

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

BUREAU OF AIR

DIVISION of AIR POLLUTION CONTROL

PERMIT SECTION

PROJECT SUMMARY for the  
DRAFT CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

Landfill, LLC  
Saline County Landfill Inc., Municipal Waste Landfill

Illinois EPA ID Number: 165808AAB

Application Number: 06060084

Application Type: Initial Permit

Start of Public Comment Period: May 12, 2008

Close of Public Comment Period: June 11, 2008

Permit Engineer/Technical Contact: Mike Davidson, 217/782-2113

Community Relations/Comments Contact: Brad Frost, 217/782-7027

(This Project Summary generally describes the source and explains the draft permit. This document has been prepared pursuant to Section 39.5(8)(b) of the Illinois Environmental Protection Act, which requires "a statement that sets forth the legal and factual basis for the draft CAAPP permit conditions.")

## I. INTRODUCTION

This source has applied for a Clean Air Act Permit Program (CAAPP) operating permit. The CAAPP is the program established in Illinois for operating permits for significant stationary sources as required by Title V of the federal Clean Air Act and Section 39.5 of Illinois' Environmental Protection Act. The conditions in a CAAPP permit are enforceable by the Illinois Environmental Protection Agency (Illinois EPA), the USEPA, and the public. This document is for informational purposes only and does not shield the Permittee from enforcement actions or its responsibility to comply with applicable regulations. This document shall not constitute a defense to a violation of the Act or any rule or regulation.

A CAAPP permit contains conditions identifying the applicable state and federal air pollution control requirements that apply to a source. The permit also establishes emission limits, appropriate compliance procedures, and specific operational flexibility. The appropriate compliance procedures may include monitoring, record keeping, and reporting to show compliance with these requirements. The Permittee must carry out these procedures on an on-going basis to demonstrate that the source is operating in accordance with the requirements of the permit. Further explanations of the specific provisions of the draft CAAPP permit are contained in the attachments to this document, which also identify the various emission units at the source.

## II. GENERAL SOURCE DESCRIPTION

### a. Nature of Source

The source is a municipal solid waste (MSW) landfill which is defined as an entire disposal facility in a contiguous geographical space where household waste is placed in or on land. An MSW landfill may also receive other types of RCRA Subtitle D wastes (40 CFR 257.2) such as commercial solid waste, non-hazardous sludge, conditionally exempt small quantity generator waste, and industrial solid waste.

Landfill gas emissions from the source are generated from the decomposition of materials deposited in the landfill. Landfill gas is composed primarily of methane and carbon dioxide. A small percentage of other constituents present in the gas include hydrogen sulfide and nonmethane organic compound(s) (NMOC).

At the time of issuance of this permit, a landfill gas collection and control system (flare) has been installed at the site.

Other emissions at the source include: particulate matter emissions (fugitive dust) generated from roads and excavation

activities; VOM emissions from the leachate/condensate storage tank; and combustion emissions from the landfill gas flare.

b. Ambient Air Quality Status for the Area

The source is located in an area that is currently designated attainment or unclassifiable for the National Ambient Air Quality Standards for all criteria pollutants (carbon monoxide, lead, nitrogen dioxide, ozone, PM<sub>2.5</sub>, PM<sub>10</sub>, sulfur dioxide).

c. Major Source Status

1. The source requires a CAAPP permit because the source is subject to a standard, limitation, or other requirement under Section 111 (NSPS) or Section 112 (HAPs) of the CAA for which USEPA requires a CAAPP permit, or because the source is in a source category designated by the USEPA. Specifically, this source is subject to the NSPS for Municipal Solid Waste Landfills, 40 CFR Part 60 Subpart WWW.

d. Source Emissions

The following table lists annual emissions of criteria pollutants from this source, as reported in the Annual Emission Reports sent to the Illinois EPA.

Pollutant	Annual Emissions (tons)				
	2002	2003	2004	2005	2006
CO	29.000000	29.000000	15.900000	8.540000	14.952200
NO <sub>x</sub>	5.200000	5.200000	2.910000	1.570000	2.748000
PM	----	----	----	----	----
SO <sub>2</sub>	----	----	----	----	----
VOM	1.900000	1.850000	1.720000	1.310000	0.270700

III. NEW SOURCE REVIEW/TITLE I CONDITIONS

This draft permit contains terms and conditions that address the applicability of permit programs for new and modified sources under Title I of the Clean Air Act (CAA) and regulations promulgated thereunder, including 40 CFR 52.21, Prevention of Significant Deterioration (PSD) and 35 IAC Part 203, Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within the draft permit by T1, T1R, or T1N. Any conditions established in a construction permit pursuant to Title I and not revised or deleted in this draft permit, remain in effect pursuant to Title I provisions until such time that the Illinois EPA revises or deletes them. Where the source has requested that the Illinois EPA establish new conditions or revise such conditions in a Title I permit, those conditions are consistent with the information provided in the CAAPP application and will remain in effect pursuant to Title I

provisions until such time that the Illinois EPA revises or deletes them.

This draft permit would establish new Title I requirements.

IV. COMPLIANCE INFORMATION

The source has certified compliance with all applicable rules and regulations; therefore, a compliance schedule is not required for this source. In addition, the draft permit requires the source to certify its compliance status on an annual basis.

V. PROPOSED ILLINOIS EPA ACTION/REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that this source's permit application meets the standards for issuance of a CAAPP permit. The Illinois EPA is therefore proposing to issue a CAAPP permit, subject to the conditions proposed in the draft permit.

Comments are requested by the Illinois EPA for the draft or proposed permit, pursuant to 35 IAC Part 252 and Sections 39.5(8) and (9) of the Illinois Environmental Protection Act. A final decision on the draft or proposed permit will not be made until the public, affected states, and USEPA have had an opportunity to comment. The Illinois EPA is not required to accept recommendations that are not based on applicable requirements. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 IAC Part 166.

ATTACHMENT 1: Summary of Source-Wide Requirements

The following table indicates the source-wide emissions control programs and planning requirements that are applicable to this source. These programs are addressed in Sections 5 and 6 of the draft permit.

<b>Program/Plan</b>	<b>Applicable</b>
Emissions Reduction Market System (ERMS)	No
Nitrogen Oxides (NO <sub>x</sub> ) Trading Program	No
Acid Rain Program	No
Compliance Assurance Monitoring (CAM) Plan	No
Fugitive Particulate Matter (PM) Operating Program	No
Risk Management Plan (RMP)	No
PM <sub>10</sub> Contingency Measure Plan	No

ATTACHMENT 2: Summary of Requirements for Specific Emission Units

The following tables include information on the requirements that apply to significant emission units at this source. The requirements are found in Section 7 of the draft permit, which is further divided into subsection, i.e., Section 7.1, 7.2, etc., for the different categories of units at the source. A separate table is provided for each subsection in Section 7 of the draft permit. An explanation of acronyms and abbreviations is contained in Section 2 of the draft permit.

Table 1 (Section 7.1 of the draft permit)

<b>Emission Unit - Municipal Solid Waste Landfill</b>	
Description	Municipal Solid Waste Landfill
Date Constructed	Commenced Construction: Prior to September 15, 1983 Modification (Expansion): October 15, 2004 See Application No. 04070007
Emission Control Equipment	Landfill Gas Collection And Control System (Open Flare)
<b>Applicable Rules and Requirements</b>	
Emission Standards	<ul style="list-style-type: none"> <li>• 40 CFR 60 Subparts A and WWW (NSPS for Municipal Solid Waste Landfills)</li> <li>• 40 CFR 61 Subparts A and M (National Emission Standard for Asbestos)</li> </ul>
Streamlining	Not Applicable
Title I Conditions	<ul style="list-style-type: none"> <li>• The draft permit contains limits on operation and emissions in Conditions 7.1.6.               <ul style="list-style-type: none"> <li>o Emissions of particulate matter (PM) from the landfill and landfill haul roads. These limits were incorporated from Permit 04070007. (T1)</li> <li>o New Title 1 limits regarding emissions and operation of the open flare. The limitations are being established in this permit pursuant to Title I of the CAA, specifically 40 CFR 52.21, Prevention of Significant Deterioration (PSD) since landfill design capacity is the basis for determining potential emissions for the landfill and landfill gas control system. Note that these limits now show that the open flare is the only landfill gas control device and the revise the limitations in the previously issued Operating Permit 00030111. (T1N)</li> </ul> </li> </ul>

<b>Emission Unit - Municipal Solid Waste Landfill</b>	
Title I Conditions (Continued)	<ul style="list-style-type: none"> <li>o New Title 1 limits regarding the overall design capacity of the landfill. The limitations are being established in this permit pursuant to Title I of the CAA, specifically 40 CFR 52.21, Prevention of Significant Deterioration (PSD) since landfill design capacity is the basis for determining potential emissions for the landfill and landfill gas control system. (T1N)</li> </ul>
Non-applicability	<ul style="list-style-type: none"> <li>• 35 IAC 212.321 - Emissions of Particulate Matter from Process Emission Units: Source is not considered to be a process emission unit</li> <li>• 35 IAC Part 220 - Non-Methane Organic Compounds: MSW landfill does not meet the applicability criteria</li> <li>• 40 CFR Part 64 - Compliance Assurance Monitoring (CAM) for Major Stationary Sources" The MSW landfill is subject to a NSPS</li> </ul>
<b>Periodic Monitoring (other than basic regulatory requirements)</b>	
Testing	<ul style="list-style-type: none"> <li>• Required by 40 CFR 60 Subpart WWW: Standards of Performance for Municipal Solid Waste Landfills</li> <li>• Sampling and analysis of the landfill gas entering the control system(s) at least once per year to determine for heat value and composition which shall include at least: methane, sulfur compounds, nonmethane organic content, and nonmethane organic compound (NMOC) content. Required to verify compliance with the emission limits in Condition 7.1.6(b).</li> <li>• Annual performance test must be performed on the open (utility) flare. Required to verify compliance with the operational limits in Condition 7.1.5(e).</li> </ul>
Emissions Monitoring	<ul style="list-style-type: none"> <li>• Required by 40 CFR 60 Subpart WWW: Standards of Performance for Municipal Solid Waste Landfill</li> <li>• Dust monitoring required to verify compliance limitation in Conditions 5.3.2(a) and 7.1.3(d) and in conjunction with the fugitive dust minimization program required in Conditions 7.1.5(d).</li> </ul>
Operational Monitoring	<ul style="list-style-type: none"> <li>• Required by 40 CFR 60 Subpart WWW: Standards of Performance for Municipal Solid Waste Landfill</li> <li>• Landfill gas flow rate monitoring - 35 Ill. Adm. Code 201.281</li> </ul>
Inspections	<ul style="list-style-type: none"> <li>• Required by 40 CFR 60 Subpart WWW: Standards of Performance for Municipal Solid Waste Landfill</li> </ul>

<b>Emission Unit - Municipal Solid Waste Landfill</b>	
Recordkeeping	<p>Required by: 40 CFR 60 Subpart WWW: Standards of Performance for Municipal Solid Waste Landfill and NESHAP 40 CFR 61 Subpart M: Handling Procedures and Control Measures for the Disposal of ACWM.</p> <p>Other records required for emission calculation and compliance with requirements in Condition 7.1.6.</p>
Other	Compliance with the fugitive dust limitation in Conditions 5.3.2(a) based upon a visual observations.
<b>Reporting</b>	
Prompt Reporting	30 day reporting of exceedance of limits in Condition 7.1.5 and 7.1.6
Other Reporting	<ul style="list-style-type: none"> <li>• General Reporting requirements including reporting of subsurface oxidation events.</li> <li>• 40 CFR 60 Subpart WWW: Standards of Performance for Municipal Solid Waste Landfill</li> <li>• NESHAP 40 CFR 61 Subpart M: Handling Procedures and Control Measures for the Disposal of ACWM.</li> </ul>

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