated.

iii. The source submitted notice of the emergency to the IEPA within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

iv. During the period of the emergency the source took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or requirements in this permit.

b. For purposes of Section 39.5(7)(k) of the Act, "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, such as an act of God, that requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operation error.

c. In any enforcement proceeding, the source seeking to establish the occurrence of an emergency has the burden of proof. This provision is in addition to any emergency or

upset provision contained in any applicable requirement. This provision does not relieve the source of any reporting obligations under existing federal or state laws or regulations.

3. General Provisions

a. Duty to Comply

The source must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. [Section 39.5(7)(o)(i) of the Act]

b. Need to Halt or Reduce Activity is not a Defense

It shall not be a defense for the source in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [Section 39.5(7)(o)(ii) of the Act]

c. Duty to Maintain Equipment

The source shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements. [Section 39.5(7)(a) of the Act]

d. Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated there under. [Section 39.5(7)(a) of the Act]

e. Duty to Pay Fees

i. The source must pay fees to the IEPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto. [Section 39.5(7)(o)(vi) of the Act]

ii. The IEPA shall assess annual fees based on the allowable emissions of all regulated air pollutants, except for those regulated air pollutants excluded in Section 39.5(18)(f) of the Act and insignificant activities in Section 6, at the source during the term of this permit. The amount of such fee shall be based on the information supplied by the applicant in its complete CAAPP permit application. [Section 39.5(18)(a)(ii)(A) of the Act]

iii. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois EPA, P.O. Box 19276, Springfield, IL, 62794-9276. Include on the check: ID #, Permit #, and "CAAPP Operating Permit Fees". [Section 39.5(18)(e) of the Act]

f. Obligation to Allow IEPA Surveillance

Pursuant to Sections 4(a), 39.5(7)(a), and 39.5(7)(p)(ii) of the Act, inspection and entry requirements that necessitate that, upon presentation of credentials and other documents as may be required by law and in accordance with constitutional limitations, the source shall allow the IEPA, or an authorized representative to perform the following:

i. Enter upon the source's premises where the emission unit(s) are located or emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit.

iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

iv. Sample or monitor any substances or parameters at any location at reasonable times:

A. As authorized by the Clean Air Act or the Act, at reasonable times, for the purposes of assuring compliance with this CAAPP permit or applicable requirements; or

B. As otherwise authorized by the Act.

v. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

g. **Effect of Permit**

i. Pursuant to Section 39.5(7)(j)(iv) of the Act, nothing in this CAAPP permit shall alter or affect the following:

A. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section.

B. The liability of the Owner or Operator of the source for any violation of applicable requirements prior to or at the time of permit issuance.

C. The applicable requirements of the acid rain program consistent with Section 408(a) of the Clean Air Act.

D. The ability of USEPA to obtain information from the source pursuant to Section 114 (inspections, monitoring, and entry) of the Clean Air Act.

ii. Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, pursuant to Sections 39.5(7)(j) and (p) of the Act, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements. [35 IAC 201.122 and Section 39.5(7)(a) of the Act]

h. **Severability Clause**

The provisions of this permit are severable. In the event of a challenge to any portion of this permit, other portions of this permit may continue to be in effect. Should any portion of this permit be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected and the rights and obligations of the source shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force. [Section 39.5(7)(i) of the Act]

4. Testing

a. Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods if applicable test methods are not specified by the applicable regulations or otherwise identified in the conditions of this permit. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of

any tests conducted as required by this permit or as the result of a request by the IEPA shall be submitted as specified in Condition 7.1 of this permit. [35 IAC Part 201 Subpart J and Section 39.5(7)(a) of the Act]

b. Pursuant to Section 4(b) of the Act and 35 IAC 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator: The IEPA may require the Owner or Operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the IEPA, at such reasonable times as may be specified by the IEPA and at the expense of the Owner or Operator of the emission source or air pollution control equipment. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The IEPA shall have the right to observe all aspects of such tests.

ii. Testing by the IEPA: The IEPA shall have the right to conduct such tests at any time at its own expense. Upon request of the IEPA, the Owner or Operator of the emission source or air pollution control equipment shall provide, without charge to the IEPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

5. Recordkeeping

a. Control Equipment Maintenance Records

Pursuant to Section 39.5(7)(b) of the Act, a maintenance record of air pollution control equipment shall be readily accessible to the Permittee, Illinois EPA, and/or USEPA as required in Condition 2.5(c). At a minimum, this record shall show the dates maintenance was performed and the nature of preventative maintenance activities.

b. Retention of Records

i. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [Section 39.5(7)(e)(ii) of the Act]

ii. Pursuant to Section 39.5(7)(a) of the Act, other records required by this permit including any logs, plans, procedures, or instructions required to be kept by this permit shall be retained for a period of at least 5 years from the date of entry unless a different period is specified by a particular permit provision.

c. Availability of Records

i. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall retrieve and provide paper copies, or as electronic media, any records retained in an electronic format (e.g., computer) in response to an IEPA or USEPA request during the course of a source inspection, unless specified differently elsewhere in this permit.

ii. Pursuant to Section 39.5(7)(a) of the Act, upon written request by the IEPA for copies of records or reports required to be kept by this permit, the Permittee shall promptly submit a copy of such material to the IEPA, unless specified differently elsewhere in this permit. For this purpose, material shall be submitted to the IEPA within 30 days unless additional time is provided by the IEPA

or the Permittee believes that the volume and nature of requested material would make this overly burdensome, in which case, the Permittee shall respond within 30 days with the explanation and a schedule for submittal of the requested material. (See also Condition 2.9(d))

6. Certification

a. Compliance Certification

i. Pursuant to Section 39.5(7)(p)(v)(C) of the Act, the source shall submit annual compliance certifications by May 1 unless a different date is specified by an applicable requirement or by a particular permit condition. The annual compliance certifications shall include the following:

A. The identification of each term or condition of this permit that is the basis of the certification.

B. The compliance status.

C. Whether compliance was continuous or intermittent.

D. The method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.

ii. Pursuant to Section 39.5(7)(p)(v)(D) of the Act, all compliance certifications shall be submitted to the IEPA Compliance Section. Address is included in Attachment 3.

iii. Pursuant to Section 39.5(7)(p)(i) of the Act, all compliance reports required to be submitted shall include a certification in accordance with Condition 2.6(b).

b. Certification by a Responsible Official

Any document (including reports) required to be submitted by this permit shall contain a certification by the responsible official of the source that meets the requirements of Section 39.5(5) of the Act and applicable regulations. [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included in Attachment 4 of this permit.

7. Permit Shield

a. Pursuant to Section 39.5(7)(j) of the Act, except as provided in Condition 2.7(b) below, the source has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the IEPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit. This permit shield does not extend to applicable requirements which are promulgated after December 9, 2014 (date USEPA notice started), unless this permit has been modified to reflect such new requirements.

b. Pursuant to Section 39.5(7)(j) of the Act, this permit and the terms and conditions herein do not affect the Permittee's past and/or continuing obligation with respect to statutory or regulatory requirements governing major source construction or modification under Title I of the CAA. Further, neither the issuance of this permit nor any of the terms or conditions of the permit shall alter or affect the liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance.

c. Pursuant to Section 39.5(7)(a) of the Act, the issuance of this permit by the IEPA does not and shall not be construed as barring, diminishing, adjudicating or in any way affecting any currently pending or future legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the IEPA or the USEPA may have against the applicant including, but not limited to, any enforcement action authorized pursuant to the provision of applicable federal and state law.

8. Title I Conditions

Pursuant to Sections 39(a), 39(f), and 39.5(7)(a) of the Act, as generally identified below, this CAAPP permit may contain certain conditions that relate to requirements arising from the construction or modification of emission units at this source. These requirements derive from permitting programs authorized under Title I of the Clean Air Act (CAA) and regulations thereunder, and Title X of the Illinois Environmental Protection Act (Act) and regulations implementing the same. Such requirements, including the New Source Review programs for both major (i.e., PSD and nonattainment areas) and minor sources, are implemented by the IEPA.

a. This permit may contain conditions that reflect requirements originally established in construction permits previously issued for this source. These conditions include requirements from preconstruction permits issued pursuant to regulations approved or promulgated by USEPA under Title I of the CAA, as well as requirements contained within construction permits issued pursuant to state law authority under Title X of the Act. Accordingly, all such conditions are incorporated into this CAAPP permit by virtue of being either an "applicable Clean Air Act requirement" or an "applicable requirement" in accordance with Section 39.5 of the Act. These conditions are identifiable herein by a designation to their origin of authority.

b. This permit may contain conditions that reflect necessary revisions to requirements established for this source in preconstruction permits previously issued under the authority of Title I of the CAA. These conditions are specifically designated herein as "TIR".

   i. Revisions to original Title I permit conditions are incorporated into this permit through the combined legal authority of Title I of the CAA and Title X of the Act. Public participation requirements and appeal rights shall be governed by Section 39.5 of the Act.

   ii. Revised Title I permit conditions shall remain in effect through this CAAPP permit, and are therefore enforceable under the same, so long as such conditions do not expire as a result of a failure to timely submit a complete renewal application or are not removed at the applicant's request.

c. This permit may contain conditions that reflect new requirements for this source that would ordinarily derive from a preconstruction permit established under the authority of Title I of the CAA. These conditions are specifically designated herein as "TIN".

   i. The incorporation of new Title I requirements into this CAAPP permit is authorized through the combined legal authority of Title I of the CAA and Title X of the Act. Public participation requirements and appeal rights shall be governed by Section 39.5 of the Act.

   ii. Any Title I conditions that are newly incorporated shall remain in effect through this CAAPP permit, and are therefore enforceable under the same, so long as such conditions do not expire as a result of a failure to timely submit a complete renewal application or are not removed at the applicant's request.

9. Reopening and Revising Permit

a. **Permit Actions**

This permit may be modified, revoked, reopened and reissued, or terminated for cause in accordance with applicable provisions of Section 39.5 of the Act. The filing of a request by the source for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [Section 39.5(7)(o)(iii) of the Act]

b. **Reopening and Revision**

Pursuant to Section 39.5(15)(a) of the Act, this permit must be reopened and revised if any of the following occur:

i. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;

ii. Additional requirements become applicable to the source for acid deposition under the acid rain program;

iii. The IEPA or USEPA determines that this permit contains a material mistake or that an inaccurate statement was made in establishing the emission standards or limitations, or other terms or conditions of this permit; or

iv. The IEPA or USEPA determines that this permit must be revised or revoked to ensure compliance with the applicable requirements.

c. **Inaccurate Application**

Pursuant to Sections 39.5(5)(e) and (i) of the Act, the IEPA has issued this permit based upon the information submitted by the source in the permit application referenced on page 1 of this permit. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation or reopening of this CAAPP under Section 39.5(15) of the Act.

d. **Duty to Provide Information**

The source shall furnish to the IEPA, within a reasonable time specified by the IEPA any information that the IEPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the source shall also furnish to the IEPA copies of records required to be kept by this permit. [Section 39.5(7)(o)(v) of the Act]

10. Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement. [Section 39.5(7)(o)(vii) of the Act]

11. Permit Renewal

a. Upon the expiration of this permit, if the source is operated, it shall be deemed to be operating without a permit unless a timely and complete CAAPP application has been submitted for renewal of this permit. However, if a timely and complete application to renew this CAAPP permit has been submitted, the terms and all conditions of the most recent issued CAAPP permit will remain in effect until the issuance of a renewal permit. [Sections 39.5(5)(l) and (o) of the Act]

b. For purposes of permit renewal, a timely application is one that is submitted no less than 9 months prior to the date of permit expiration. [Section 39.5(5)(n) of the Act]

12. Permanent Shutdown

Pursuant to Section 39.5(7)(a) of the Act, this permit only covers emission units and control equipment while physically present at the source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

13. Startup, Shutdown, and Malfunction

Pursuant to Section 39.5(7)(a) of the Act, in the event of an action to enforce the terms or conditions of this permit, this permit does not prohibit a Permittee from invoking any affirmative defense that is provided by the applicable law or rule.

Section 3 - Source Requirements

1. Applicable Requirements

Pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act, the Permittee shall comply with the following applicable requirements. These requirements are applicable to all emission units (including insignificant activities unless specified otherwise in this Section) at the source.

a. **Fugitive Particulate Matter**

i. **Applicable Requirement(s)**

A. Pursuant to 35 IAC 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source, unless the exception for wind speed greater than 25 mph is demonstrated in accordance with 35 IAC 212.314.

ii. **Compliance Method (Fugitive Particulate Matter)**

A. Pursuant to Sections 39.5(7)(b) and (d) of the Act, upon request by the Illinois EPA, the Permittee shall conduct observations at the property line of the source for visible emissions of fugitive particulate matter from the landfill activities to address compliance with 35 IAC 212.301. For this purpose, daily observations shall be conducted for at least seven calendar days for particular area(s) of concern at the source, as specified in the request. Observations shall begin either within one day or three days of receipt of a written request from the Illinois EPA, depending, respectively, upon whether observations will be conducted by employees of the Permittee or a third-party observer hired by the Permittee to conduct observations at its behest. The Permittee shall keep records for these observations, including identity of the observer, the date and time of observations, the location(s) from which observations were made, and duration of any fugitive emissions event(s).

b. **Episode Action Plan**

i. Pursuant to 35 IAC 244.141, the Permittee shall have on file with the IEPA an Episode Action Plan for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The Episode Action Plan shall contain the information specified in 35 IAC 244.144.

ii. The Permittee shall immediately implement the appropriate steps described in the Episode Action Plan should an air pollution alert or emergency be declared, as required by 35 IAC 244.169, or as may otherwise be required under 35 IAC 244, Appendix D.

iii. Pursuant to 35 IAC 244.143(d), if an operational change occurs at the source which invalidates the Episode Action Plan, a revised Episode Action Plan shall be submitted to the IEPA for review within 30 days of the change and is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the IEPA within 30 days of receipt of the revision. In the event that the IEPA notifies the Permittee of a deficiency with any revision to the Episode Action Plan, the Permittee shall be required to revise and resubmit the Episode Action Plan within 30 days of receipt of notification to address the deficiency pursuant to Section 39.5(7)(a) of the Act.

iv. The Episode Action Plan (dated January 14, 2014), as submitted by the Permittee on January 16, 2014, is incorporated herein by reference. The document constitutes the formal Episode Action Plan required by 35 IAC 244.142, addressing the actions that will be implemented to reduce SO_2, PM_{10}, NO_2, CO and VOM emissions from various emissions units in the event of a yellow alert, red alert or emergency issued under 35 IAC 244.161 through 244.165.

v. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep a copy of the Episode Action Plan, any amendments or revisions to the Episode Action Plan (as required by Condition 3.1(b)), and the Permittee shall also keep a record of activities completed according to the Episode Action Plan.

c. **Ozone Depleting Substances**

Pursuant to 40 CFR 82.150(b), the Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

i. Pursuant to 40 CFR 82.156, persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices.

ii. Pursuant to 40 CFR 82.158, equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment.

iii. Pursuant to 40 CFR 82.161, persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program.

iv. Pursuant to 40 CFR 82 Subpart B, any person performing service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner shall comply with 40 CFR 82 Subpart B, Servicing of Motor Vehicle Air Conditioners.

v. Pursuant to 40 CFR 82.166, all persons shall comply with the reporting and recordkeeping requirements of 40 CFR 82.166.

d. **Asbestos Demolition and Renovation**

i. Asbestos Fees. Pursuant to Section 9.13(a) of the Act, for any site for which the Owner or Operator must file an original 10-day notice of intent to renovate or demolish pursuant to Condition 3.1(d)(ii) below and 40 CFR 61.145(b), the owner or operator shall pay to the IEPA with the filing of each 10-day notice a fee of $150.

ii. Pursuant to 40 CFR 61 Subpart M, Standard of Asbestos, prior to any demolition or renovation at this facility, the Permittee shall fulfill notification requirements of 40 CFR 61.145(b).

iii. Pursuant to 40 CFR 61.145(c), during demolition or renovation, the Permittee shall comply with the procedures for asbestos emission control established by 40 CFR 61.145(c).

e. **Future Emission Standards**

Pursuant to Section 39.5(15)(a) of the Act, this source shall comply with any new or revised applicable future standards of 40 CFR 60, 61, 62, or 63; or 35 IAC Subtitle B after the date issued of this permit. The Permittee shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by Condition

2.6(a). This permit may also have to be revised or reopened to address such new regulations in accordance to Condition 2.9.

2. Plans, Programs or Other Requirements

This Section is reserved for source-wide requirements not specified in Sections 3 or 4. As of the date of issuance of this permit, there are no other source-wide requirements that need to be separately addressed in this Section.

3. Title I Requirements

a. i. **Construction Permit 06100058 Requirements [T1]**

Pursuant to Construction Permit 06100058, total emissions from the source shall not exceed the following limits:

Pollutant	Limit (Tons/year)
NO_x	80
CO	200
SO2	80
VOM/NMOC	40
$PM/PM_{10}/PM_{2.5}$*	80
Single HAP	8
Total HAPs	20

* Limits only address filterable PM and do not include fugitive PM emissions from the landfill operations.

ii. **Compliance Method**

Monitoring

A. Pursuant to Sections 39.5(7)(b) and (d) of the Act, the Permittee shall demonstrate compliance with the requirements in Condition 3.3(a)(i), as follows:

I. The Permittee shall utilize the monitoring procedures, required in Conditions 4.1.2(b)(ii), 4.2.2(a)(ii)(A), 4.3.2(a)(ii)(A), and 4.4.2(a)(ii)(A), i.e., the monitoring procedures used to demonstrate compliance and/or calculate emissions for the emission units and operations covered under the respective section.

II. Source-wide emissions for each pollutant shall be based upon the sum of emissions from all emission units and operations at the source, where compliance with annual limits shall be determined from a running total of 12 months of data, i.e., the sum of emissions data for each specific pollutant for the month of record plus the preceding 11 months of data.

III. Emissions shall be determined using appropriate emission factors which in order of preference shall be factors from on-site testing, manufacturer's emission data, and emission factors from USEPA's *Compilation of Air Pollutant Emission Factors* (AP-42), and continuous operation.

Testing

B. Pursuant to Sections 39.5(7)(b) and (d) of the Act, compliance with the SO_2 and NMOC/VOM emission limitations in Condition 3.3(a)(i) shall be verified based upon the total reduced sulfur (TSR) testing and SO_2 calculation

procedures required in Conditions 4.1.2(b)(ii)(B) and the NMOC/VOM testing and calculation procedures required in Conditions 4.1.2(c)(ii)(C).

Recordkeeping

C. Pursuant to Sections 39.5(7)(b) and (e) of the Act, as applicable, the Permittee shall keep and maintain records and documentation of the assumptions and/or factors, and calculations used to demonstrate compliance with the source-wide limitations in Condition 3.3(a)(i).

4. Synthetic Minor Limits

As of the date of issuance of this permit, there are no source-wide synthetic minor limits that need to be included in this Condition.

5. Source-wide Non-Applicability Determinations

a. Pursuant to 35 IAC 212.302(a) and (b), the operations at this source are not subject to 35 IAC 212.304 through 212.310 and 212.312 because, respectively, the operations at the source are not designated as being applicable based upon the sources SIC code and because it is not located in the geographical areas defined in 35 IAC 212.324(a)(1).

Should this source become subject to 35 IAC 212.302, the Permittee shall prepare and operate under a Fugitive PM Operating Program consistent with 35 IAC 212.310 and submitted to the IEPA for its review. The Fugitive PM Operating Program shall be designed to significantly reduce fugitive particulate matter emissions, pursuant to 35 IAC 212.309(a). Any future Fugitive PM Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the Fugitive PM Operating Program is not expressly disapproved, in writing, by the IEPA within 30 days of receipt of the Fugitive PM Operating Program. In the event that the IEPA notifies the Permittee of a deficiency with any Fugitive PM Operating Program, the Permittee shall be required to revise and resubmit the Fugitive PM Operating Program within 30 days of receipt of notification to address the deficiency pursuant to Section 39.5(7)(a) of the Act.

b. Pursuant to 35 IAC 212.700, the operations at this source are not subject to 35 IAC Part 212 Subpart U because, the operations at the source are not located in the geographical areas defined in 35 IAC 212.324(a)(1).

Should this source become subject to 35 IAC Part 212 Subpart U, then the Permittee shall prepare and operate under a PM_{10} Contingency Measure Plan reflecting the PM_{10} emission reductions as set forth in 35 IAC 212.701 and 212.703. The Permittee shall, within 90 days after the date this source becomes subject to 35 IAC 212.700, submit a request to modify this CAAPP permit in order to include a new, appropriate PM_{10} Contingency Measure Plan.

c. Pursuant to 35 IAC 212.314, Condition 3.1(a)(i)(A) and 35 IAC 212.301 shall not apply when the wind speed is greater than 40.2 km/hr (25 mph).

d. Pursuant to 35 IAC 212.700, the source is not subject to 35 IAC Part 212 Subpart U because the source is not located in the areas designated in and subject to 35 IAC 212.324(a)(1) or 212.423(a).

Should this source become subject to 35 IAC 212.700, then the Permittee shall prepare and operate under a PM_{10} Contingency Measure Plan reflecting the PM_{10} emission reductions as set forth in 35 IAC 212.701 and 212.703. The Permittee shall, within 90 days after the date this source becomes subject to 35 IAC 212.700, submit a request to modify this CAAPP permit in order to include a new, appropriate PM_{10} Contingency Measure Plan.

e. Pursuant to 40 CFR 68.10, the source is not subject to the federal regulations for Chemical Accident Prevention in 40 CFR Part 68 because the source does not meet the listed applicability requirements.

Should this stationary source, as defined in 40 CFR 68.3, become subject to the federal regulations for Chemical Accident Prevention in 40 CFR Part 68, then the Permittee shall submit a compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or submit a certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan, as part of the annual compliance certification required by Condition 2.6(a). This condition is imposed in this permit pursuant to 40 CFR 68.215(a)(2)(i) and (ii).

f. i. A. The compression ignition (CI) internal combustion engines (ICE) at the source are not subject to the requirements of 40 CFR Part 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines based upon the engines not meeting the applicability criteria in 40 CFR 60.4200 and the definition of a *stationary internal combustion engine* in 40 CFR 60.4219, i.e., all engines at the source are mobile and meet the definition of a non-road engine as defined in 40 CFR 1068.30.

B. The spark ignition (SI) internal combustion engines (ICE) at the source are not subject to the requirements of 40 CFR Part 60 Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines based upon the engines not meeting the applicability criteria in 40 CFR 60.4230 and the definition of a *stationary internal combustion engine* in 40 CFR 60.4248, i.e., all engines at the source are mobile and meet the definition of a non-road engine as defined in 40 CFR 1068.30.

C. The internal combustion engines at the source are not subject to the requirements of 40 CFR 63 Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines based upon the engines not meeting the applicability criteria in 40 CFR 63.6585(a) and the definition of a *stationary reciprocating internal combustion engine (RICE)* in 40 CFR 63.6675, i.e., all engines at the source are mobile and meet the definition of a non-road engine as defined in 40 CFR 1068.30.

ii. The Permittee shall comply with the following applicable requirements pursuant to Sections 39.5(7)(a), (b), (d), and (e) of the Act.

A. The Permittee shall not have nonroad engines onsite/in one location for more than 12 consecutive months. A location is any single site at a building, structure, facility, or installation. Any engine, or engines, that replaces an engine at a location and that is intended to perform the same or similar function as the engine it replaced will be included in calculating the consecutive time period.

B. I. Pursuant to 35 IAC Part 201.142, the Permittee shall obtain appropriate permits, as applicable, prior the installation of any new stationary engine at the source. Pursuant Section 39.5(14)(b) of the Act, the Permittee shall submit an application to revise this CAAPP permit as a "minor permit modification" subsequent to the installation of any new stationary engine at the source.

II. Pursuant to 35 IAC 201.142 and Sections 39.5(14)(b) or (c) of the Act, the Permittee either submit the applications and revise this CAAPP permit as per Condition 3.5(f)(ii)(B)(i) or revise this CAAPP as a "significant permit modification" prior to any change in an existing engines applicability to either 40 CFR Part 60 Subpart IIII

and/or JJJJ and/or 40 CFR Part 63 Subpart ZZZZ, i.e., any change where an engine would be meet the definition of either a stationary internal combustion engine or stationary RICE.

C. Pursuant to 35 IAC 270.302(b), the Permittee shall submit an application for modification of the CAAPP permit, pursuant to Section 39.5(14) of the Act, within 12 months of a change in an existing engines status, i.e., portable to stationary, or the installation of any new "stationary reciprocating internal combustion engine (RICE)" at the source.

D. Pursuant to Sections 39.5(7)(b) and (e) of the Act, the Permittee shall verify that the engines at the source meet the definition of a mobile and non-road engines, as defined at 40 CFR 1068.30, by collecting and maintaining the following:

I. An annual inventory or list of all engines at the source, with sufficient description to identify each engine (make, model, horsepower, serial number, fuel used, etc.); and

II. Semi-annual record or log of the location of each engine at the source which documents whether the engine is operating at a single location during the past 12 months.

While on site, each engine shall be labeled in such way that it can be determined whether it is a nonroad engine or a stationary engine subject to 40 CFR 63 Subpart ZZZZ.

g. i. The stationary reciprocating internal combustion engines at the source are not subject to the requirements of 35 IAC Part 217, Subpart Q - Stationary Reciprocating Internal Combustion Engines And Turbines based upon the engines not meeting the applicability criteria in 35 IAC 217.386. Specifically, pursuant to 217.386(a)(2)(A), the engines, located at the source, nameplate capacity are less than 500 bhp output.

ii. A. Pursuant to Sections 39.5(7)(b) and (e) of the Act, the Permittee shall verify that the engines at the are not applicable to 35 IAC Part 217, Subpart Q, by collecting and maintaining an inventory or list of all engines at the source, with sufficient description to identify each engine (make, model, nameplate capacity/horsepower, serial number, fuel used, etc.).

B. Pursuant to 35 IAC 201.142, the Permittee shall obtain a construction permit prior to the installation of any new "stationary reciprocating internal combustion engine (RICE)" at the source that meets the criteria shown in 35 IAC 201.146(i), i.e., any "combustion engine with a rating at equal to or greater than 500 bhp output that is subject to the control requirements of 35 Ill. Adm. Code 217.388(a) or (b)".

C. Pursuant to 35 IAC 270.302(b), the Permittee shall submit an application for modification of the CAAPP permit, pursuant to Section 39.5(14) of the Act, within 12 months of a change in an existing engines status or the installation of any new "stationary reciprocating internal combustion engine (RICE)" at the source.

6. Reporting Requirements

The Permittee shall submit the following information pursuant to Section 39.5(7)(f) of the Act. Addresses are included in Attachment 3.

a. **Prompt Reporting**

i. A. Pursuant to Section 39.5(7)(f)(ii) of the Act, the Permittee shall promptly notify the IEPA, Air Compliance Section, within 30 days of deviations from applicable requirements as follows:

I. Requirements in Conditions 3.1(a)(i).

II. Requirements in Condition 3.3(a)(i).

III. Requirements in Condition 3.5(f).

B. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.6(b).

ii. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Report required by Condition 3.6(b).

iii. The deviation reports shall contain at a minimum the following information:

A. Date and time of the deviation.

B. Emission unit(s) and/or operation involved.

C. The duration of the event.

D. Probable cause of the deviation.

E. Corrective actions or preventative measures taken.

iv. All deviation reports required in this Permit shall be identified, summarized, and reported as part of the Semiannual Monitoring Report required by Condition 3.6(b).

b. **Semiannual Reporting**

i. Pursuant to Section 39.5(7)(f)(i) of the Act, the Permittee shall submit Semiannual Monitoring Reports to the IEPA, Air Compliance Section, summarizing required monitoring as part of the Compliance Methods in this Permit submitted every six months as follows, unless more frequent reporting is required in other parts of this permit.

Monitoring Period	Report Due Date
January through June	July 31
July through December	January 31

ii. The Semiannual Monitoring Report must be certified by a Responsible Official consistent with Condition 2.6(b).

c. **Annual Emissions Reporting**

Pursuant to 35 IAC Part 254, the Source shall submit an Annual Emission Report to the Air Quality Planning Section, due by May 1 of the year following the calendar year in which the emissions took place. All records and calculations upon which the verified and reported data are based must be retained by the source.

Section 4 - Emission Unit Requirements

4.1 MSW Landfill

1. Emission Units and Operations

Emission Units	*Pollutants Being Regulated*	*Original Construction Date*	*Modification/ Reconstruction Date*	*Air Pollution Control Devices or Measures*	*Monitoring Devices*
MSW Landfill	Opacity, NO_x, CO, SO_2, PM/PM_{10}, VOM/NMOC, HAPs and Asbestos	November 2000	December 23, 2008[1]	GCCS with Utility Flare Construction January 10, 2007[2] Modification December 9, 2011[3] Modification February 27, 2013[4]	None

Footnote No.

1 Construction Permit 06070067: Increase in airspace due to a redesign of the existing municipal solid waste landfill.

2 Construction Permit 06100058: Construction of GCCS and back-up flare installed;

3 Construction Permit 06100058: modification covering an increase in permitted emissions for the affected flare based on site specific LFG sampling data GCCS and back-up flare and to clarify applicability in regard to 40 CFR Part 60 Subpart WWW and 40 CFR 63, Subpart AAAA.

4 Construction Permit 06100058: modification covering an increase in permitted SO_2 emissions for the affected flare based on site specific data for the sulfur content of the LFG.

2. Applicable Requirements

For the emission units in Condition 4.1.1 above, the Permittee shall comply with the following applicable requirements pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act.

a. i. **Visible Emissions (Opacity) Requirements**

A. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, except as allowed by 35 IAC 212.123(b) and 212.124.

B. Pursuant to 40 CFR 60.18(c)(1), the open flare shall be designed for and operated with no visible emissions as determined by the methods specified in Condition 4.1.2(a)(ii) and 40 CFR 60.18(f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

ii. **Compliance Method (Opacity Requirements)**

Monitoring

A. Pursuant to Sections 39.5(7)(b), (c), and (d) of the Act, the Permittee shall demonstrate compliance of the open flare with the visible emission provisions of Condition 4.1.2(a)(i)(A) and (B) through periodic monitoring for visible emissions as follows.

I. 1. The Permittee shall demonstrate compliance of the open flare with the visible emission provision of Condition 4.1.2(a)(i)(A) using USEPA RM 22 with an RM 22 observation period of at least 30 minutes. In lieu of RM 22, the Permittee may demonstrate compliance using USEPA RM 9, in order to quantify the percentage of opacity from the open flare. Follow-up RM 9 monitoring must be performed within 24 hours after visible emissions are determined to be present via RM 22. As per RM 9, opacity monitoring shall be conducted by a certified opacity observer. Determination of opacity and/or compliance verification via RM 9 shall take precedence over a determination made via RM 22.

Opacity shall be determined as an average of three sets of observations taken over a 12 hour period. Pursuant to RM 9, Section 2.5: Opacity shall be determined as an average of 24 consecutive observations recorded at 15-second intervals. By dividing the observations recorded on the record sheet into sets of 24 consecutive observations. A set is composed of any 24 consecutive observations. Sets need not be consecutive in time and in no case shall two sets overlap. For each set of 24 observations, calculate the average for a particular set by summing the opacity of the 24 observations and dividing this sum by 24. Overall opacity shall be calculated as the average of all three sets by summing the opacity of the three sets and dividing this sum by 3.

II. Visible emission monitoring shall be conducted on a monthly basis until at least 4 months of data indicates compliance with both Condition 4.1.2(a)(i)(A) and (B). Thereafter; monitoring may switch to a quarterly basis. Monitoring shall revert to the monthly basis if a deviation is detected. Quarterly monitoring may resume after another 4 months of data again indicates no deviations.

III. Monitoring by a third party is not required unless requested in writing by the IEPA and/or USEPA.

IV. If an exceedance is indicated, pursuant to Condition 4.1.2(a)(i)(A) or (B), the Permittee shall either take corrective action within 4 hours of such observation or indicate a deviation within the monitoring record. Corrective action may include, but is not limited to the following: maintenance and repair and/or adjustment of the open flare. If corrective action was taken, the Permittee shall perform a follow-up verification of compliance by monitoring for visible emissions within 48 hours of the initial observation.

V. A deviation shall be recorded in the monitoring record:

1. If an exceedance is observed and corrective action cannot be made within 48 hours;

2. If RM 22 is used to demonstrate compliance with both Conditions 4.1.2(a)(i)(A) and/or (B), a deviation shall be indicated in the monitoring record if visible emissions are observed for more than a total of 5 minutes during the 30 minute observation period.

3. If RM 9 is used to demonstrate compliance with Conditions 4.1.2(a)(i)(A), a deviation shall be indicated in the monitoring record if the open flare's opacity exceeds 30%.

Recordkeeping

B. I. Pursuant to 40 CFR Section 60.7(f); the owners or operators shall maintain a file of all measurements, maintenance, reports and records.

II. Pursuant to 39.5(7)(b) and (e) of the Act, the Permittee shall collect and maintain the following records of the visible emissions observations required by Condition 4.1.2(a)(ii)(A). These records shall include the following:

1. Copies of all field data sheets as per RM 9 and/or 22 which includes but is not limited to the following:

   (a) Date and time the observations were performed;

   (b) Name(s) of observing personnel and their affiliation;

   (c) The total elapsed time for each observation, i.e., the observation period, pursuant to the method used;

   (d) Identification of the equipment which was observed; and

   (e) The findings of the observation including the presence of any visible emissions or the percentage of opacity;

2. Operational status of the open flare;

3. An indication of the monitoring frequency, i.e., monthly or quarterly;

4. If applicable, a description of any corrective action taken including if the corrective action took place within 4 hours of the initial observation of exceedance.

b. i. Sulfur Dioxide Requirements (SO_2)

A. Pursuant to 35 IAC 214.301, no person shall cause or allow the emission of sulfur dioxide (SO_2) into the atmosphere from any process emission source to exceed 2000 ppm.

B. Pursuant to Construction Permit 06100058, emissions of SO_2 from the open flare shall not exceed 80 tons/year: [T1]

ii. **Compliance Method (SO_2 Requirements)**

Monitoring

A. Pursuant to Construction Permit 06100058, compliance with annual limits shall be determined from a running total of 12 months of data, i.e., the sum of emissions data for the month of record plus the preceding 11 months of data. [T1]

B. Pursuant to Sections 39.5(7)(b), (c) and (d) of the Act, the Permittee shall demonstrate compliance with Condition 4.1.2(b)(i)(A) and (B) monthly based upon the 12 month total LFG volumetric flow throughput through the gas collection and control system (cubic feet per minute), e.g., the sum of the month of record volumetric flow plus the preceding 11 months volumetric flow, and an analysis of the LFG chemical and physical composition as follows:

I. Volumetric Flow Throughput: The Permittee shall install, calibrate, operate, and maintain a gas flow rate measuring device that shall record the flow to the open flare at least every 15 minute.

II. LFG Chemical and Physical Composition: The LFG shall be sampled and analyzed annually for total reduced sulfur (TRS) as per RM 15/16 or ASTM D5504; and LFG methane, and NMOC (pound/cubic foot) and net heat content (Btu/cubic foot) as per RM 3C. Except upon IEPA/USEPA written request, a written notification of testing or submittal of a formal testing protocol is not required for these activities.

III. The Permittee shall determine the overall sulfur content of the collected LFG in pounds per hour based upon LFG volumetric flow rate and LFG TRS data required in Condition 4.1.2(b)(ii)(B)(I) and (II).

IV. The Permittee shall demonstrate compliance with the limitations in Condition 4.1.2(b)(i)(A) and (B) based on LFG volumetric flow rate data and LFG Chemical and Physical Composition data required in Condition 4.1.2(b)(ii)(B)(I) and (II), and calculations of the maximum possible SO_2 concentration and the annual SO_2 emissions (ton/year) for a given month based upon the sum of LFG throughput data for the month of record plus the preceding 11 months of data, assuming stoichiometric combustion, i.e., 0% excess air and 100% conversion of TRS to SO_2.

C. Pursuant to Sections 39.5(7)(b) and (d) of the Act, the Permittee shall inspect and verify proper operation of the open flare on a monthly basis.

Recordkeeping

D. Pursuant to Sections 39.5(7)(b) and (e) of the Act, the Permittee shall maintain the following records:

I. Design specifications for the flare as set by the manufacturer, including maximum gas capacity (scfm) and maximum heat input capacity (million Btu/hour). As an alternative to manufacturer's data for emissions, the Permittee may keep a record of the maximum emissions, based on engineering calculations, with supporting documentation.

II. The LFG consumed by the flare, on a daily basis.

III. The total sulfur content of the LFG and the results of the compliance verification analysis pursuant to Condition 4.1.2(b)(i)(A) and 35 IAC 214.301 determined in accordance with Condition 4.1.2(b)(ii)(B).

IV. Log of sampling and analysis activity, including measured data, documentation for the sampling and analysis activities, and supporting documentation and calculations for the sulfur content of LFG on an hourly basis.

V. Annual emissions of SO_2 from the affected flare (tons/year) with supporting calculations.

c. i. **Nonmethane Organic Compounds Requirements (NMOC)**

A. I. Pursuant to 40 CFR 60.752(b)(1)(i), the Permittee shall install a landfill gas collection and control system in compliance with 40 CFR 60.752(b)(2).

II. Pursuant to 40 CFR 60.752(b)(2)(i) and Section 39.5(7)(a) of the Act, the landfill gas collection and control system shall be designed,

installed, and operated as per the Illinois EPA approved collection and control system design plan, dated September 22, 2014.

1. Pursuant to 40 CFR 60.752(b)(2)(i)(A) and Section 39.5(7)(a) of the Act, the collection and control system shall meet the design requirements in Condition 4.1.2(c)(i)(A)(III) and 40 CFR 60.752(b)(2)(ii).

2. Pursuant to 40 CFR 60.752(b)(2)(i)(B) and Section 39.5(7)(a) of the Act, the following alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions of 40 CFR 60.753 through 60.758 are approved:

   (a) The Permittee may utilize temporary gas extraction wells, horizontal collection trenches and/or leachate collection systems for LFG extraction until permanent extraction wells can be installed once the area is at final grade. This exclusion does not exclude the temporary LFG extraction points from compliance with the applicable provisions of Condition 4.1.2(b)(A)(III) and (IV) and 40 CFR 60.752(b)(2)(ii)-(iv); Condition 4.1.2(c)(i)(B) and 40 CFR Section 60.753 [Operational standards for collection and control systems]; Conditions 4.1.2(c)(ii)(A)(II) through (VI) and 40 CFR Section 60.755 [Compliance provisions]; and Condition 4.1.2(c)(ii)(B) and 40 CFR Section 60.756 [Monitoring of operations].

   (b) The Permittee may exclude from monitoring, required pursuant to Condition 4.1.2(c)(ii)(B) and 40 CFR 60.756(a) as follows:

      (i) Those wells installed within the waste boundary and connected to the gas collection and control system (GCCS) for odor control or for purposes other than NMOC control and/or off-site landfill migration control installed prior to the age criteria shown in Condition 4.1.2(c)(i)(B)(I) and 40 CFR 60.753(a); and

      (ii) Exclusion of dangerous areas such as roads, the active area, truck traffic areas, areas with snow or ice covered, and steep sloped areas with grade equals to 4:1 from the surface monitoring plan.

      Pursuant to Sections 39.5(7)(b) and (e) of the Act, for each surface monitoring event, the Permittee is required to keep records of the actual surface monitoring route followed and records of specific wells and/or areas excluded from monitoring and the reason for the exclusion.

III. Pursuant to 40 CFR 60.752(b)(2)(ii), the Permittee shall install a collection and control system that captures the gas generated within the landfill as required by the following:

1. Pursuant to 40 CFR 60.752(b)(2)(ii)(A), the active collection system shall:

(a) Pursuant to 40 CFR 60.752(b)(2)(ii)(A)(1), be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment;

(b) Pursuant to 40 CFR 60.752(b)(2)(ii)(A)(2), collect gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for a period of:

(i) 5 years or more if active; or

(ii) 2 years or more if closed or at final grade.

(c) Pursuant to 40 CFR 60.752(b)(2)(ii)(A)(3), collect gas at a sufficient extraction rate;

(d) Pursuant to 40 CFR 60.752(b)(2)(ii)(A)(4), be designed to minimize off-site migration of subsurface gas.

2. Pursuant to 40 CFR 60.752(b)(2)(iii), the Permittee shall route all the collected gas to a control system that complies with the requirements in either 40 CFR 60.752(b)(2)(iii)(A), (B) or (C). In this case, the source has elected to comply with the following:

(a) Pursuant to 40 CFR 60.752(b)(2)(iii)(A), an open flare designed and operated in accordance with 40 CFR 60.18 except as noted in Condition 4.1.2(c)(ii)(C)(III) and 40 CFR 60.754(e);

Where:

(i) Pursuant to 40 CFR 60.18(c)(1), the flare shall be designed for and operated with no visible emissions as determined by the methods specified in 40 CFR 60.18(f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

(ii) Pursuant to 40 CFR 60.18(c)(2), the flare shall be operated with a flame present at all times, as determined by the methods specified in 40 CFR 60.18(f).

(iii) Pursuant to 40 CFR 60.18(c)(3), the Permittee has the choice of adhering to either the heat content specifications in 40 CFR 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR 60.18(c)(4), or adhering to the requirements in 40 CFR 60.18(c)(3)(i).

(A) Pursuant to 40 CFR 60.18(c)(3)(i)(B), the actual exit velocity of a flare shall be determined by the method specified in 40 CFR 60.18(f)(4). Pursuant to Condition 4.1.2(c)(ii)(C)(III) and 40 CFR 60.754(e), Method 3C may be used to determine the landfill gas molecular weight for

calculating the flare gas exit velocity under §60.18(f)(4).

(B) Pursuant to 40 CFR 60.18(c)(3)(ii), flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in 40 CFR 60.18(f)(3). Pursuant to Condition 4.1.2(c)(ii)(C)(III) and 40 CFR 60.754(e), the net heating value of the combusted landfill gas as determined in §60.18(f)(3) is calculated from the concentration of methane in the landfill gas as measured by Method 3C. A minimum of three 30-minute Method 3C samples are determined. The measurement of other organic components, hydrogen, and carbon monoxide is not applicable.

(iv) Pursuant to 40 CFR 60.18(c)(4)(i), open flare shall be designed for and operated with an exit velocity, as determined by the methods specified in 40 CFR 60.18(f)(4), less than 18.3 m/sec (60 ft/sec), except as provided in 40 CFR 60.18(c)(4)(ii) and (iii).

(v) Pursuant to 40 CFR 60.18(e), except as provided for in Condition 4.1.2(c)(i)(B)(V) and 40 CFR 60.753(e), flares used to comply with provisions of 40 CFR 60.752 shall be operated at all times when emissions may be vented to them.

IV. Pursuant to 40 CFR 60.752(b)(2)(iv), the Permittee shall operate the collection and control device installed to comply with 40 CFR Subpart WWW, in accordance with the provisions Condition 4.1.2(c)(i)(B) and 40 CFR Section 60.753 [Operational standards for collection and control systems]; Conditions 4.1.2(c)(ii)(A)(II) through (VI) and 40 CFR Section 60.755 [Compliance provisions]; and Condition 4.1.2(c)(ii)(B) and 40 CFR Section 60.756 [Monitoring of operations].

V. Pursuant to 40 CFR 60.752(b)(2)(v), the collection and control system may be capped or removed provided that all the conditions of 40 CFR 60.752(b)(2)(v)(A), (B), and (C) are met:

1. The landfill shall be a closed landfill as defined in 40 CFR 60.751. A closure report shall be submitted to the Illinois EPA Compliance Section as provided in Condition 4.1.5(b)(i)(B) and 40 CFR 60.757(d);

2. The collection and control system shall have been in operation a minimum of 15 years; and

3. Following the procedures specified in Condition 4.1.2(c)(ii)(C)(I) and 40 CFR 60.754(b), the calculated NMOC gas produced by the landfill shall be less than 50 megagrams

per year on three successive test dates. The test dates shall be no less than 90 days apart, and no more than 180 days apart.

B. I. Pursuant to 40 CFR 60.753(a), the Permittee shall operate the collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for:

1. 5 years or more if active; or

2. 2 years or more if closed or at final grade;

II. Pursuant to 40 CFR 60.753(b), the Permittee shall operate the collection system with negative pressure at each wellhead except under the following conditions:

1. A fire or increased well temperature;

2. Use of a geomembrane or synthetic cover. The Permittee shall develop acceptable pressure limits in the design plan;

3. A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the Administrator.

III. Pursuant to 40 CFR 60.753(c), the Permittee shall operate each interior wellhead in the collection system with a landfill gas temperature less than 55°C (131°F) and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The Permittee may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.

IV. Pursuant to 40 CFR 60.753(d), the Permittee shall operate the collection system so that the methane concentration is less than 500 ppm above background at the surface of the landfill.

V. Pursuant to 40 CFR 60.753(e), the Permittee shall operate the system such that all collected gases are vented to a control system designed and operated in compliance with Condition 4.1.2(c)(i)(A)(III) and 40 CFR 60.752(b)(2)(iii). In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour.

VI. Pursuant to 40 CFR 60.753(f), the Permittee shall operate the control system at all times when the collected gas is routed to the system.

VII Pursuant to 40 CFR 60.753(g), if monitoring demonstrates that the operational requirements in Condition 4.1.2(c)(i)(B)(II), (III), or (IV) and 40 CFR 60.753(b), (c), or (d) are not met, corrective action shall be taken as specified in Condition 4.1.2(c)(ii)(A)(II)(3) and (4) and/or 4.1.2(c)(ii)(A)(IV) and 40 CFR 60.755(a)(3) and (5) and/or 40 CFR 60.755(c). If corrective actions are taken as specified in Condition 4.1.2(c)(ii)(A)(II) and/or (IV) and 40 CFR 60.755, the monitored exceedance is not a violation of the operational requirements in Condition 4.1.2(c)(i)(B) and 40 CFR 60.753.

C. I. Pursuant to 40 CFR 60.759(a), the Permittee shall site active collection wells, horizontal collectors, surface collectors, or other extraction devices at a sufficient density throughout all gas producing areas using the following procedures unless alternative procedures have been approved in the collection and control system design plan as provided in 40 CFR 60.752(b)(2)(i)(C) and (D):

1. Pursuant to 40 CFR 60.759(a)(1), the collection devices within the interior and along the perimeter areas shall be certified to achieve comprehensive control of surface gas emissions by a professional engineer. The following issues shall be addressed in the design: depths of refuse, refuse gas generation rates and flow characteristics, cover properties, gas system expandability, leachate and condensate management, accessibility, compatibility with filling operations, integration with closure end use, air intrusion control, corrosion resistance, fill settlement, and resistance to the refuse decomposition heat.

2. Pursuant to 40 CFR 60.759(a)(2), the sufficient density of gas collection devices determined in Condition 4.1.2(c)(i)(C)(I)(1) and 40 CFR 60.759(a)(1) shall address landfill gas migration issues and augmentation of the collection system through the use of active or passive systems at the landfill perimeter or exterior.

3. Pursuant to 40 CFR 60.759(a)(3), the placement of gas collection devices determined in Condition 4.1.2(c)(i)(C)(1) and 40 CFR 60.759(a)(1) shall control all gas producing areas, except as provided as follows:

(a) Pursuant to 40 CFR 60.759(a)(3)(i), any segregated area of asbestos or nondegradable material may be excluded from collection if documented as provided in Condition 4.1.2(c)(ii)(D)(VIII) and 40 CFR 60.758(d). The documentation shall provide the nature, date of deposition, location and amount of asbestos or nondegradable material deposited in the area, and shall be provided to the Illinois EPA upon request.

(b) Pursuant to 40 CFR 60.759(a)(3)(ii), any nonproductive area of the landfill may be excluded from control, provided that the total of all excluded areas can be shown to contribute less than 1 percent of the total amount of NMOC emissions from the landfill. The amount, location, and age of the material shall be documented and provided to the Illinois EPA upon request. A separate NMOC emissions estimate shall be made for each section proposed for exclusion, and the sum of all such sections shall be compared to the NMOC emissions estimate for the entire landfill. Emissions from each section shall be computed using the equation in 40 CFR 40 CFR 60.759(a)(3)(ii).

(c) Pursuant to 40 CFR 60.759(a)(3)(iii), the values for k and CNMOC determined in field testing shall be used if field testing has been performed in determining the NMOC emission rate or the radii of influence (this distance from the well center to a point in the landfill where the pressure gradient applied by the blower or compressor approaches zero). If field testing has not

been performed, the default values for k, LO and CNMOC provided in 40 CFR 60.754(a)(1) or the alternative values from 40 CFR 60.754(a)(5) shall be used. The mass of nondegradable solid waste contained within the given section may be subtracted from the total mass of the section when estimating emissions provided the nature, location, age, and amount of the nondegradable material is documented as provided in Condition 4.1.2(c)(i)(C)(I)(3)(a) and 40 CFR 60.759(a)(3)(i).

II. Pursuant to 40 CFR 60.759(b), the Permittee shall construct the gas collection devices using the following equipment or procedures:

1. The landfill gas extraction components shall be constructed of polyvinyl chloride (PVC), high density polyethylene (HDPE) pipe, fiberglass, stainless steel, or other nonporous corrosion resistant material of suitable dimensions to: convey projected amounts of gases; withstand installation, static, and settlement forces; and withstand planned overburden or traffic loads. The collection system shall extend as necessary to comply with emission and migration standards. Collection devices such as wells and horizontal collectors shall be perforated to allow gas entry without head loss sufficient to impair performance across the intended extent of control. Perforations shall be situated with regard to the need to prevent excessive air infiltration.

2. Vertical wells shall be placed so as not to endanger underlying liners and shall address the occurrence of water within the landfill. Holes and trenches constructed for piped wells and horizontal collectors shall be of sufficient cross-section so as to allow for their proper construction and completion including, for example, centering of pipes and placement of gravel backfill. Collection devices shall be designed so as not to allow indirect short circuiting of air into the cover or refuse into the collection system or gas into the air. Any gravel used around pipe perforations should be of a dimension so as not to penetrate or block perforations.

3. Collection devices may be connected to the collection header pipes below or above the landfill surface. The connector assembly shall include a positive closing throttle valve, any necessary seals and couplings, access couplings and at least one sampling port. The collection devices shall be constructed of PVC, HDPE, fiberglass, stainless steel, or other nonporous material of suitable thickness.

III. Pursuant to 40 CFR 60.759(c), the Permittee shall convey the landfill gas to a control system in compliance with Condition 4.1.2(c)(i)(A)(III)(2) and 40 CFR 60.752(b)(2)(iii) through the collection header pipe(s). The gas mover equipment shall be sized to handle the maximum gas generation flow rate expected over the intended use period of the gas moving equipment using the following procedures:

1. Pursuant to 40 CFR 60.759(c)(1), for existing collection systems, the flow data shall be used to project the maximum flow rate. If no flow data exists, the procedures below in Condition 4.1.2(c)(i)(C)(III)(2) and 40 CFR 60.759(c)(2) shall be used.

2. Pursuant to 40 CFR 60.759(c)(2), for new collection systems, the maximum flow rate shall be in accordance with Condition 4.1.2(c)(ii)(A)(II)(1) and 40 CFR 60.755(a)(1).

D. Pursuant to 40 CFR 60.1(a), the Permittee must comply with the applicable General Provisions in 40 CFR 60.1 through 60.19 (See Condition 7.3(a)).

ii. **Compliance Method (NMOC Requirements)**

Compliance Provisions

A. I. 1. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall operate the GCCS under the provisions of the GCCS design plan prepared by the Permittee and submitted to the IEPA for its review as required in Conditions 4.1.2(c)(i)(A)(II) and 40 CFR 60.752(b)(2)(i). The GCCS design plan shall be designed to significantly capture the gas generated within the MSW landfill and reduce NMOC emissions, pursuant to Section 39.5(7)(a) of the Act and Conditions 4.1.2(c)(i)(A)(III)-(IV) and 40 CFR 60.752(b)(2)(ii) and (iv). The Permittee shall comply with the GCCS design plan and any amendments to the GCCS design plan submitted pursuant to Conditions 4.1.2(c)(i)(A)(II).

2. Pursuant to Section 39.5(7)(a) of the Act and Condition 4.1.2(c)(i)(A)(I), the GCCS design plan shall be amended from time to time by the Permittee so that the GCCS design plan is current. Such amendments shall be consistent with the requirements set forth Conditions 4.1.2(c)(i)(A)(III)-(IV) and 40 CFR 60.752(b)(2)(ii) and (iv) and shall be submitted to the IEPA within 30 days of such amendment. Any future revision to the GCCS design plan made by the Permittee during the permit term is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the IEPA within 30 days of receipt of the revision. In the event that the IEPA notifies the Permittee of a deficiency with any revision to the GCCS design plan, the Permittee shall be required to revise and resubmit the GCCS design plan within 30 days of receipt of notification to address the deficiency pursuant to Section 39.5(7)(a) of the Act.

3. The approved GCCS design plan, dated September 22, 2014, is incorporated herein by reference. The document constitutes the formal established GCCS design plan required by Condition 4.1.2(c)(i)(A)(II) and 40 CFR 60.752(b)(2)(i), addressing the capture of the gas generated within the MSW landfill and reduce NMOC emissions.

II. Pursuant to 40 CFR 60.755(a), except as provided, if applicable, in Condition 4.1.2(c)(i)(A)(II)(2) and 40 CFR 60.752(b)(2)(i)(B), the specified methods below and in 40 CFR 60.755(a)(1) through (a)(6) shall be used to determine whether the gas collection system is in compliance with Condition 4.1.2(c)(i)(A)(III) and 40 CFR 60.752(b)(2)(ii).

1. Pursuant to 40 CFR 60.755(a)(1), for the purposes of calculating the maximum expected gas generation flow rate from the landfill to determine compliance with Condition 4.1.2(c)(i)(A)(III)(1)(a) and 40 CFR 60.752(b)(2)(ii)(A)(1), one of the equations in 40 CFR 60.755(a)(1)(i) or (ii) shall be used. The k and Lo kinetic factors should be those published in the most recent Compilation of Air Pollutant Emission

Factors (AP-42) or other site specific values demonstrated to be appropriate and approved by the Administrator. If k has been determined as specified in 40 CFR 60.754(a)(4), the value of k determined from the test shall be used. A value of no more than 15 years shall be used for the intended use period of the gas mover equipment. The active life of the landfill is the age of the landfill plus the estimated number of years until closure.

Pursuant to 40 CFR 60.755(a)(1)(iii),, actual flow data may be used to project the maximum expected gas generation flow rate instead of, or in conjunction with, the equations in 40 CFR 60.755(a)(1)(a)(1)(i) and (ii). If the landfill is still accepting waste, the actual measured flow data will not equal the maximum expected gas generation rate, so calculations using the equations in 40 CFR 60.755(a)(1)(a)(1)(i) or (ii) or other methods shall be used to predict the maximum expected gas generation rate over the intended period of use of the gas control system equipment.

2. Pursuant to 40 CFR 60.755(a)(2), for the purposes of determining sufficient density of gas collectors for compliance with Condition 4.1.2(c)(i)(A)(III)(1)(b) and 40 CFR 60.752(b)(2)(ii)(A)(2), the Permittee shall design a system of vertical wells, horizontal collectors, or other collection devices, satisfactory to the Illinois EPA, capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards.

3. Pursuant to 40 CFR 60.755(a)(3), for the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with Condition 4.1.2(c)(i)(A)(III)(1)(c) and 40 CFR 60.752(b)(2)(ii)(A)(3), the Permittee shall measure gauge pressure in the gas collection header at each individual well, monthly. If a positive pressure exists, action shall be initiated to correct the exceedance within 5 calendar days, except for the three conditions allowed under Condition 4.1.2(c)(i)(B)(II) and 40 CFR 60.753(b). If negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of positive pressure. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval.

4. Pursuant to 40 CFR 60.755(a)(5), for the purpose of identifying whether excess air infiltration into the landfill is occurring, the Permittee shall monitor each well monthly for temperature and nitrogen or oxygen as provided in Condition 4.1.2(c)(i)(B)(III) and 40 CFR 60.753(c). If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance

standards. An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval.

5. Pursuant to 40 CFR 60.755(a)(6), if the Permittee seeks to demonstrate compliance with Condition 4.1.2(c)(i)(A)(III)(1)(d) and 40 CFR 60.752(b)(2)(ii)(A)(4) through the use of a collection system not conforming to the specifications provided in Condition 4.1.2(c)(i)(C) and 40 CFR 60.759, the Permittee shall provide information satisfactory to the Administrator as specified in 40 CFR 60.752(b)(2)(i)(C) demonstrating that off-site migration is being controlled.

III. Pursuant to 40 CFR 60.755(b), for purposes of compliance with 40 60.753(a), the Permittee shall place each well or design component as specified in the approved design plan as provided in Condition 4.1.2(c)(i)(A)(II) and 40 CFR 60.752(b)(2)(i). Each well shall be installed no later than 60 days after the date on which the initial solid waste has been in place for a period of:

1. 5 years or more if active; or

2. 2 years or more if closed or at final grade.

IV. Pursuant to 40 CFR 60.755(c), the following procedures shall be used for compliance with the surface methane operational standard as provided in Condition 4.1.2(c)(i)(B)(IV) and 40 CFR 60.753(d).

1. Pursuant to 40 CFR 60.755(c)(1), the Permittee shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals (or a site-specific established spacing) for each collection area on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in Condition 4.1.2(c)(ii)(A)(V) and 40 CFR 60.755(d).

2. Pursuant to 40 CFR 60.755(c)(2), the background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells.

3. Pursuant to 40 CFR 60.755(c)(3), surface emission monitoring shall be performed in accordance with RM 21 of Appendix A of 40 CFR Part 60, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.

4. Pursuant to 40 CFR 60.755(c)(4), any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified below and in 40 CFR 60.755(c)(4)(i) through (v) shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of Condition 4.1.2(c)(i)(B)(IV) and 40 CFR 60.753(d).

(a) Pursuant to 40 CFR 60.755(c)(4)(i), the location of each monitored exceedance shall be marked and the location recorded.

(b) Pursuant to 40 CFR 60.755(c)(4)(ii), cover maintenance or adjustments to the vacuum of the adjacent wells to

increase the gas collection in the vicinity of each exceedance shall be made and the location shall be re-monitored within 10 calendar days of detecting the exceedance.

(c) Pursuant to 40 CFR 60.755(c)(4)(iii), if the re-monitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the same location, the action specified in Condition 4.1.2(c)(ii)(A)(IV)(4)(e) and 40 CFR 60.755(c)(4)(v) shall be taken, and no further monitoring of that location is required until the action specified in Condition 4.1.2(c)(ii)(A)(IV)(4)(e) and 40 CFR 60.755(c)(4)(v).

(d) Pursuant to 40 CFR 60.755(c)(4)(iv), any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the 10-day re-monitoring specified in Conditions 4.1.2(c)(ii)(A)(IV)(4)(b) or (c) and 40 CFR 60.755(c)(4)(ii) or (iii) shall be re-monitored 1 month from the initial exceedance. If the 1-month remonitoring shows a concentration less than 500 parts per million above background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1-month remonitoring shows an exceedance, the actions specified in Conditions 4.1.2(c)(ii)(A)(IV)(4)(c) or (e) and 40 CFR 60.755(c)(4)(iii) or (v) shall be taken.

(e) Pursuant to 40 CFR 60.755(c)(4)(v), for any location where monitored methane concentration equals or exceeds 500 parts per million above background three times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the Administrator for approval.

(f) Pursuant to 40 CFR 60.753(d), to determine if this level is exceeded, the Permittee shall conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The Permittee may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing.

5. Pursuant to 40 CFR 60.755(c)(5), the Permittee shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.

V. Pursuant to 40 CFR 60.755(d), the Permittee shall comply with the following instrumentation specifications and procedures for surface emission monitoring devices:

1. The portable analyzer shall meet the instrument specifications provided in RM 21 of Appendix A of 40 CFR Part 60, except that "methane" shall replace all references to VOC.

2. The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air.

3. To meet the performance evaluation requirements in RM 21, the instrument evaluation procedures of RM 21 shall be used.

4. The calibration procedures provided in RM 21 shall be followed immediately before commencing a surface monitoring survey.

VI. Pursuant to 40 CFR 60.755(e), the provisions of 40 CFR 60 Subpart WWW shall apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for treatment or control devices.

Monitoring

B. I. Pursuant to 40 CFR 60.756(a), the Permittee shall install a sampling port and a thermometer, other temperature measuring device, or an access port for temperature measurements at each wellhead and:

1. Measure the gauge pressure in the gas collection header on a monthly basis as provided in Condition 4.1.2(c)(ii)(A)(II)(3) and 40 CFR 60.755(a)(3); and

2. Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in Condition 4.1.2(c)(ii)(A)(II)(4) and 40 CFR 60.755(a)(5); and

Pursuant to Condition 4.1.2(c)(i)(B)(III) and 40 CFR 40 CFR 60.753(c),

(a) The nitrogen level shall be determined using Method 3C, unless an alternative test method is established in the collection and control system design plan as allowed, if applicable, in Condition 4.1.2(c)(i)(A)(II) and 40 CFR 60.752(b)(2)(i).

(b) Unless an alternative test method is established in the collection and control system design plan as allowed, if applicable, in Condition 4.1.2(c)(i)(A)(II) and 40 CFR 60.752(b)(2)(i), the oxygen shall be determined by an oxygen meter using Method 3A or 3C except that:

(i) The span shall be set so that the regulatory limit is between 20 and 50 percent of the span;

(ii) A data recorder is not required;

(iii) Only two calibration gases are required, a zero and span, and ambient air may be used as the span;

(iv) A calibration error check is not required;

(v) The allowable sample bias, zero drift, and calibration drift are ±10 percent.

3. Monitor temperature of the landfill gas on a monthly basis as provided in Condition 4.1.2(c)(ii)(A)(II)(4) and 40 CFR 60.755(a)(5).

II. Pursuant to 40 CFR 60.756(c), the Permittee shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment on the open flare:

1. A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame.

2. A device that records flow to or bypass of the flare. The Permittee shall either:

(a) Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or

(b) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

III. Pursuant to 40 CFR 60.756(f), the Permittee shall monitor surface concentrations of methane according to the instrument specifications and procedures provided in Condition 4.1.2(c)(ii)(A)(V) and 40 CFR 60.755(d). Any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of 500 ppm or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring.

IV. Pursuant to Sections 39.5(7)(b) and (d) of the Act and 40 CFR 60.18(f)(2), the presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

Testing

C. I. Pursuant to 40 CFR 60.754(b), the Permittee shall calculate the NMOC emission rate for purposes of determining when the system can be removed as provided in Condition 4.1.2(c)(i)(A)(V) and 40 CFR 60.752(b)(2)(v), using the equation in 40 CFR 60.754(b).

1. Pursuant to 40 CFR 60.754(b)(1), the flow rate of landfill gas, QLFG, shall be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control device using a gas flow measuring device calibrated according

to the provisions of section 4 of Method 2E of Appendix A of 40 CFR Part 60.

2. Pursuant to 40 CFR 60.754(b)(2), the average NMOC concentration, CNMOC, shall be determined by collecting and analyzing landfill gas sampled from the common header pipe before the gas moving or condensate removal equipment using the procedures in Method 25C or Method 18 of Appendix A of 40 CFR Part 60. If using Method 18 of Appendix A of 40 CFR Part 60, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The sample location on the common header pipe shall be before any condensate removal or other gas refining units. The Permittee shall divide the NMOC concentration from Method 25C of Appendix A of 40 CFR Part 60 by six to convert from CNMOC as carbon to CNMOC as hexane.

3. Pursuant to 40 CFR 60.754(b)(3), the Permittee may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the USEPA.

II. Pursuant to 40 CFR 60.754(c),when calculating emissions for PSD purposes, the Permittee shall estimate the NMOC emission rate for comparison to the PSD major source and significance levels in 40 CFR 51.166 or 52.21 using AP-42 or other approved measurement procedures.

III. Pursuant to 40 CFR 60.754(e), the performance test required in Condition 4.1.2(c)(i)(A)(III)(2) and 40 CFR 60.752(b)(2)(iii)(A), the net heating value of the combusted landfill gas as determined in 40 CFR 60.18(f)(3) is calculated from the concentration of methane in the landfill gas as measured by Method 3C. A minimum of three 30-minute Method 3C samples are determined. The measurement of other organic components, hydrogen, and carbon monoxide is not applicable. Method 3C may be used to determine the landfill gas molecular weight for calculating the flare gas exit velocity under 40 CFR 60.18(f)(4).

Recordkeeping

General Records

D. I. Pursuant to Sections 39.5(7)(b) and (e) of the Act, the Permittee shall keep readily accessible, on-site records of the items listed below. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.

1. Site-specific NMOC emission rate(s) and/or methane generation rate constant(s) (k) used to determine MSW landfill emissions (megagrams/yr) allowed under 40 CFR 60.754(a)(3), (4), and/or (5).

2. Copies of USEPA and/or Illinois EPA correspondence approving alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions of 40 CFR 60.753 through 60.758 allowed under, if applicable, in Condition 4.1.2(c)(i)(A)(II)(2) and 40 CFR 60.752(b)(2)(i)(B).

3. Waste Acceptance

Copies of all waste acceptance records required to be maintained under 35 IAC Subtitle G (i.e., daily, monthly, and/or quarterly solid waste records and summaries). At a minimum these records shall include:

(a) Monthly records of the amount of waste accepted;

(b) The year-by-year waste acceptance rate; and

(c) The total amount of waste in-place.

4. An inspection maintenance and repair log for the affected landfill and/or control equipment, listing each activity performed with date. This requirement includes the landfill cover integrity inspection and repair requirement in Condition 4.1.2(c)(ii)(A)(IV)(5) and 40 CFR 60.755(c)(5).

5. Up-to-date, readily accessible continuous records of the landfill flow to the control system (Monthly and annual). Annual landfill gas usage shall be determined on a calendar year basis.

6. Operating hours on a monthly basis for the landfill gas open flare.

NSPS Records

II. Pursuant to 40 CFR Section 60.7(b); the owners or operators shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the GCCS including; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

III. Pursuant to 40 CFR Section 60.7(f); the owners or operators shall maintain a file of all measurements, maintenance, reports and records.

IV. Pursuant to Sections 39.5(7)(b) and (e) of the Act and 40 CFR 60.18(f)(2), the Permittee shall keep a record of the presence of a flare pilot flame using continuous temperature recorder or logbook recording all alarm activation incidents and record whether each alarm activation indicates the pilot flame is extinguished.

V. Pursuant to 40 CFR 60.758(a), except as provided, if applicable, in Condition 4.1.2(c)(i)(A)(II)(2) and 40 CFR 60.752(b)(2)(i)(B), the Permittee shall keep up-to-date, readily accessible, on-site records of the design capacity report which triggered 40 CFR 60.752(b), the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.

VI. Pursuant to 40 CFR 60.758(b), except as provided, if applicable, in Condition 4.1.2(c)(i)(A)(II)(2) and 40 CFR 60.752(b)(2)(i)(B), the Permittee shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed below and in 40 CFR 60.758(b)(1) through (b)(4) as measured during the initial performance test or compliance determination. Records of subsequent

tests or monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal.

1. Pursuant to 40 CFR 60.758(b)(1), the following records shall be kept to demonstrate compliance with Condition 4.1.2(c)(i)(A)(III) and 40 CFR 60.752(b)(2)(ii):

   (a) The maximum expected gas generation flow rate as calculated in Condition 4.1.2(c)(ii)(A)(II)(1) and 40 CFR 60.755(a)(1). The Permittee may use another method to determine the maximum gas generation flow rate, if the method has been approved by the Administrator.

   (b) The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in Condition 4.1.2(c)(i)(C)(I)(1) and 40 CFR 60.759(a)(1).

2. Pursuant to 40 CFR 60.758(b)(4), the following records shall be kept to demonstrate compliance with Condition 4.1.2(c)(i)(A)(III)(2)(a) and 40 CFR 60.752(b)(2)(iii)(A) when an open flare is being used: the flare type (i.e., steam-assisted, air-assisted, or nonassisted), all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in 40 CFR 60.18; continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent.

VII. Pursuant to 40 CFR 60.758(c), except as provided, if applicable, in Condition 4.1.2(c)(i)(A)(II) and 40 CFR 60.752(b)(2)(i)(B), the Permittee shall keep up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in Condition 4.1.2(c)(ii)(B) and 40 CF 60.756 as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.

1. Pursuant to 40 CFR 60.758(c)(2), the Permittee shall keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified in Condition 4.1.2(c)(ii)(B)(II) and 40 CFR 60.756.

2. Pursuant to 40 CFR 60.758(c)(4), the Permittee shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified in Condition 4.1.2(c)(ii)(B)(II) and 40 CFR 60.756(c), and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent.

The above is considered to be in conjunction with the monitoring specified Condition 4.1.2(c)(ii)(B).

Pursuant to Sections 39.5(7)(b) and (e) of the Act, the Permittee shall include in the monitoring record any instances when positive pressure occurs pursuant to Condition 4.1.2(c)(i)(B)(II).

VIII. Pursuant to 40 CFR 60.758(d), except as provided in Condition 4.1.2(c)(i)(A)(II) and 40 CFR 60.752(b)(2)(i)(B), the Permittee shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.

1. Pursuant to 40 CFR 60.758(d)(1), the shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under 40 CFR 60.755(b).

2. Pursuant to 40 CFR 60.758(d)(2), the Permittee shall keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as provided in 40 CFR 60.759(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in 40 CFR 60.759(a)(3)(ii).

IX. Pursuant to 40 CFR 60.758(e), except as provided in 40 CFR 60.752(b)(2)(i)(B), the Permittee shall keep up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in 40 CFR 60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.

d. i. **Hazardous Air Pollutant Requirements (HAP)**

A. I. Pursuant to 40 CFR 63.1955(a), the Permittee shall comply with the requirements in Condition 4.1.2(c) and 4.1.5((b)((i)(A) through (C)) pursuant to 40 CFR 60 Subpart WWW.

II. Pursuant to 40 CFR 63.1955(b), the Permittee must comply with the requirements in Condition 4.1.2(d)(ii)(A) and (B) and 4.1.5((b)((i)(D) and 40 CFR 63.1960 through 63.1985 and with the general provisions of 40 CFR 63 Subpart A specified in table 1 of 40 CFR 63 Subpart AAAA (See Condition 7.3) pursuant to 40 CFR 63 Subpart AAAA.

III. Pursuant to 40 CFR 63.1955(c), for approval of collection and control systems that include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions, the Permittee must follow the procedures in 40 CFR 60.752(b)(2). If alternatives have already been approved under 40 CFR 60 subpart WWW, these alternatives can be used to comply with 40 CFR 63 Subpart AAAA.

Note: The approved alternatives referenced above are listed in Conditions 4.1.2(c)(i)(A)(II)(2).

ii. **Compliance Method (HAP Requirements)**

General and Continuing Compliance Requirements

A. I. Pursuant to 40 CFR 63.1960, compliance shall be determined as per the requirements in Condition 4.1.2(c)(ii), including performance testing, monitoring of the collection system, continuous parameter monitoring, and other credible evidence. In addition, continuous parameter monitoring data, collected pursuant to Condition 4.1.2(c)(ii)(B)(II)(1), shall be used to demonstrate compliance with the operating conditions for control systems. If a deviation occurs,

the Permittee shall have failed to meet the control device operating conditions described in Condition 4.1.2(c)(i)(A)(III)(2) pursuant to 40 CFR 60 Subpart WWW and have deviated from the requirements of 40 CFR 63 Subpart AAAA. Finally, the Permittee must develop a written SSM plan according to the provisions in 40 CFR 63.6(e)(3). A copy of the SSM plan must be maintained on site. Failure to write or maintain a copy of the SSM plan is a deviation from the requirements of 40 CFR 63 Subpart AAAA.

II. 1. Pursuant to 40 CFR 63.1965, a deviation as defined in 40 CFR 63.1990, means any instance in which an affected source subject to 40 CFR 63 Subpart AAAA, or the Permittee:

(a) Fails to meet any requirement or obligation established by 40 CFR 63 Subpart AAAA, including, but not limited to, any emissions limitation (including any operating limit) or work practice standard;

(b) Fails to meet any term or condition that is adopted to implement an applicable requirement in 40 CFR 63 Subpart AAAA and that is included in the operating permit for any affected source required to obtain such a permit; or

(c) Fails to meet any emission limitation, (including any operating limit), or work practice standard in 40 CFR 63 Subpart AAAA during SSM, regardless of whether or not such failure is permitted by 40 CFR 63 Subpart AAAA.

2. Pursuant to 40 CFR 63.1965, for the purposes of the landfill monitoring and SSM plan requirements, deviations include the following:

(a) Pursuant to 40 CFR 63.1965(c), a deviation occurs when a SSM plan is not developed or maintained on site.

III. Pursuant to 40 CFR 63.1975, the following are not to be included in any average computed under 40 CFR 63 Subpart AAAA:

1. Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments.

2. Startups.

3. Shutdowns.

4. Malfunctions.

Recordkeeping

B. I. Pursuant to 40 CFR 63.1980(a), the Permittee shall keep records as specified in Conditions 4.1.2(c)(ii)(D)(II) through (IX) pursuant to 40 CFR 60 Subpart WWWW.

II. Pursuant to 40 CFR 63.1980(b) and 40 CFR 60.7(b) and 63.10(b)(2)(ii), the Permittee must keep and maintain the following general records:

1. Pursuant to 40 CFR 63.10(b)(2)(i), the occurrence and duration of each startup or shutdown when the startup or shutdown causes the source to exceed any applicable emission limitation;

2. Pursuant to 40 CFR 60.7(b) and 63.10(b)(2)(ii), the occurrence and duration of each malfunction of operation of the landfill and/or gas collection system, or the required open flare, or any periods during which a continuous monitoring system or monitoring device is inoperative;

3. Pursuant to 40 CFR 63.10(b)(2)(iii), all required maintenance performed on the open flare and monitoring equipment;

4. Pursuant to 40 CFR 63.10(b)(2)(iv)(A), actions taken during periods of startup or shutdown when the source exceeded applicable emission limitations in a relevant standard and when the actions taken are different from the procedures specified in the affected source's startup, shutdown, and malfunction plan (see §63.6(e)(3)); or

5. Pursuant to 40 CFR 63.10(b)(2)(B), actions taken during periods of malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) when the actions taken are different from the procedures specified in the affected source's startup, shutdown, and malfunction plan (see §63.6(e)(3));

6. Pursuant to 40 CFR 63.10(b)(2)(v), all information necessary, including actions taken, to demonstrate conformance with the affected source's startup, shutdown, and malfunction plan (see §63.6(e)(3)) when all actions taken during periods of startup or shutdown (and the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards), and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. (The information needed to demonstrate conformance with the startup, shutdown, and malfunction plan may be recorded using a "checklist", or some other effective form of recordkeeping, in order to minimize the recordkeeping burden for conforming events);

Applicable records include but are not limited to items such as SSM plans.

III. Pursuant to 40 CFR 63.1980(g), if the Permittee adds any liquids other than leachate in a controlled fashion to the waste mass then the Permittee must keep a record of calculations showing that the percent moisture by weight expected in the waste mass to which liquid is added is less than 40 percent. The calculation must consider the waste mass, moisture content of the incoming waste, mass of water added to the waste including leachate recirculation and other liquids addition and precipitation, and the mass of water removed through leachate or other water losses. Moisture level sampling or mass balances calculations can be used. The Permittee must document the calculations and the basis of any assumptions. Keep the record of the calculations until the Permittee ceases liquids addition.

e. i. **Asbestos**

A. I. Pursuant to 40 CFR 61.151, the Permittee shall operate any inactive waste disposal site, as defined in 40 CFR 61.141, that has received deposits of asbestos-containing waste material (ACWM) as follows:

1. Comply with one of the following:

   (a) Pursuant to 40 CFR 61.151(a)(1), either discharge no visible emissions to the outside air from an inactive waste disposal site subject to 40 CFR 61.151; or

   (b) Pursuant to 40 CFR 61.151(a)(2), cover the ACWM with at least 15 centimeters (6 inches) of compacted nonasbestos-containing material, and grow and maintain a cover of vegetation on the area adequate to prevent exposure of the ACWM; or

   (c) Pursuant to 40 CFR 61.151(a)(3), cover the asbestos-containing waste material with at least 60 centimeters (2 feet) of compacted nonasbestos-containing material, and maintain it to prevent exposure of the asbestos-containing waste; or

   (d) Pursuant to 40 CFR 61.151(a)(4), for inactive waste disposal sites for asbestos tailings, a resinous or petroleum-based dust suppression agent that effectively binds dust to control surface air emissions may be used instead of the methods listed above and in 40 CFR 61.151(a) (1), (2), and (3). Use the agent in the manner and frequency recommended for the particular asbestos tailings by the manufacturer of the dust suppression agent to achieve and maintain dust control. Obtain prior written approval of the Administrator to use other equally effective dust suppression agents. For purposes of this paragraph, any used, spent, or other waste oil is not considered a dust suppression agent.

2. Pursuant to 40 CFR 61.151(b), unless a natural barrier adequately deters access by the general public, install and maintain warning signs and fencing as required in 40 CFR 61.151(b), or comply with 40 CFR 61.151(a)(2) or (a)(3).

3. Pursuant to 40 CFR 61.151(c), the Permittee may use an alternative control method that has received prior approval of the Administrator rather than comply with the requirements of 40 CFR 61.151(a) or (b).

4. Pursuant to 40 CFR 61.151(e), within 60 days of a site becoming inactive, record, in accordance with State law, a notation on the deed to the facility property and on any other instrument that would normally be examined during a title search; this notation will in perpetuity notify any potential purchaser of the property that:

   (a) The land has been used for the disposal of asbestos-containing waste material;

   (b) The survey plot and record of the location and quantity of asbestos-containing waste disposed of within the disposal site required in 40 CFR 40 CFR 61.154(f) have been filed with the Administrator; and

   (c) The site is subject to 40 CFR Part 61, Subpart M.

II. Pursuant to 40 CFR 61.154, the Permittee shall operate any active waste disposal site that receives ACWM as follows:

1. Pursuant to 40 CFR 61.154(a), either there must be no visible emissions to the outside air from any active waste disposal site where ACWM has been deposited, or the requirements of 40 CFR 61.154(c) or (d) must be met.

2. Pursuant to 40 CFR 61.154(b), unless a natural barrier adequately deters access by the general public, either warning signs and fencing must be installed and maintained as shown in 40 CFR 61.154(b), or the requirements of 40 CFR 61.154(c)(1) must be met.

3. Pursuant to 40 CFR 61.154(c), rather than meet the no visible emission requirement of 40 CFR 61.154(a), at the end of each operating day, or at least once every 24-hour period while the site is in continuous operation, the asbestos-containing waste material that has been deposited at the site during the operating day or previous 24-hour period shall:

   (a) Pursuant to 40 CFR 61.154(c)(1), be covered with at least 15 centimeters (6 inches) of compacted nonasbestos-containing material, or

   (b) Pursuant to 40 CFR 61.154(c)(2), be covered with a resinous or petroleum-based dust suppression agent that effectively binds dust and controls wind erosion. Such an agent shall be used in the manner and frequency recommended for the particular dust by the dust suppression agent manufacturer to achieve and maintain dust control. Other equally effective dust suppression agents may be used upon prior approval by the Administrator. For purposes of this paragraph, any used, spent, or other waste oil is not considered a dust suppression agent.

4. Pursuant to 40 CFR 61.154(d), rather than meet the no visible emission requirement of 40 CFR 61.154(a), use an alternative emissions control method that has received prior written approval by the Administrator according to the procedures described in 40 CFR 61.149(c)(2).

5. Pursuant to 40 CFR 61.154(g), upon closure of the active waste disposal site, the Permittee shall comply with all the provisions of 40 CFR 61.151.

ii. Compliance Method (Asbestos Requirements)

Monitoring

A. Pursuant to Sections 39.5(7)(b) and (d) of the Act, the Permittee shall perform a monthly inspection on all inactive and active ACWM disposal sites at the source to demonstrate compliance with the visible emissions and/or cover requirements of Condition 4.1.2(e)(i)(A) and 40 CFR 61.151(a) and 61.154(c). If the cover at the site is not in compliance with the ACWM cover requirements, pursuant to Condition 4.1.2(e)(i)(A) and 40 CFR 61.151(a) and 61.154(c), or if ACWM is exposed, the Permittee shall either monitor for visible emissions using USEPA RM 22 or take corrective action within 4 hours of the observation of exposed ACWM, in accordance with the cover and or control requirements Condition 4.1.2(e)(i)(A) and 40 CFR

61.151(a) and 61.154(c), as applicable. All inspections and/or corrective actions and data as per RM 22 must be documented.

Recordkeeping

B. I. Pursuant to 40 CFR 61.154(e), for all asbestos-containing waste material received, the Permittee shall:

1. Pursuant to 40 CFR 61.154(e)(1), maintain waste shipment records, using a form similar to that shown in Figure 4 of 40 CFR 61 Subpart M, and include the following information:

(a) The name, address, and telephone number of the waste generator.

(b) The name, address, and telephone number of the transporter(s).

(c) The quantity of the ACWM in cubic meters (cubic yards).

(d) The presence of improperly enclosed or uncovered waste, or any asbestos-containing waste material not sealed in leak-tight containers. Report in writing to the Illinois EPA Compliance Section, by the following working day, the presence of a significant amount of improperly enclosed or uncovered waste. Submit a copy of the waste shipment record along with the report.

(e) The date of the receipt.

2. Pursuant to 40 CFR 61.154(e)(2), as soon as possible and no longer than 30 days after receipt of the waste, send a copy of the signed waste shipment record to the waste generator.

3. Pursuant to 40 CFR 61.154(e)(3), upon discovering a discrepancy between the quantity of waste designated on the waste shipment records and the quantity actually received, attempt to reconcile the discrepancy with the waste generator. If the discrepancy is not resolved within 15 days after receiving the waste, immediately report in writing to the Illinois EPA Compliance Section. Describe the discrepancy and attempts to reconcile it, and submit a copy of the waste shipment record along with the report.

II. Pursuant to 40 CFR 61.154(f), maintain, until closure, records of the location, depth and area, and quantity in cubic meters (cubic yards) of asbestos-containing waste material within the disposal site on a map or diagram of the disposal area.

III. Pursuant to Sections 39.5(7)(b) and (e) of the Act, the Permittee shall collect and maintain the records of the inspections and/or corrective actions and data as per RM 22 required pursuant to Condition 4.1.2(e)(ii)(A).

3. Non-Applicability Determinations

a. The MSW landfill is not subject to 35 IAC 220, Nonmethane Organic Compounds because, pursuant to 35 IAC 220.200(b), any MSW landfill that commenced construction, reconstruction, or modification on or after May 30, 1991, is subject to the requirements of 40 CFR 60, Subpart WWW, in lieu of the requirements of 35 IAC 220.

b. The MSW landfill and fugitive PM operations are not subject to 35 IAC 212.321 or 212.322, due to the unique nature of the unit(s), a process weight rate cannot be set so that such rules cannot reasonably be applied, pursuant to 35 IAC 212.323.

c. The MSW landfill is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the MSW landfill is subject to a NSPS proposed after November 15, 1990, pursuant to 40 CFR 64.2(b)(1)(i).

4. Other Requirements

For the emission units in Condition 4.1.1 above, the Permittee shall comply with the following applicable requirements pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act.

a. i. Title I Requirements (Construction Permit 06100058 [T1])

A. Pursuant to Construction Permit 06100058, the Permittee shall comply with the following:

I. This permit is issued based on negligible emissions of Hazardous Air Pollutants (HAPs) from the affected flare. For this purpose, HAP emissions shall not exceed 0.4 Tons/year. [T1]

II. Emissions of the affected flare shall not exceed the following limits. These limits are based on the information provided in the application including the maximum flow to the affected flare. [T1]

Pollutant		Emissions	
	(Lbs/mmBtu)	(Lbs/Hour)	(Tons/Year)
NO_x	0.068	6.45	28.34
CO	0.37	35.11	154.22
VOM	0.0068	0.64	2.82
PM	0.0187	1.77	7.79

ii. Compliance Method (Construction Permit 06100058)

Monitoring

A. I. Pursuant to Construction Permit 06100058, compliance with annual flare limits shall be determined from a running total of 12 months of data i.e., the sum of emissions data for each specific pollutant for the month of record plus the preceding 11 months of data. [T1]

II. Pursuant to Sections 39.5(7)(b) and (d) of the Act, emissions shall be determined using appropriate emission factors which in order of preference shall be factors from on-site testing for composition of the LFG, manufacturer guaranteed emissions data, test data from a similar landfill and/or flare, and emission factors from USEPA's Compilation of Air Pollutant Emission Factors (AP-42), and continuous operation.

Recordkeeping

B. Pursuant to Sections 39.5(7)(b) and (e) of the Act, the Permittee shall keep the following records:

I. **Open Flare**

1. A file containing the design specifications for the open flare including capacity, scfm, and a demonstration that the flare complies with applicable operating requirements of 40 CFR 60.18 and 60.754(e) (i.e., gas exit velocity).

2. The LFG consumed by the flare, million cu ft/month and million cu ft/year.

3. An operating log which shall include the following:

   (a) Status of the flare.

   (b) Adjustments to the flare's operating parameters.

   (c) Identification of any period when the flare was to be in service but was out of service with a detailed explanation of the cause and an explanation of actions taken to prevent or reduce the likelihood of future occurrences.

4. An inspection/maintenance log which shall include the following:

   (a) Date of inspection and observed condition of the flare.

   (b) Date and description of maintenance performed.

II. **Emissions**

NO_x, CO, PM/PM_{10}, and VOM emissions as needed to demonstrate compliance with the emission limits in Condition 4.1.4(a)(i)(A)(II), including the following:

1. The rates (lb/mmBtu and lb/hour) for emissions of each pollutant used by the Permittee to calculate emissions of the affected flare, with supporting emission calculations and documentation for any applicable emission factors and the efficiency of the control measures being relied upon; and

2. Records of the actual emissions of each pollutant from the affected flare (tons/month and tons/year), with supporting emission calculations and documentation for the emission factors and the efficiency of the control measures being relied upon.

5. Reporting Requirements

The Permittee shall submit the following information pursuant to Section 39.5(7)(f) of the Act. Addresses are included in Attachment 3.

a. <u>Prompt Reporting</u>

i. Pursuant to Section 39.5(7)(f)(ii) of the Act, the Permittee shall promptly notify the IEPA, Air Compliance Section, within 30 days of deviations from applicable requirements as follows unless a different period is specified by a particular permit provision, i.e., NSPS or NESHAP requirement.

   A. Requirements in Conditions 4.1.2(a) through (e) and 4.1.4.

ii. The deviation reports shall contain at a minimum the following information:

   A. Date and time of the deviation.

   B. Emission unit(s) and/or operation involved.

C. The duration of the event.

D. Probable cause of the deviation.

E. Corrective actions or preventative measures taken.

iii. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.6(b).

b. **Federal Reporting**

i. A. Pursuant to 40 CFR 60.757(a)(3), except as provided in 40 CFR 40 CFR 60.752(b)(2)(i)(B), an amended design capacity report shall be submitted to the Illinois EPA providing notification of an increase in the design capacity of the landfill, within 90 days of an increase in the maximum design capacity of the landfill to or above 2.5 million megagrams and 2.5 million cubic meters. This increase in design capacity may result from an increase in the permitted volume of the landfill or an increase in the density as documented in the annual recalculation required in 40 CFR 60.758(f).

B. Pursuant to 40 CFR 60.757(d), the owner or operator of a controlled landfill shall submit a closure report to the Illinois EPA Compliance Section within 30 days of waste acceptance cessation. The Illinois EPA may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR 258.60. If a closure report has been submitted to the Illinois EPA, no additional wastes may be placed into the landfill without filing a notification of modification as described under 40 CFR 60.7(a)(4).

C. Pursuant to 40 CFR 60.757(e), the owner or operator of a controlled landfill shall submit an equipment removal report to the Illinois EPA Compliance Section 30 days prior to removal or cessation of operation of the control equipment.

I. Pursuant to 40 CFR 60.757(e)(1), the equipment removal report shall contain all of the following items:

1. A copy of the closure report submitted in accordance with paragraph (d) of this section;

2. A copy of the initial performance test report demonstrating that the 15 year minimum control period has expired; and

3. Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 megagrams or greater of NMOC per year.

II. Pursuant to 40 CFR 60.757(e)(2), the Illinois EPA may request such additional information as may be necessary to verify that all of the conditions for removal in 40 CFR 60.752(b)(2)(v) have been met.

D. I. Pursuant to 40 CFR 63.1980(a), the Permittee shall submit reports as specified in 40 CFR 60 Subpart WWW, whichever applies to the affected MSW landfill, with one exception: The Permittee must submit the annual report described in 40 CFR 60.757(f) every 6 months.

II. Pursuant to 40 CFR 63.1980(b), the Permittee must also submit reports as specified in the general provisions of 40 CFR Part 60 Subpart A and 40 CFR Part 63 as shown in Table 1 of 40 CFR 63 Subpart AAAA.

Applicable records in the general provisions include items such as SSM plans.

III. Pursuant to 40 CFR 60.757(f), the recorded information shown below and in 40 CFR 60.757(f)(1) through (f)(6) shall be submitted in the semi-annual reports required above and in 40 CFR 63.1980(a). Reportable exceedances are defined under Condition 4.1.2(c)(ii)(D)(VII) and 40 CFR 60.758(c).

1. Value and length of time for exceedance of applicable parameters monitored under 40 CFR 60.756(a), (b), (c), and (d).

2. Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under 40 CFR 60.756.

3. Description and duration of all periods when the control device was not operating for a period exceeding 1 hour and length of time the control device was not operating.

4. All periods when the collection system was not operating in excess of 5 days.

5. The location of each exceedance of the 500 parts per million methane concentration as provided in 40 CFR 60.753(d) and the concentration recorded at each location for which an exceedance was recorded in the previous month.

6. The date of installation and the location of each well or collection system expansion added pursuant to 40 CFR 60.755(a)(3), (b), and (c)(4).

IV. Pursuant to Section 39.5(7)(b) and (f)(ii) of the Act, in regard to the semi-annual reports required above, the Permittee shall follow the same schedule required in Condition 3.6(b).

E. Pursuant to 40 CFR 60.757(g), the Permittee shall include the following information with the initial performance test report required under 40 CFR 60.8:

I. A diagram of the collection system showing collection system positioning including all wells, horizontal collectors, surface collectors, or other gas extraction devices, including the locations of any areas excluded from collection and the proposed sites for the future collection system expansion;

II. The data upon which the sufficient density of wells, horizontal collectors, surface collectors, or other gas extraction devices and the gas mover equipment sizing are based;

III. The documentation of the presence of asbestos or nondegradable material for each area from which collection wells have been excluded based on the presence of asbestos or nondegradable material;

IV The sum of the gas generation flow rates for all areas from which collection wells have been excluded based on nonproductivity and the calculations of gas generation flow rate for each excluded area; and

V. The provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover

equipment is inadequate to move the maximum flow rate expected over the life of the landfill; and

VI. The provisions for the control of off-site migration.

F. I. Pursuant to 40 CFR 61.151(d) and 61.154(j), the Permittee shall notify the Illinois EPA Compliance Section in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site and covered as per 40 CFR 61.151 or 61.154, and follow the procedures specified in the notification. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Illinois EPA Compliance Section at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. Include the following information in the notice:

1. Scheduled starting and completion dates.

2. Reason for disturbing the waste.

3. Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the Administrator may require changes in the emission control procedures to be used.

4. Location of any temporary storage site and the final disposal site.

II. Pursuant to 40 CFR 61.154(e)(1)(iv), the Permittee shall report in writing to the Illinois EPA Compliance Section, by the following working day, the presence of a significant amount of improperly enclosed or uncovered waste. Submit a copy of the waste shipment record, required in 40 CFR 61.154(e), along with the report.

III. Pursuant to 40 CFR 61.154(e)(1)(iv), if the discrepancy between the quantity of waste designated on the waste shipment records and the quantity actually received is not resolved within 15 days after receiving the waste, as per 40 CFR 61.154(e)(1)(iv), the Permittee shall immediately report in writing to the Illinois EPA Compliance Section. Describe the discrepancy and attempts to reconcile it, and submit a copy of the waste shipment record, required in 40 CFR 61.154(e), along with the report.

IV. Pursuant to 40 CFR 61.154(h), the Permittee shall submit to the Illinois EPA Compliance Section, upon closure of the facility, a copy of records of asbestos waste disposal locations and quantities, required in 40 CFR 61.154(f).

4.2 Portable Rock Crushing Unit

1. Emission Units and Operations

Emission Units	*Pollutants Being Regulated*	*Original Construction Date*	*Modification/ Reconstruction Date*	*Air Pollution Control Devices or Measures*	*Monitoring Devices*
Portable Rock Crushing Unit	Opacity and PM/PM10	March 2000	2012	Spray bars	N/A

2. Applicable Requirements

For the emission units in Condition 4.2.1 above, the Permittee shall comply with the following applicable requirements pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act.

a. i. **Opacity Requirements**

A. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, except as allowed by 35 IAC 212.123(b) and 212.124.

ii. Compliance Method (Opacity Requirements)

Monitoring

A. Pursuant to Sections 39.5(7)(b), (c), and (d) of the Act, the Permittee shall demonstrate compliance of the portable rock crushing unit with the visible emission provisions of Condition 4.2.2(a)(i)(A) through periodic monitoring for visible emissions using either of the following:

I. i. USEPA RM 22 with an observation period shall be at least 5 minutes. If visible emissions are detected the Permittee shall take corrective action immediately. If visible emissions cannot be reduced to zero within 4 hours, the original observations shall be recorded either as a deviation or the Permittee may demonstrate compliance using USEPA RM 9. Follow-up RM 9 monitoring must be performed within 24 hours after visible emissions are detected via RM 22.

ii. USEPA RM 9 with opacity determined as an average of three sets of observations taken over at least a thirty minute period. As per RM 9, opacity monitoring shall be conducted by a certified opacity observer. Opacity and/or compliance verification via RM 9 shall take precedence over a determinations made via RM 22.

II. Visible emission monitoring shall be conducted at least seven (7) days after resumption of the crushing operations at the source. Monitoring shall be conducted on a monthly basis until at least 4 months of data indicates compliance with Condition 4.2.2(a)(i)(A). Thereafter; monitoring may switch to a quarterly basis. Monitoring shall revert to the monthly basis if a deviation is detected. Quarterly monitoring may resume after another 4 months of data again indicates no deviations.

Recordkeeping

B. I. Pursuant to 39.5(7)(b) and (e) of the Act, shall maintain a file of all measurements, maintenance, reports and records.

II. Pursuant to 39.5(7)(b) and (e) of the Act, the Permittee shall collect and maintain the following records of the visible emissions observations required by Condition 4.2.2(a)(ii)(A). These records shall include the following:

1. Copies of all field data sheets as per RM 9 and/or 22 which includes but is not limited to the following:

   (a) Date and time the observations were performed;

   (b) Name(s) of observing personnel and their affiliation;

   (c) The total elapsed time for each observation, i.e., the observation period, pursuant to the method used;

   (d) Identification of the equipment which was observed; and

   (e) The findings of the observation including the presence of any visible emissions or the percentage of opacity;

2. Operational status of the portable rock crushing unit;

3. An indication of the monitoring frequency, i.e., monthly or quarterly;

4. If applicable, a description of any corrective action taken.

b. i. **Particulate Matter Requirements (PM)**

A. Pursuant to 35 IAC 212.321(a), no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, to exceed the allowable emission rates specified in 35 IAC 212.321(c) (See Condition 7.2).

B. Pursuant to construction permit 00060110, PM emissions from portable rock crushing unit shall not exceed nominal emission rates of 0.5 ton/month and 5.1 tons/yr. [T1].

ii. Periodic Monitoring Compliance Method (PM Requirements)

Monitoring

A. Compliance with the above annual limit and other annual limits set by this permit shall be determined from a running total of 12 months of data, i.e., from the sum of the data for the month of record plus the preceding 11 months.

B. Pursuant to 39.5(7)(b) and (d)(ii) of the Act, the Permittee shall conduct visual inspections of the affected portable rock crushing unit operations and associated control measures, when they are operating to ensure that the control measures are operating properly and PM emissions from the affected operations are minimized. For this purpose, at least one inspection shall be conducted per month that the affected operations are operated.

C. Emissions shall be determined using appropriate emission factors which in order of preference shall be factors from on-site testing, manufacturer's emission data, and emission factors from USEPA's Compilation of Air

Pollutant Emission Factors (AP-42), and records of the portable rock crushing unit throughput required in Condition 4.2.2(c)(ii)(B).

D. Compliance with the limitation in Condition 4.2.2(b)(i)(A) shall be based upon of the portable rock crushing unit rated capacity records required in Condition 4.2.2(c)(ii)(B) and the emission calculations required in Condition 4.2.2(b)(ii)(C).

Recordkeeping

E. Pursuant to 39.5(7)(b) and (e) of the Act, the Permittee shall keep and maintain the following records:

I. Records of the periodic inspections required in Condition 4.2.2(b)(ii)(B), which include the date of the inspections and its results.

II. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired and nature of repair; and

III. The emission calculations required in Condition 4.2.2(b)(ii)(C) and (D) with documentation of the assumptions and/or factors, and calculations used to demonstrate compliance with the limitations in Condition 4.2.2(b)(i)(A) and (B).

c. i. **Operational and Production Requirements**

A. Pursuant to Construction Permit 00060110, the portable rock crushing unit shall be designed and operated as follows:

I. The rated capacity of the crusher in the affected operations shall not exceed 150 tons/hour. [T1]

II. The portable rock crushing unit shall be utilized as a portable unit as defined by the New Source Performance Standards (NSPS), 40 CFR 60.671, i.e., it shall be mounted on a chassis or skids and there shall be no cable, chain, turntable, bolt or other means by which the unit is attached to an anchor, slab or structure prior to transporting the unit. [T1]

III. The portable rock crushing unit throughput shall not exceed 25,000 tons/month and 300,000 tons/year. [T1]

ii. Compliance Method (Operational and Production Requirements)

Monitoring

A. Compliance with the above annual limit set by this permit shall be determined from a running total of 12 months of data, i.e., from the sum of the data for the month of record plus the preceding 11 months.

Recordkeeping

B. Pursuant to 39.5(7)(b) and (e) of the Act, the Permittee shall keep and maintain the following records:

I. Hours of operation on a monthly basis (hours/month and hours/year) as determined from a running total of 12 months of data, i.e., from the sum of the data for the month of record plus the preceding 11 months;

II. Throughput (tons/month and tons/year) based upon the actual hours of operation and the rated capacity of the portable rock crushing unit;

III. Documentation for the rated capacity of the crusher (tons/hour); and

IV. Documentation of the dates on which the portable rock crushing unit is moved, along with the location to which the unit is moved (i.e., elsewhere on the site or relocation offsite).

3. Non-Applicability Determinations

a. The portable rock crushing unit is not subject to the New Source Performance Standards (NSPS) for Nonmetallic Mineral Processing Plants, 40 CFR Part 60 Subpart OOO, because the unit is classified as a portable and rated capacity at or below the 150 tons per hour threshold shown in 40 CFR 60.670(b)(2). (See Conditions 4.2.2(c)(i)(A)(I) and (II))

Compliance with the above shall be based upon the records required in Condition 4.2.2(b)(ii)(E).

b. The portable rock crushing unit is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the portable rock crushing unit is subject to an emission limitation or standard for which this CAAPP permit specifies a continuous compliance determination method, pursuant to 40 CFR 64.2(b)(1)(vi). (See Condition 4.2.2(b))

4. Other Requirements

As of the date of issuance of this permit, there are no other requirements that need to be included in this Condition.

5. Reporting Requirements

The Permittee shall submit the following information pursuant to Section 39.5(7)(f) of the Act. Addresses are included in Attachment 3.

a. <u>Prompt Reporting</u>

i. A. Pursuant to Section 39.5(7)(f)(ii) of the Act, the Permittee shall promptly notify the IEPA, Air Compliance Section, within 30 days of deviations from applicable requirements as follows unless a different period is specified by a particular permit provision, i.e., NSPS or NESHAP requirement:

I. Requirements in Conditions 4.2.2(a)(i), (b)(i), and (c)(i).

B. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.6(b).

ii. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Report required by Condition 3.6(b).

iii. The deviation reports shall contain at a minimum the following information:

A. Date and time of the deviation.

B. Emission unit(s) and/or operation involved.

C. The duration of the event.

D. Probable cause of the deviation.

E. Corrective actions or preventative measures taken.

4.3 Liquid Waste Solidification Activities

1. Emission Units and Operations

Emission Units	*Pollutants Being Regulated*	*Original Construction Date*	*Modification/ Reconstruction Date*	*Air Pollution Control Devices or Measures*	*Monitoring Devices*
Liquid Waste Solidification Activities	Opacity, PM/PM_{10}, VOM, and HAP	2002	2011	None	None

2. Applicable Requirements

For the emission units in Condition 4.3.1 above, the Permittee shall comply with the following applicable requirements pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act.

a. i. **Opacity Requirements**

A. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, except as allowed by 35 IAC 212.123(b) and 212.124.

ii. Compliance Method (Opacity Requirements)

Monitoring

A. Pursuant to Sections 39.5(7)(b), (c), and (d) of the Act, the Permittee shall demonstrate compliance of the liquid waste solidification activities with the visible emission provisions of Condition 4.3.2(a)(i)(A) through periodic monitoring for visible emissions using either of the following:

I. 1. USEPA RM 22 with an observation period shall be at least 5 minutes. If visible emissions are detected the Permittee shall take corrective action immediately. If visible emissions cannot be reduces to zero within 4 hours, the original observations shall be recorded either as a deviation or the Permittee may demonstrate compliance using USEPA RM 9. Follow-up RM 9 monitoring must be performed within 24 hours after visible emissions are detected via RM 22.

2. USEPA RM 9 with opacity determined as an average of three sets of observations taken over at least a thirty minute period. As per RM 9, opacity monitoring shall be conducted by a certified opacity observer. Opacity and/or compliance verification via RM 9 shall take precedence over a determinations made via RM 22.

II. Visible emission monitoring shall be conducted on a monthly basis until at least 4 months of data indicates compliance with Condition 4.3.2(a)(i)(A). Thereafter; monitoring may revert to a quarterly basis. Monitoring shall revert to the monthly basis if a deviation is detected. Quarterly monitoring may resume after another 4 months of data again indicates no deviations.

Recordkeeping

B. I. Pursuant to 39.5(7)(b) and (e) of the Act, the Permittee shall maintain a file of all measurements, maintenance, reports and records.

II. Pursuant to 39.5(7)(b) and (e) of the Act, the Permittee shall collect and maintain the following records of the visible emissions observations required by Condition 4.3.2(a)(ii)(A). These records shall include the following:

1. Copies of all field data sheets as per RM 9 and/or 22 which includes but is not limited to the following:

   (a) Date and time the observations were performed;

   (b) Name(s) of observing personnel and their affiliation;

   (c) The total elapsed time for each observation, i.e., the observation period, pursuant to the method used;

   (d) Identification of the equipment which was observed; and

   (e) The findings of the observation including the presence of any visible emissions or the percentage of opacity.

2. Operational status of the liquid waste solidification activities;

3. An indication of the monitoring frequency, i.e., monthly or quarterly; and

4. If applicable, a description of any corrective action taken.

b. i. <u>Particulate Matter Requirements (PM)</u>

A. Pursuant to 35 IAC 212.321(a), no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, to exceed the allowable emission rates specified in 35 IAC 212.321(c) (See Condition 7.2).

B. Pursuant to construction permit 02080021, PM emissions from liquid waste solidification activities shall not exceed nominal emission rates of 4.8 lbs/hr and 9.0 tons/yr. [T1].

ii. <u>Periodic Monitoring Compliance Method (PM Requirements)</u>

<u>Monitoring</u>

A. Compliance with the above annual limit and other annual limits set by this permit shall be determined from a running total of 12 months of data, i.e., from the sum of the data for the month of record plus the preceding 11 months.

B. Pursuant to 39.5(7)(b) and (d)(ii) of the Act, the Permittee shall conduct visual inspections of the affected liquid waste solidification activities when they are operating to ensure that the PM emissions from the affected operations are minimized. For this purpose, at least one inspection shall be conducted in a given month that the affected liquid waste solidification activities are being operated. The inspections may be conducted concurrently with the visible emissions monitoring required in Condition 4.3.2(a)(ii)(A).

C Emissions shall be determined using appropriate emission factors which in order of preference shall be factors from on-site testing, manufacturer's

emission data, and emission factors from USEPA's Compilation of Air Pollutant Emission Factors (AP-42), and records of the liquid waste solidification activities unit throughput required in Condition 4.3.2(c)(i)(B).

D. Compliance with the limitation in Condition 4.3.2(b)(i)(A) and (B) shall be based upon of the liquid waste solidification activities absorbent usage records required in Condition 4.3.2(c)(i)(B) and the emission calculations required in Condition 4.3.2(b)(ii)(C).

Recordkeeping

E. Pursuant to 39.5(7)(b) and (e) of the Act, the Permittee shall keep and maintain the following records:

I. Periodic inspections required in Condition 4.3.2(b)(ii)(B), which include the date of the inspections and its results;

II. Prompt corrective action, with identification and description of the corrective action, effect on emissions, date identified, date corrected and nature of correction; and

III. The emission calculations required in Condition 4.3.2(b)(ii)(C) and (D) with documentation of the assumptions and/or factors, and calculations used to demonstrate compliance with the limitations in Condition 4.3.2(b)(i)(A) and (B).

c. i. **Operational and Production Requirements**

A. Pursuant to Construction Permit 02080021, the liquid waste solidification activities shall be designed and operated as follows:

I. Liquid waste throughput shall not exceed 6 million gallons per year. [T1]

II. The amount of solid absorbent material used for the solidification process shall not exceed 14,000 tons/year. [T1]

III. The facility shall not be operated more than 3744 hours per year. [T1]

Recordkeeping

B. Pursuant to 39.5(7)(b) and (e) of the Act, the Permittee shall keep and maintain the following records:

I. Operating hours of the facility.

II. Amount of liquid waste processed (tons/month and tons/year).

III. Amount of each absorbent material used in solidification process, by type (tons/month and tons/year).

3. Non-Applicability Determinations

a. The liquid waste solidification activities is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the does not use an add-on control device to achieve compliance with an emission limitation or standard.

4. Other Requirements

For the emission units in Condition 4.3.1 above, the Permittee shall comply with the following applicable requirements pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act.

a. i. **Title I Requirements (Construction Permit 02080021) [T1]**

A. Pursuant to Construction Permit 02080021, emissions of VOM and HAPs from the liquid waste solidification activities shall each not exceed 0.1 lb/hour and 0.4 tons/year. [T1]

ii. Compliance Method (Construction Permit 02080021)

Monitoring

A. Compliance with the above annual limit and other annual limits set by this permit shall be determined from a running total of 12 months of data, i.e., from the sum of the data for the month of record plus the preceding 11 months.

B. Emissions shall be determined using appropriate emission factors which in order of preference shall be factors from on-site testing, manufacturer's emission data, and emission factors from USEPA's Compilation of Air Pollutant Emission Factors (AP-42), and records of the liquid waste solidification activities required in Conditions 4.3.2(c)(i)(B) and 4.3.4(a)(ii)(D).

C. Compliance with the limitation in Condition 4.3.4(a)(i)(A) shall be based upon of the emission calculations required in Condition 4.3.4(a)(ii)(B).

Recordkeeping

D. Pursuant to 39.5(7)(b) and (e) of the Act, the Permittee shall keep and maintain the following records:

I. The emission calculations required in Condition 4.3.4(a)(ii)(B) and (C) with documentation of the assumptions and/or factors, and calculations used to demonstrate compliance with the limitations in Condition 4.3.4(a)(i)(A).

5. Reporting Requirements

The Permittee shall submit the following information pursuant to Section 39.5(7)(f) of the Act. Addresses are included in Attachment 3.

a. **Prompt Reporting**

i. A. Pursuant to Section 39.5(7)(f)(ii) of the Act, the Permittee shall promptly notify the IEPA, Air Compliance Section, within 30 days of deviations from applicable requirements as follows unless a different period is specified by a particular permit provision, i.e., NSPS or NESHAP requirement:

I. Requirements in Conditions 4.3.2(a)(i), 4.3.2(b)(i), and 4.3.2(c)(i).

II. Requirements in Condition 4.3.4(a)(i).

B. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.6(b).

ii. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Report required by Condition 3.6(b).

iii. The deviation reports shall contain at a minimum the following information:

A. Date and time of the deviation.

B. Emission unit(s) and/or operation involved.

C. The duration of the event.

D. Probable cause of the deviation.

E. Corrective actions or preventative measures taken.

4.4 Mobile Diesel Engines >150 HP

1. Emission Units and Operations

Emission Units	*Pollutants Being Regulated*	*Original Construction Date*	*Modification/ Reconstruction Date*	*Air Pollution Control Devices or Measures*	*Monitoring Devices*
158 HP Diesel Engine (Portable Rock Crushing Unit)	Opacity & SO_2	2002	N/A	None	None

2. Applicable Requirements

For the emission units in Condition 4.4.1 above, the Permittee shall comply with the following applicable requirements pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act.

a. i. **Opacity Requirements**

A. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, except as allowed by 35 IAC 212.123(b) and 212.124.

ii. Compliance Method (Opacity Requirements)

Monitoring

A. Pursuant to Sections 39.5(7)(b), (c), and (d) of the Act, the Permittee shall demonstrate compliance of the diesel engine with the visible emission provisions of Condition 4.4.2(a)(i)(A) through annual monitoring for visible emissions using either of the following:

I. i. USEPA RM 22 with an observation period shall be at least 5 minutes. If visible emissions are detected the Permittee shall take corrective action immediately. If visible emissions cannot be reduces to zero within 4 hours, the original observations shall be recorded either as a deviation or the Permittee may demonstrate compliance using USEPA RM 9. Follow-up RM 9 monitoring must be performed within 24 hours after visible emissions are detected via RM 22.

ii. USEPA RM 9 with opacity determined as an average of three sets of observations taken over at least a thirty minute period. As per RM 9, opacity monitoring shall be conducted by a certified opacity observer. Opacity and/or compliance verification via RM 9 shall take precedence over a determinations made via RM 22.

Recordkeeping

B. I. Pursuant to 39.5(7)(b) and (e) of the Act, the Permittee shall maintain a file of all measurements, maintenance, reports and records.

II. Pursuant to 39.5(7)(b) and (e) of the Act, the Permittee shall collect and maintain the following records of the visible emissions observations required by Condition 4.4.2(a)(ii)(A). These records shall include the following:

1. Copies of all field data sheets as per RM 9 and/or 22 which includes but is not limited to the following:

   (a) Date and time the observations were performed;

   (b) Name(s) of observing personnel and their affiliation;

   (c) The total elapsed time for each observation, i.e., the observation period, pursuant to the method used;

   (d) Identification of the equipment which was observed; and

   (e) The findings of the observation including the presence of any visible emissions or the percentage of opacity;

2. Operational status of the engine;

3. If applicable, a description of any corrective action taken including if the corrective action took place within 4 hours of the initial observation of exceedance.

b. i. Sulfur Dioxide Requirements (SO_2)

A. Pursuant to 35 IAC 214.301, no person shall cause or allow the emission of sulfur dioxide (SO_2) into the atmosphere from any process emission source to exceed 2000 ppm.

ii. **Compliance Method (SO_2 Requirements)**

Monitoring

A. Pursuant to Sections 39.5(7)(a) of the Act, the Permittee shall maintain, and operate the engines according to the manufacturer's specifications.

B. Pursuant to Sections 39.5(7)(b), (c) and (d) of the Act, the Permittee shall demonstrate compliance with Condition 4.4.2(b)(i)(A) annually based upon an analysis of the fuel oil, e.g., diesel fuel, used in the engines, for total reduced sulfur (TRS) content.

   I. Fuel oil, e.g., diesel fuel, supplier data or in the event that the fuel oil supplier is unable to provide the sulfur content of the fuel oil supply for the affected diesel engines, the Permittee shall have the sulfur content of the oil supply to the affected diesel engines, in lbs/mmBtu, determined from an analysis of representative sample of the oil supply. The sample shall be taken no later than 30 days after acceptance of a shipment of fuel.

   II. No later than 30 days after a request by the Illinois EPA, the Permittee shall have the TRS content of the oil supply to the affected diesel engines, in lbs/mmBtu, determined from an analysis of representative sample of the oil supply.

   III. Sampling and analysis, including that which forms the basis for the suppliers' data, shall be conducted using methods that would be acceptable under the federal New Source Performance Standards for Stationary Gas Turbines, 40 CFR 60.335(b)(2) and (c) or the federal Acid Rain Program, 40 CFR 75, Appendix D, Optional SO_2 Emissions Data Protocol for Gas-Fired and Oil-Fired Units e.g., ASTM D4057-88 and ASTM D129-91.

Note: Condition 4.4.2(b)(ii)(B)(III) is for fuel testing methodology only, and is in no way intended to subject the source to those provisions.

IV. Pursuant to Sections 39.5(7)(b) and (d) of the Act, the Permittee shall verify compliance with Condition 4.4.2(b)(i)(A) annually. SO_2 emissions shall be determined, assuming complete conversion of sulfur into SO_2, e.g., SO_2 emissions in lb/mmBtu are twice the sulfur content of the fuel supply, in lb/mmBtu and stoichiometric combustion using the fuel oil TRS content data determined as per Condition 4.4.2(ii)(B)(III) and the fuel oil usage data required in Condition 4.4.2(b)(ii)(C).

Recordkeeping

C. Pursuant to Sections 39.5(7)(b) and (e) of the Act, the Permittee shall maintain the following records:

I. Design specifications for each engine as set by the manufacturer;

II. The total reduced sulfur content of the fuel oil, e.g., diesel fuel, in accordance with Condition 4.4.2(b)(ii)(B);

III. If applicable, a log of sampling and analysis activity, including measured data, documentation for the sampling and analysis activities, and supporting documentation and calculations for the sulfur content of fuel oil, e.g., diesel fuel; and

IV. SO_2 emissions from the affected engine (ppm) with supporting documentation and calculations.

3. Non-Applicability Determinations

a. The diesel engine is not subject to the Acid Rain Program, 40 CFR 72, because the diesel engine is a non-utility units, as defined by 40 CFR 72.6(b)(8).

b. The diesel engine is not subject to 35 IAC 212.321 or 212.322, due to the unique nature of such units, a process weight rate cannot be set so that such rules cannot reasonably be applied, pursuant to 35 IAC 212.323.

c. The diesel engine is not subject to 35 IAC 216.121 because the engine is not a fuel combustion unit as defined by 35 IAC 211.2470.

d. The diesel engine is not subject to 35 IAC 217.141 because the engine is not a fuel combustion units, as defined by 35 IAC 211.2470.

e. The diesel engines are not subject to 35 IAC 217 Subpart Q: Stationary Reciprocating Internal Combustion Engines And Turbines, because the engines nameplate capacity is less than 500 bhp output, pursuant to 217.386(a)(2)(B).

e. The stationary reciprocating internal combustion engine at the source is not subject to the requirements of 35 IAC Part 217, Subpart Q - Stationary Reciprocating Internal Combustion Engines And Turbines based upon the engine not meeting the applicability criteria in 35 IAC 217.386. Specifically, pursuant to 217.386(a)(2)(A), the nameplate capacity of the engine is rated at less than 500 bhp.

f. The diesel engines are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the engines do not use an add-on control device to achieve compliance with an emission limitation or standard.

4. Other Requirements

As of the date of issuance of this permit, there are no other requirements that need to be included in this Condition.

Section 5 - Additional Title I Requirements

This Section is reserved for Title I requirements not specified in Sections 3 or 4. As of the date of issuance of this permit, there are no Title I requirements that need to be separately addressed in this Section.

Section 6 - Insignificant Activities Requirements

1. Insignificant Activities Subject to Specific Regulations

This condition is reserved for insignificant activities, as defined in 35 IAC 201.210 and 201.211, which are subject to specific standards promulgated pursuant Sections 111, 112, 165, or 173 of the Clean Air Act, see Sections 9.1(d) and 39.5(6)(a) of the Act. As of the date of issuance of this permit, there are no such insignificant activities present at the source.

2. Insignificant Activities in 35 IAC 201.210(a)

In addition to any insignificant activities identified in Condition 6.1, the following additional activities at the source constitute insignificant activities pursuant to 35 IAC 201.210 and 201.211:

Insignificant Activity	*Number of Units*	*Insignificant Activity Category*
20,000 gallon Leachate Storage tanks	6	35 IAC 201.210(a)(1) and 201.211
Alternative Dailey Cover (Use of Petroleum Contaminated Soils)	1	35 IAC 201.210(a)(1) and 201.211
Direct combustion units used for comfort heating and fuel combustion emission units as further detailed in 35 IAC 201.210(a)(4).	7	35 IAC 201.210(a)(4)
Storage tanks < 10,000 gallon with annual throughput < 100,000 gallon (not storing gasoline or any material listed as a HAP).	1	35 IAC 201.210(a)(11)
Storage tanks of virgin or refined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuel oil.	6	35 IAC 201.210(a)(11)

3. Insignificant Activities in 35 IAC 201.210(b)

Pursuant to 35 IAC 201.210, the source has identified insignificant activities as listed in 35 IAC 201.210(b)(1) through (28) as being present at the source. The source is not required to individually list the activities.

4. Applicable Requirements

Insignificant activities in Conditions 6.1 and 6.2 are subject to the following general regulatory limits notwithstanding status as insignificant activities. The Permittee shall comply with the following requirements, as applicable:

a. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 IAC 212.122, except as provided in 35 IAC 212.123(b).

b. Pursuant to 35 IAC 212.321 or 212.322 (see Conditions 7.2(a) and (b)), no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceed the allowable emission rates specified 35 IAC 212.321 or 212.322 and 35 IAC Part 266.

c. Pursuant to 35 IAC 219.301, no person shall cause or allow the discharge of more than 8 lbs/hr of organic material into the atmosphere from any emission source, except as provided in 35 IAC 219.302, 219.303, and 219.304 and the following exception: If no odor nuisance exists the limitation of 35 IAC 215 Subpart K shall apply only to photochemically reactive material.

d. Pursuant to 35 IAC 219.122(b), no person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 250 gal, unless such tank is equipped with a permanent submerged loading pipe, submerged fill, or an equivalent device approved by the IEPA according to 35 IAC Part 201 or unless such tank is a pressure tank as described in 35 IAC 215.121(a) or is fitted with a recovery system as described in 35 IAC 215.121(b)(2). Exception as provided in 35 IAC 219.122(c): If no odor nuisance exists the limitations of 35 IAC 215.122 shall only apply to the loading of volatile organic liquid with a vapor pressure of 2.5 psia or greater at 70°F.

e. Pursuant to 35 IAC 219 Subpart PP, QQ, RR, and/or TT, VOM emissions from insignificant activities required to be included in determining applicability of 35 IAC 219 Subpart PP, QQ, RR, and/or TT, in conjunction with applicable emission units in Section 4 of this permit, shall not equal or exceed 25 ton/yr.

5. Compliance Method

Pursuant to Section 39.5(7)(b) of the Act, the source shall maintain records of the following items for the insignificant activities in Conditions 6.1 and 6.2:

a. List of all insignificant activities, including insignificant activities added as specified in Condition 6.6, the categories the insignificant activities fall under, and supporting calculations as needed for any insignificant activities listed in 35 IAC 201.210(a)(1) through (3).

b. Potential to emit emission calculations before any air pollution control device for any insignificant activities listed in 35 IAC 201.210(a)(1) through (3).

6. Notification Requirements for Insignificant Activities

The source shall notify the IEPA accordingly to the addition of insignificant activities:

a. <u>Notification 7 Days in Advance</u>

i. Pursuant to 35 IAC 201.212(b), for the addition of an insignificant activity that would be categorized under 35 IAC 201.210(a)(1) and 201.211 and is not currently identified in Conditions 6.1 or 6.2, a notification to the IEPA Permit Section 7 days in advance of the addition of the insignificant activity is required. Addresses are included in Attachment 3. The notification shall include the following pursuant to 35 IAC 201.211(b):

A. A description of the emission unit including the function and expected operating schedule of the unit.

B. A description of any air pollution control equipment or control measures associated with the emission unit.

C. The emissions of regulated air pollutants in lb/hr and ton/yr.

D. The means by which emissions were determined or estimated.

E. The estimated number of such emission units at the source.

F. Other information upon which the applicant relies to support treatment of such emission unit as an insignificant activity.

ii. Pursuant to 35 IAC 201.212(b), for the addition of an insignificant activity that would be categorized under 35 IAC 201.210(a)(2) through 201.210(a)(18) and is not currently identified in Conditions 6.1 or 6.2, a notification to the IEPA Permit Section 7 days in advance of the addition of the insignificant activity is required. Addresses are included in Attachment 3.

iii. Pursuant to Sections 39.5(12)(a)(i)(b) and 39.5(12)(b)(iii) of the Act, the permit shield described in Section 39.5(7)(j) of the Act (see Condition 2.7) shall not apply to any addition of an insignificant activity noted above.

b. **Notification Required at Renewal**

Pursuant to 35 IAC 201.212(a) and 35 IAC 201.146(kkk), for the addition of an insignificant activity that would be categorized under 35 IAC 201.210(a) and is currently identified in Conditions 6.1 or 6.2, a notification is not required until the renewal of this permit.

c. **Notification Not Required**

Pursuant to 35 IAC 201.212(c) and 35 IAC 201.146(kkk), for the addition of an insignificant activity that would be categorized under 35 IAC 201.210(b) as describe in Condition 6.3, a notification is not required.

Section 7 - Other Requirements

1. Testing

a. Pursuant to Section 39.5(7)(a) of the Act, a written test protocol shall be submitted at least sixty (60) days prior to the actual date of testing, unless it is required otherwise in applicable state or federal statutes or air pollution control construction permit. The IEPA may at the discretion of the Compliance Section Manager (or designee) accept protocol less than 60 days prior to testing provided it does not interfere with the IEPA's ability to review and comment on the protocol and does not deviate from the applicable state or federal statutes. The protocol shall be submitted to the IEPA, Compliance Section and IEPA, Stack Test Specialist for its review. Addresses are included in Attachment 3. This protocol shall describe the specific procedures for testing, including as a minimum:

i. The name and identification of the emission unit(s) being tested.

ii. Purpose of the test, i.e., permit condition requirement, IEPA or USEPA requesting test.

iii. The person(s) who will be performing sampling and analysis and their experience with similar tests.

iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the emission unit and any control equipment will be determined.

v. The specific determinations of emissions and operation which are intended to be made, including sampling and monitoring locations.

vi. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods. Include if emission tests averaging of 35 IAC 283 will be used.

vii. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with detailed justification. This shall be included as a waiver of the test procedures. If a waiver has already been obtained by the IEPA or USEPA, then the waiver shall be submitted.

viii. Any proposed use of an alternative test method, with detailed justification. This shall be included as a waiver of the test procedures. If a waiver has already been obtained by the IEPA or USEPA, then the waiver shall be submitted.

ix. Sampling of materials, QA/QC procedures, inspections, etc.

b. The IEPA, Compliance Section shall be notified prior to these tests to enable the IEPA to observe these tests pursuant to Section 39.5(7)(a) of the Act as follows:

i. Notification of the expected date of testing shall be submitted in writing a minimum of thirty (30) days prior to the expected test date, unless it is required otherwise in applicable state or federal statutes.

ii. Notification of the actual date and expected time of testing shall be submitted in writing a minimum of five (5) working days prior to the actual date of the test. The IEPA may at its discretion of the Compliance Section Manager (or designee) accept notifications with shorter advance notice provided such notifications will not interfere with the IEPA's ability to observe testing.

c. Copies of the Final Report(s) for these tests shall be submitted to the IEPA, Compliance Section within fourteen (14) days after the test results are compiled and finalized but no later than ninety (90) days after completion of the test, unless it is required otherwise in applicable state or federal statutes or the IEPA may at the discretion of the Compliance Section Manager (or designee) agree upon an alternative date in advance pursuant to Section 39.5(7)(a) of the Act. The Final Report shall include as a minimum:

i. General information including emission unit(s) tested.

ii. A summary of results.

iii. Discussion of conditions during each test run (malfunction/breakdown, startup/shutdown, abnormal processing, etc.).

iv. Description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule.

v. Detailed description of test conditions, including:

A. Process information, i.e., mode(s) of operation, process rate, e.g. fuel or raw material consumption.

B. Control equipment information, i.e., equipment condition and operating parameters during testing.

C. A discussion of any preparatory actions taken, i.e., inspections, maintenance and repair.

vi. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.

vii. An explanation of any discrepancies among individual tests or anomalous data.

viii. Results of the sampling of materials, QA/QC procedures, inspections, etc.

ix. Discussion of whether protocol was followed and description of any changes to the protocol if any occurred.

x. Demonstration of compliance showing whether test results are in compliance with applicable state or federal statutes.

d. Copies of all test reports and other test related documentation shall be kept on site as required by Condition 2.5(b) pursuant to Section 39.5(7)(e)(ii) of the Act.

2. PM Process Weight Rate Requirements

a. New Process Emission Units - 35 IAC 212.321

New Process Emission Units For Which Construction or Modification Commenced On or After April 14, 1972. [35 IAC 212.321]

i. No person shall cause or allow the emission of PM into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of PM from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 IAC 212.321(c). See Condition 7.2(a)(iii) below. [35 IAC 212.321(a)]

ii. Interpolated and extrapolated values of the data in 35 IAC 212.321(c) shall be determined by using the equation: [35 IAC 212.321(b)]

$$E = A(P)^B$$

Where:

P = Process weight rate (T/hr)
E = Allowable emission rate (lbs/hr)

A. Process weight rates of less than 450 T/hr:

A = 2.54
B = 0.53

B. Process weight rates greater than or equal to 450 T/hr:

A = 24.8
B = 0.16

iii. Limits for New Process Emission Units: [35 IAC 212.321(c)]

P (T/hr)	E (lbs/hr)	P (T/hr)	E (lbs/hr)
0.05	0.55	25.00	14.00
0.10	0.77	30.00	15.60
0.20	1.10	35.00	17.00
0.30	1.35	40.00	18.20
0.40	1.58	45.00	19.20
0.50	1.75	50.00	20.50
0.75	2.40	100.00	29.50
1.00	2.60	150.00	37.00
2.00	3.70	200.00	43.00
3.00	4.60	250.00	48.50
4.00	5.35	300.00	53.00
5.00	6.00	350.00	58.00
10.00	8.70	400.00	62.00
15.00	10.80	450.00	66.00
20.00	12.50	500.00	67.00

3. 40 CFR 60 Subpart A Requirements (NSPS)

a. 40 CFR 60 Subpart A and Subpart WWW—Standards of Performance for Municipal Solid Waste Landfills

Pursuant to 40 CFR 60 Subpart A and Subpart WWW, the Permittee shall comply with the following applicable General Provisions as indicated:

General Provision Citation	*Subject of Citation*	*Explanation (if required)*
60.1	General Applicability of the General Provisions	
60.2	Definitions	
60.3	Units and Abbreviations	
60.4	Address	
60.5	Determination of Construction or Modification	
60.6	Review of Plans	
60.7	Notification and Recordkeeping	
60.8	Performance Tests	
60.9	Availability of Information	
60.10	State Authority	
60.11	Compliance with Standards and Maintenance Requirements	
60.12	Circumvention	
60.13	Monitoring Requirements	
60.14	Modification	
60.15	Reconstruction	
60.16	Priority List	
60.17	Incorporations by Reference	
60.18	General Control Device Requirements and Work Practice Requirements	
60.19	General Notification and Reporting Requirements	

4. 40 CFR 63 Subpart A Requirements (NESHAP)

a. 40 CFR 63 Subpart A and Subpart AAAA—National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills

Pursuant to 40 CFR 63 Subpart A and Table 1 to Subpart AAAA of Part 63, the Permittee shall comply with the following applicable General Provisions as indicated:

General Provision Citation	*Description*	*Explanation*
63.1(a)	Applicability: general applicability of NESHAP in this part	Affected sources are already subject to the provisions of paragraphs (a)(10)-(12) through the same provisions under 40 CFR, Part 60 Subpart A.
63.1(b)	Applicability determination for stationary sources	
63.1(e)	Title V permitting	
63.2	Definitions	
63.4	Prohibited activities and circumvention	Affected sources are already subject to the provisions of paragraph (b) through the same provisions under 40 CFR, Part 60 Subpart A.
63.5(b)	Requirements for existing, newly constructed, and reconstructed sources	
63.6(e)	Operation and maintenance requirements, startup, shutdown and malfunction plan provisions	
63.6(f)	Compliance with nonopacity emission standards	Affected sources are already subject to the provisions of paragraphs (f)(1) and (2)(i) through the same provisions under 40 CFR, Part 60 Subpart A.
63.10(b)(2)(i) -(b)(2)(v)	General recordkeeping requirements	
63.10(d)(5)	If actions taken during a startup, shutdown and malfunction plan are consistent with the procedures in the startup, shutdown and malfunction plan, this information shall be included in a semi-annual startup, shutdown and malfunction plan report. Any time an action taken during a startup, shutdown and malfunction plan is not consistent with the startup, shutdown and malfunction plan, the source shall report actions taken within 2 working days after commencing such actions, followed by a letter 7 days after the event.	
63.12(a)	These provisions do not preclude the State from adopting and enforcing any standard, limitation, etc., requiring permits, or requiring emissions reductions in excess of those specified	

General Provision Citation	*Description*	*Explanation*
63.15	Availability of information and confidentiality	
63.1(a)	Applicability: general applicability of NESHAP in this part	Affected sources are already subject to the provisions of paragraphs (a)(10)-(12) through the same provisions under 40 CFR, Part 60 Subpart A.
63.1(b)	Applicability determination for stationary sources	
63.1(e)	Title V permitting	
63.2	Definitions	

Section 8 - State Only Requirements

1. Permitted Emissions for Fees

`The annual emissions from the source for purposes of "Duties to Pay Fees" of Condition 2.3(e), not considering insignificant activities as addressed by Section 6, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. The Permittee shall maintain records with supporting calculations of how the annual emissions for fee purposes were calculated. This Condition is set for the purpose of establishing fees and is not federally enforceable. See Section 39.5(18) of the Act.

Pollutant		*Tons/Year*
Volatile Organic Material	(VOM)	38.54
Sulfur Dioxide	(SO_2)	80.00
Particulate Matter	(PM)	55.80
Nitrogen Oxides	(NO_x)	28.34
HAP, not included in VOM or PM	(HAP)	4.09
	Total	206.77

Attachment 1 - List of Emission Units at This Source

Section	*Emission Units*	*Description*
4.1	MSW Landfill	MSW Landfill subject to NSPS and NESHAP requirements
4.2	Portable Rock Crushing Unit	Portable crusher with a capacity less than Liquid Waste Solidification Activities
4.3	Liquid Waste Solidification Activities	Process combines liquid waste with an absorbent material.
4.4	Mobile Diesel Engine >150 HP	158 HP Diesel Engine associated with the Portable Rock Crushing Unit

Attachment 2 - Acronyms and Abbreviations

acfm	Actual cubic feet per minute
ACMA	Alternative Compliance Market Account
ACWM	Asbestos-Containing Waste Material
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ATU	Allotment trading unit
BACT	Best Available Control Technology
BAT	Best Available Technology
BOL	Bureau of Land
Btu	British Thermal Units
°C	Degrees Celsius or centigrade
C_{NMOC}	Average NMOC Concentration
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAIR	Clean Air Interstate Rule
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CISWI	Commercial Industrial Solid Waste Incinerator
CO	Carbon monoxide
CO_2	Carbon dioxide
COMS	Continuous Opacity Monitoring System
CPMS	Continuous Parameter Monitoring System
dscf	Dry standard cubic foot
dscm	Dry standard cubic meter
ERMS	Emissions Reduction Market System
°F	Degrees Fahrenheit
GCCS	
GHG	Greenhouse gas
GACT	Generally Acceptable Control Technology
gr	Grains
HAP	Hazardous air pollutant
Hg	Mercury
HMIWI	Hospital medical infectious waste incinerator
hp	Horsepower
hr	Hour
H_2S	Hydrogen sulfide
I.D. No.	Identification number of source, assigned by IEPA
IAC	Illinois Administrative Code

ILCS	Illinois Compiled Statutes
IEPA	Illinois Environmental Protection Agency
kw	Kilowatts
kPa	kilopascal
LAER	Lowest Achievable Emission Rate
LFG	Landfill gas
lbs	Pound
m	Meter
m^3	cubic meters
MACT	Maximum Achievable Control Technology
M	Thousand
MM	Million
mmBtu	Million British thermal units
mos	Month
MSDS	Material Safety Data Sheet
MSSCAM	Major Stationary Sources Construction and Modification (Non-attainment New Source Review)
MSW	Municipal Solid Waste
MW	Megawatts
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen oxides
NMOC	Non-methane Organic Compound
NSPS	New Source Performance Standards
NSR	New Source Review
PB	Lead
PEMS	Predictive Emissions Monitoring System
PM	Particulate matter
PM_{10}	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
$PM_{2.5}$	Particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 microns as measured by applicable test or monitoring methods
ppm	Parts per million
ppmv	Parts per million by volume
ppmw	Parts per million by weight
PSD	Prevention of Significant Deterioration
PSEU	Pollutant-Specific Emission Unit
psia	Pounds per square inch absolute
PTE	Potential to emit
RACT	Reasonable Available Control Technology
RDF	Recycling and Disposal Facility
RM	Reference Method
RMP	Risk Management Plan
scf	Standard cubic feet

SCR	Selective catalytic reduction
SIP	State Implementation Plan
SO_2	Sulfur dioxide
T1	Title I - identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
TRS	Total Reduced Sulfur
USEPA	United States Environmental Protection Agency
VOM	Volatile organic material

Attachment 3 - Contact and Reporting Addresses

IEPA Compliance Section	Illinois EPA, Bureau of Air Compliance & Enforcement Section (MC 40) 1021 North Grand Avenue East P.O. Box 19276 Springfield, Illinois 62794-9276 Phone No.: 217/782-2113
IEPA Stack Test Specialist	Illinois EPA, Bureau of Air Compliance Section Source Monitoring - Third Floor 9511 Harrison Street Des Plaines, Illinois 60016 Phone No.: 847/294-4000
IEPA Air Quality Planning Section	Illinois EPA, Bureau of Air Air Quality Planning Section (MC 39) 1021 North Grand Avenue East P.O. Box 19276 Springfield, Illinois 62794-9276 Phone No.: 217/782-2113
IEPA Air Regional Field Operations Regional Office #3	Illinois EPA, Bureau of Air Regional Office #3 2009 Mall Street Collinsville, Illinois 62234 Phone No.: 618/346-5120
IEPA Permit Section	Illinois EPA, Bureau of Air Permit Section (MC 11) 1021 North Grand Avenue East P.O. Box 19506 Springfield, Illinois 62794-9506 Phone No.: 217/785-1705
USEPA Region 5 - Air Branch	USEPA (AR - 17J) Air and Radiation Division 77 West Jackson Boulevard Chicago, Illinois 60604 Phone No.: 312/353-2000

Attachment 4 - Example Certification by a Responsible Official

SIGNATURE BLOCK	
NOTE: THIS CERTIFICATION MUST BE SIGNED BY A RESPONSIBLE OFFICIAL. APPLICATIONS WITHOUT A SIGNED CERTIFICATION WILL BE DEEMED AS INCOMPLETE.	
I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION ARE TRUE, ACCURATE AND COMPLETE. ANY PERSON WHO KNOWINGLY MAKES A FALSE, FICTITIOUS, OR FRAUDULENT MATERIAL STATEMENT, ORALLY OR IN WRITING, TO THE ILLINOIS EPA COMMITS A CLASS 4 FELONY. A SECOND OR SUBSEQUENT OFFENSE AFTER CONVICTION IS A CLASS 3 FELONY. (415 ILCS 5/44(H))	
AUTHORIZED SIGNATURE:	
BY: _____	_____
AUTHORIZED SIGNATURE	TITLE OF SIGNATORY
_____	_____/_____/_____
TYPED OR PRINTED NAME OF SIGNATORY	DATE