

US EPA ARCHIVE DOCUMENT



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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PAT QUINN, GOVERNOR

DOUGLAS P. SCOTT, DIRECTOR

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

Clinton Landfill, Inc. - Clinton Landfill #2
Attn: Ron L. Edwards
Post Office Box 9071
Peoria, Illinois 61612

Application No.: 10010020

I.D. No.: 039808AAC

Applicant's Designation:

Date Received: January 25, 2010

Subject: Odor Control Measures

Date Issued: February 18, 2010

Location: Clinton Landfill #2, Route 51 South, Clinton, DeWitt County

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of various activities to control odors from the existing landfill, as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special conditions:

- 1a. This permit authorizes the Permittee to undertake the following activities to reduce odors from the existing Clinton Landfill #2. If construction of an odor control activity is planned that is outside the scope of the authorization provided by this permit and a construction permit is required for such activity under 35 IAC 201.142, the Permittee shall obtain a new or revised construction permit for such activity.
 - i. Application of cover enhancements such as use of additional soil/compost/clay cover and other sealant materials, beyond that associated with routine operation of the landfill, to reduce or prevent release of gas to the atmosphere.
 - ii. Use of tarps and other temporary gas collection techniques, with control of collected gas by a temporary (trailer or skid mounted) control device, e.g., a flare, scrubber, bio-filter, or absorption control device or the existing gas transport and gas control system.
 - iii. Use of tarps and other temporary gas collection techniques for collection of odorous gases from nonproductive areas of the landfill with enhanced dispersion to the atmosphere, provided that the amount of gas managed in this manner shall qualify for the exclusion from control, pursuant to 40 CFR 60.759(a)(3)(ii).
 - iv. Use of temporary flare, scrubber, bio-filter, or absorption control devices for control of collected gas in conjunction with the evaluation of the feasibility and effectiveness of the particular type of control technology or device for permanent use at the landfill.

- v. Use of odor reducing chemical agents for leachate spills, pooled rainwater, excavated soil, and other accumulations of material on the surface of the landfill that may contribute to odorous emissions.
 - vi. Other similar measures that are pursued to control odorous emission that do not entail installation of permanent landfill gas collection systems or control devices.
- b. This permit is issued based upon the activities authorized by this permit constituting an emissions control project, which will act to reduce emissions of organic compounds and will not significantly increase emissions of other pollutants.
- c. This permit does not relieve the Permittee of the responsibility to comply with all Local, State and Federal Regulations which are part of the applicable Illinois State Implementation Plan, as well as all other applicable Federal, State and Local requirements. (See also Standard Condition 5(c).)
2. This permit does not relax requirements for control of emissions, testing, recordkeeping, and reporting associated with the existing landfill gas (LFG) collection and control system and fugitive particulate matter emissions at this source, as established in the current Clean Air Act Permit Program (CAAPP) permit or other permits issued by the Illinois EPA for the source.
- 3a. LFG collection activities conducted pursuant to this permit shall be designed to achieve comprehensive control of surface gas emissions, as generally required in accordance with applicable requirements of 40 CFR 60.759(a).
- b. Landfill gas control devices installed pursuant this permit shall comply with applicable requirements of 40 CFR 60.752, including:
- i. Flares shall be operated in compliance with applicable requirements for flares, including timely observations for visible emissions and operational testing in accordance with 40 CFR 60.18. [40 CFR 60.752(b)(2)(iii)(a)]
 - ii. Other types of control devices shall be operated in compliance with applicable requirements, including conducting initial performance tests for nonmethane organic compound (NMOC) emissions within 180 days of initial startup, in accordance with 40 CFR 60.752(b)(2)(iii)(b).
- 4a. The Permittee shall conduct operational monitoring, as required by 40 CFR 60.756, for control devices installed pursuant to the permit, including fulfilling applicable procedural requirements and conducting appropriate monitoring in accordance with 40 CFR 60.756(d) for devices other than open flares or enclosed combustors.

- b. In addition to the periodic monitoring of surface methane concentrations required by 40 CFR 60.755(c), before and after implementing particular types of odor control measures pursuant to this permit, the Permittee shall conduct representative monitoring in the affected area for either surface concentrations of methane using the procedures of 60.755(c) or other indicator compound for odors as approved by the Illinois EPA.
- c.
 - i. In addition to the periodic monitoring for the active gas collection system required by 40 CFR 60.756, the Permittee shall conduct representative monitoring in accordance with the procedures of 60.756(a) for the composition of LFG collected by the active gas collection system from different areas of the landfill, which data can be correlated with activities conducted pursuant to this permit. This monitoring shall include analysis for the sulfur and methane content (ppmv) and heat content (Btu per cubic feet) of the LFG.
 - ii. Initial sampling and analysis of the LFG, as required by Condition 4(c)(i), shall be conducted for all parameters within 30 days of issuance of this permit. Thereafter sampling and analysis of the LFG shall be repeated, at least a semi-annual basis, until all odor control activities authorized under this permit are ceased.
- d. The Permittee shall maintain records for the above monitoring activities, including records describing the monitoring methodology, the monitoring activities that are performed, and the results of monitoring.
- 5. Control devices installed pursuant to this permit shall be operated and maintained in accordance with good air pollution control practice to minimize emissions. As related to this requirement, for control devices installed pursuant to this permit, the Permittee shall maintain: 1) Files containing the supplier's specifications and recommended operating and maintenance procedures for the devices; 2) Operating log(s); 3) Maintenance/repair log(s); and 4) Files containing the reports for performance tests or other evaluations conducted for the devices.
- 6. The Permittee shall maintain the following records related to activities conducted pursuant to this permit:
 - a. The Permittee shall fulfill the applicable recordkeeping requirements of NSPS, 40 CFR 60.758.
 - b. The Permittee shall maintain detailed records for pilot activities conducted pursuant to this permit that, at a minimum, include the following information. For this purpose, a pilot activity is an activity of a type that has not previously been conducted and evaluated at the landfill, whose actual level of

effectiveness for control of odorous emissions from the landfill is uncertain, or an activity of a type previously conducted at the landfill whose effectiveness for control of odorous emissions has not previously been evaluated or is being reevaluated.

- i. Records describing the proposed activity and evaluation(s), including the information that is needed to prepare the notification required by Condition 7(a).
 - ii. Records for the actual implementation of the activity and associated evaluation(s).
 - iii. Records for the results of the evaluation, including the Permittee's conclusions about the effectiveness of the activity in controlling odorous emissions, the results of the formal evaluation(s) of effectiveness, and the practices or procedures recommended for implementation of similar activities at the landfill in the future.
- c. The Permittee shall maintain logs or other records for the activities conducted pursuant to this permit that, at a minimum, include the following information:
- i. For all activities (excluding placement of routine soil/clay cover) that are performed pursuant to this permit, listings by category or type of activity that include for each such activity: description and location; relevant dates (e.g., the dates for starting implementation, completing implementation, starting termination, and completing termination of an activity) with explanation; a description of the magnitude of the odorous emissions addressed by the activity; and information on the expected and actual effectiveness of the activity in mitigating the odorous emissions.
 - ii. For use of tarps and application of additional cover or other sealant material to reduce or prevent odorous emissions: reason(s) why a barrier was needed (e.g., observed odors, observed crack in the cover material, excavation related to construction of the gas collection system, etc.); a diagram of the area covered; type of barrier; and steps taken to verify and maintain the integrity of the barrier, with description and dates.
 - iii. For use of tarps or other gas collection techniques, with control of collected gas by a temporary control device or the existing gas transport and gas control system, as well as the information required by Condition 6(c)(ii): a description of the means by which gas was transported to the control device and records for the steps taken to verify and maintain the taken effectiveness of gas collection and control.

- iv. For use of tarps or other gas collection devices for collection of gas from nonproductive areas of the landfill with enhanced dispersion relying on the exclusion from control in 40 CFR 60.759(a)(3)(ii), as well as the information required by Condition 6(c)(ii): a discussion of the reasons why gas was vented to the atmosphere and was not contained or controlled; and records for the steps taken to verify and maintain the taken the continued effectiveness of enhanced dispersion.
- v. For use of temporary (trailer or skid mounted) flare, scrubber or absorption control device for control of collected gas in conjunction with the evaluation of such control technology or device for permanent use at the landfill, as well as the information required by Condition 6(b): records for the steps taken to verify and maintain the continued effectiveness of the device.
- vi. For use of odor reducing chemical agents for leachate spills, pooled rainwater, excavated soil, and other surface accumulations of odorous materials: a description of the accumulated material and the amount and condition of the material; identification of the agent used and amount of each application by date; a discussion of the likely cause of the accumulation; and a description of other measures taken to address the accumulated material.
- v. For other categories or types activities conducted pursuant to this permit that is not addressed by specific records pursuant to Condition 6(c)(ii) through (vi): relevant information further describing the activity; and records for the steps taken to verify and maintain the taken effectiveness of the activity.
- d. The Permittee shall maintain records documenting its efforts to achieve comprehensive control of surface gas emissions from the landfill, as required by 40 CFR 60.759 (See also Condition 3), including plot maps showing all activities currently being conducted to address surface gas emissions, assessments of the effectiveness of these activities in aggregate in controlling surface gas emissions, and plans for further actions as needed to improve overall control of gas emissions.
- e. If any collected landfill gas from nonproductive areas of the landfill is not controlled, the Permittee shall maintain records to demonstrate that control is not required of such gas is not required based on the exclusion in 40 CFR 60.759(a)(3)(ii), considering the total amount of gas generated from nonproductive areas and the total amount of gas generated from the landfill. If these records must be prepared, the Permittee shall update these records whenever additional gas is collected from

nonproductive areas of the landfill but not controlled or otherwise on at least a semi-annual basis.

- f. The Permittee shall maintain a copy of all notifications and reports that are required to be submitted to the Illinois EPA pursuant to this permit. (Refer to Conditions 7 and 8.)
 - g. The Permittee shall retain all records, including logs and procedures, required by this permit at a readily accessible location at the source for at least five years from the date of entry and these records shall be available for inspection by the Illinois EPA upon request. The Permittee shall provide copies of any required records requested by the Illinois EPA as soon as is practicable, considering the nature and extent of the requested records.
7. The Permittee shall submit the following notifications to the Illinois EPA, which shall be submitted 7 days in advance of a specified activity or otherwise as soon as practicable in advance of the activity:
- a. Notification for each pilot activity conducted under this permit that, at a minimum, shall include the following information:
 - i. General description of the activity to be conducted and the type of evaluation(s) that are planned.
 - ii. Detailed information regarding the activity that is being evaluated, including: description; location; identification and description any control device that is part of the activity; discussion of the possible effects of the activity on odorous emissions or other emissions; and a description of the evaluation(s) that will be performed.
 - iii. Proposed dates for the pilot activity and expected duration of the evaluation.
 - iv. The information required by Condition 7(b) or (c), if also applicable for the particular activity.
 - b. Notification for each control device installed under this permit that, at a minimum, shall include the following information:
 - i. Identification of the control device.
 - ii. A description of the control device, including: type; capacity; information confirming that it is a temporary trailer or skid mounted device; emission control efficiency; and other performance specifications provided by the supplier
 - iii. A description of the planned use for the control device, the expected effect on odorous emissions; and whether the

control technology or device will also be undergoing evaluation for feasibility and effectiveness.

iv. Proposed date for beginning installation of the device.

8. The Permittee shall submit the following reports to the Illinois EPA related to activities conducted pursuant to this permit:

- a. The Permittee shall submit all report required pursuant to NSPS, 40 CFR 60.757.
- b. The Permittee shall submit monthly reports, which shall be submitted within 7 days of the end of each calendar month that that identify and describe the specific activities undertaken during the month pursuant to this permit, including a map of the landfill indicating the location of each activity; describe each pilot activity started, completed or continuing during the month and the results from such pilot activity; discuss other events or activities related to this permit during the month that affected odorous emissions from the landfill and assess its progress toward achieving comprehensive control of surface gas emissions from the landfill.
- c. The Permittee shall submit reports for any deviation from the requirements of this permit in accordance with the relevant conditions in the CAAPP permit for prompt reporting of deviations

9. Two copies of required reports and notifications shall be sent to the Illinois EPA's Compliance Section at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

and one copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency/Regional Office
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

Phone: 618-346-5120 Facsimile: 618-346-5155

- 10a. i. The authorization to commence construction of measures and activities provided by this permit terminates on June 30, 2011. This condition supersedes Standard Condition 1.

- ii. For measures and activities authorized by this construction permit that are commenced by June 30, 2011, the Permittee may continue to operate such measures and activities pursuant to this permit until December 31, 2012 or the CAAPP permit for the source is revised to address these measures and activities, whichever occurs first.
- b. i. The Permittee shall apply to the Illinois EPA for a new or revised construction permit for any air pollution control equipment installed pursuant to this permit that it decides to pursue for use on a permanent basis.
- ii. The Permittee shall promptly apply to the Illinois EPA for a revision to its CAAPP permit to address any permanent changes to the gas collection system or control devices for the landfill.

If you have any questions on this permit, please call Kunj Patel at 217/782-2113.

Edwin C. Bakowski

Edwin C. Bakowski, P.E.
Manager, Permit Section
Division of Air Pollution Control

Date Signed: February 18, 2010

ECB:CPR:KMP:psj

cc: Region 3