

AIR EMISSION PERMIT NO. 03700156- 002

IS ISSUED TO

WASTE MANAGEMENT, INC.
2650 West Cliff Road
Burnsville, Dakota County, MN 55337

**FOR THE BURNSVILLE, MINNESOTA
SANITARY LANDFILL**

The emission units, control equipment and emission stacks at the stationary source authorized in this permit are as described in the following permit application(s):

Permit Type	Application Date	Issuance Date	Action Number
Total Facility Operating Permit	06/15/1995	February 14, 2005	001
Moderate Amendment	08/31/2005	See below	002

This permit authorizes the Permittee to operate and construct the stationary source at the address listed above unless otherwise noted in Table A. The Permittee must comply with all the conditions of the permit. Any changes or modifications to the stationary source must be performed in compliance with Minn. R. 7007.1150 to 7007.1500. Terms used in the permit are as defined in the state air pollution control rules unless the term is explicitly defined in the permit.

Permit Type: Federal; Pt 70/True Minor for NSR

Issue Date: February 28, 2006

Expiration: February 14, 2010

Title I Conditions do not expire.

Richard J. Sandberg, Manager
Air Quality Permits Section
Industrial Division

for Sheryl A. Corrigan
Commissioner
Minnesota Pollution Control Agency

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NOTICE TO THE PERMITTEE:

Your stationary source may be subject to the requirements of the Minnesota Pollution Control Agency's (MPCA) solid waste, hazardous waste, and water quality programs. If you wish to obtain information on these programs, including information on obtaining any required permits, please contact the MPCA general information number at:

Metro Area	(651) 296-6300
Outside Metro Area	1-800-657-3864
TTY	(651) 282-5332

The rules governing these programs are contained in Minn. R. chs. 7000-7105. Written questions may be sent to: Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, Minnesota 55155-4194.

Questions about this air emission permit or about air quality requirements can also be directed to the telephone numbers and address listed above.

PERMIT SHIELD:

Subject to the limitations in Minn. R. 7007.1800, compliance with the conditions of this permit shall be deemed compliance with the specific provision of the applicable requirement identified in the permit as the basis of each condition. Subject to the limitations of Minn. R. 7007.1800 and 7017.0100, subp. 2, notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

FACILITY DESCRIPTION:

Landfill:

The Burnsville Sanitary Landfill is located in Dakota County, Minnesota. The total permitted waste footprint is 145 acres. The landfill is owned and operated by Waste Management. The site first began accepting waste in 1962, and final closure of the entire facility is projected in the year 2015, the actual closure date will depend on the refuse acceptance rates.

Landfill Gas Collection and Control System:

The Burnsville Sanitary Landfill, Inc. has a landfill gas collection and control system in place over a portion of the municipal solid waste landfill area, by means of a compressor unit, the extracted landfill gas flows under vacuum to fuel an electric power generation facility for energy recovery consisting of five Reciprocating Caterpillar engines (owned and operated by Minnesota Methane II, LLC) with permit authorization for an additional sixth engine. The existing blower and a LFG Specialties enclosed Flare unit (owned and operated by Waste Management) is used as a backup to the electric power generation facility. The landfill, landfill gas collection system, flare, and Minnesota Methane II, LLC engines collectively constitute a single stationary source for the purposes of the federal Prevention of Significant Deterioration regulation and the federal Title V permit regulation.

ACTION 002

Waste Management, Inc.'s (WMI) Burnsville Sanitary Landfill (BSL) plans an expansion. The expansion project includes an approximately 42.2 acre horizontal expansion immediately west of the existing landfill, 37.8 acres of which will be for new MSW disposal cells; and a proposed vertical lift of 6.5 feet to the currently permitted 80.6 acres. The expansion project will provide approximately 6.2 million cubic yards of MSW disposal capacity.

The project does not involve the installation of any new emission sources, but does change two existing emission sources. These are the fugitive LFG emissions from EU001 (Landfill), and the fugitive particulate emissions from FS001 (Unpaved roads).

This amendment also incorporates administratively an extension of 120 days for certification of the monitors for the flare (flow and temperature.)

TABLE A: LIMITS AND OTHER REQUIREMENTS

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Table A contains limits and other requirements with which your facility must comply. The limits are located in the first column of the table (What To do). The limits can be emission limits or operational limits. This column also contains the actions that you must take and the records you must keep to show that you are complying with the limits. The second column of Table A (Why to do it) lists the regulatory basis for these limits. Appendices included as conditions of your permit are listed in Table A under total facility requirements.

Subject Item: Total Facility

What to do	Why to do it
AIR POLLUTION CONTROL EQUIPMENT AND FUGITIVE EMISSIONS CONTROL REQUIREMENTS	hdr
Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated, unless otherwise noted in Table A.	Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)
Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment. At a minimum, the O & M plan shall identify all air pollution control equipment and shall include a preventative maintenance program for that equipment, a description of (the minimum but not necessarily the only) corrective actions to be taken to restore the equipment to proper operation to meet applicable permit conditions, a description of the employee training program for proper operation and maintenance of the control equipment, and the records kept to demonstrate plan implementation.	Minn. R. 7007.0800, subp. 14 and Minn. R. 7007.0800, subp. 16(J)
Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted.	Minn. R. 7011.0020
Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150.	Minn. R. 7011.0150
MONITORING REQUIREMENTS	hdr
Monitoring Equipment Calibration: Calibrate the flare flow meter and flare temperature monitoring devices by April 30, 2006. Thereafter, annually calibrate all required monitoring equipment.	Minn. R. 7007.0800, subp. 4(D)
Operation of Monitoring Equipment: Unless otherwise noted in Tables A, B, and/or C, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks and zero and span adjustments. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system.	Minn.R. 7007.0800, subp. 4(D)
NOTIFICATIONS	hdr
Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, notification shall be made to the Commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 3. At the time of notification, the owner or operator shall inform the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over.	Minn. R. 7019.1000, subp. 3
Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2. At the time of notification or as soon as possible thereafter, the owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over.	Minn. R. 7019.1000, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

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Operation Changes: In any shutdown, breakdown, or deviation the Permittee shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The Commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate.	Minn. R. 7019.1000, subp. 4
Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment.	Minn. R. 7019.1000, subp. 1
Notification of Deviations Endangering Human Health or the Environment Report: Within 2 working days of discovery, notify the Commissioner in writing of any deviation from permit conditions which could endanger human health or the environment. Include the following information in this written description: 1. the cause of the deviation; 2. the exact dates of the period of the deviation, if the deviation has been corrected; 3. whether or not the deviation has been corrected; 4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and 5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation.	Minn. R. 7019.1000, subp. 1
RECORDKEEPING	hdr
Record keeping: Retain all records at the stationary source for a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A).	Minn. R. 7007.0800, subp. 5(C)
APPLICATIONS	hdr
Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.	Minn. R. 7007.1150 through Minn. R. 7007.1500
MISCELLANEOUS	hdr
The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp.16
Extension Request: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H).	Minn. R. 7007.1400, subp. 1(H)
Inspections: The Permittee shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A).	Minn. R. 7007.0800, subp. 9(A)
Emission Inventory Report: due 91 days after end of each calendar year following permit issuance (April 1). To be submitted on a form approved by the Commissioner.	Minn. R. 7019.3000 through Minn. R. 7019.3010
Emission Fees: due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005 through Minn. R. 7002.0095
The Permittee is required to submit a Risk Management Plan (RMP) under the federal rule, 40 CFR pt. 68. Each owner or operator of a stationary source, at which a regulated substance is present above a threshold quantity in a process, shall design and implement an accidental release prevention program. A complete RMP must be submitted to the RMP Reporting Center, PO Box 3346, Merrifield, VA 22116. RMP submittal information may be obtained at http://www.epa.gov/swercepp or by calling 1-800-424-9346. These requirements must be complied with no later than the latest of the following dates: (1) June 21, 1999; (2) Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130; or (3) The date on which a regulated substance is first present above a threshold quantity in a process.	40 CFR pt. 68
Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7030.0010 - 7030.0080

TABLE A: LIMITS AND OTHER REQUIREMENTS

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Facility Name: Waste Management Inc/Burnsville Landfill

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Subject Item: GP 001 Landfill, and Gas Collection System

What to do	Why to do it
A. STANDARDS FOR AIR EMISSIONS	hdr
A.01. Design and installation	hdr
An active collection and control system that captures the gas generated within the landfill as required by 40 CFR Section 60.752(b)(2)(ii)(A) and 40 CFR Section 60.752(b)(2)(iii).	40 CFR Section 60.752(b)(2)(ii)
CONTINUED: The active collection system shall: (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; (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. (3) Collect gas at a sufficient extraction rate; (4) Be designed to minimize off-site migration of subsurface gas.	CONTINUED: 40 CFR Section 60.752(b)(2)(ii)
Notify the commissioner in writing when the landfill gas flow of the collected landfill gases first exceeds 2465 cubic feet per minute (30-day average). The notification shall state that the reason for the notification is to accommodate the increasing quantity of landfill gas generated.	40 CFR Section 60.752(b)(2)(iii)
Submit permit application within 30 days after the landfill gas flow of the collected landfill gases first exceeds 2465 cubic feet per minute (30-day average), unless an alternative for managing landfill gas has been approved by the Commissioner. The Permittee shall apply for an amendment to increase the control equipment capacity to accommodate additional landfill gas flow.<alternative>	CONTINUED 40 CFR Section 60.752(b)(2)(iii)
A.02. Emission limits	CONTINUED 40 CFR Section 60.752(b)(2)(iii)
Route all the collected gas to an enclosed control system designed and operated to either reduce NMOC by 98 weight percent or reduce the outlet NMOC concentration to less than 20 parts per million by volume, dry basis as hexane at 3 percent oxygen, or to a treatment system that processes the gas for subsequent sale or use.	CONTINUED 40 CFR Section 60.752(b)(2)(iii)
A.03. System operation	CONTINUED 40 CFR Section 60.752(b)(2)(iii)
The reduction efficiency or parts per million by volume are established by an initial performance testing or subsequent performance testing, using the test methods specified in 40 CFR Section 60.754(d). [see TEST METHODS AND PROCEDURES] If the Permittee chooses to measure the reduction efficiency described above, inlet gas shall be sampled immediately upstream of the control device to minimize any effects of dilution due to air infiltration.	CONTINUED 40 CFR Section 60.752(b)(2)(iii)
The control device shall be operated within the parameter ranges established during the initial or most recent performance test. The operating parameters to be monitored are specified in 40 CFR Section 60.756.	
Operate the collection and control device installed to comply with 40 CFR pt. 60, subp. WWW, in accordance with the provisions of 40 CFR Section 60.753 [Operational standards for collection and control systems], 40CFR Section 60.755 [Compliance provisions] and 40 CFR Section 60.756 [Monitoring of operations].	40 CFR Section 60.752(b)(2)(iv)
A.04. System retirement	hdr
The collection and control system may be capped or removed provided that all the conditions of paragraphs (A), (B), and (C) below are met: (A) The landfill shall be a closed landfill as defined in 40 CFR Section 60.751. A closure report shall be submitted as provided in 40 CFR Section 60.757(d); (B) The collection and control system shall have been in operation a minimum of 15 years; and (C) Following the procedures specified in 40 CFR Section 60.754(b) [NMOC emission calculations], 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.	40 CFR Section 60.752(b)(2)(v)
When the MSW landfill is closed, the Permittee is no longer subject to the requirement to maintain an operating permit under 40 CFR pts. 70 or 71 for the landfill if the landfill is not otherwise subject to the requirements of either part 70 or 71 and if the Permittee meets the conditions for control system removal specified in 40 CFR Section 60.752(b)(2)(v).	40 CFR Section 60.752(d)

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The Permittee is no longer required to comply with the requirements of 40 CFR pt. 63, subp. AAAA when the Permittee is no longer required to apply controls as specified in 40 CFR Section 60.752(b)(2)(v).	40 CFR Section 63.1950
B. OPERATIONAL STANDARDS FOR COLLECTION AND CONTROL SYSTEMS	hdr
(see additional limits and requirements under "G. RECORDKEEPING")	hdr
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	40 CFR Section 60.753(a)
Operate the system such that all collected gases are vented to a control system designed and operated in compliance with 40 CFR Section 60.752(b)(2)(iii) [Control equipment design]. 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.	40 CFR Section 60.753(e) <alternative>
Operate the control or treatment system at all times when the collected gas is routed to the system.	40 CFR Section 60.753(f)
B.01. Operational Limits for the Collection System	hdr
If monitoring demonstrates that the operational requirements below for pressure, temperature, oxygen/nitrogen, or surface methane are not met, corrective action shall be taken as specified in 60 CFR Section 60.755(a)(3) through (5) or 40 CFR Section 60.755(c). If corrective actions are taken as specified in 40 CFR Section 60.755, the monitored exceedance is not a violation of the operational requirements of 40 CFR Section 60.753.	40 CFR Section 60.753(g)
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.	40 CFR Section 60.753(c) regarding changes to oxygen and temperature limits
B.01.a. Pressure at wellhead	hdr
Operate the collection system with negative pressure at each wellhead except under the following conditions: (1) A fire or increased well temperature. The owner or operator shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in 40 CFR Section 60.757(f)(1); (2) <reserved>; (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 submitted for approval.	40 CFR Section 60.753(b)
B.01.c. Temperature at wellhead	hdr
Temperature: less than or equal to 62 degrees C (145 degrees F) for each interior wellhead in the collection system, unless a higher operating temperature value at a particular well has been approved. Existing approvals are listed below.	40 CFR Section 60.753(c) regarding temperature limits
<Reserved for alternative approved temperatures>	CONTINUED 40 CFR Section 60.753(c) regarding temperature limits
B.01.c. Oxygen/nitrogen at wellhead	hdr
For each interior wellhead in the collection system, Oxygen: less than 5 percent or Nitrogen: less than 20 percent	40 CFR Section 60.753(c) regarding oxygen/nitrogen limits
For each interior wellhead, the nitrogen level shall be determined using Method 3C	40 CFR Section 60.753(c) regarding nitrogen monitoring
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 plus-or-minus 10 percent.	40 CFR Section 60.753(c) regarding oxygen monitoring <alternative>
B.01.d. Surface methane	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS

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Operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill.	40 CFR Section 60.753(d) regarding the methane limit
B.02. Evaluating surface methane	hdr
To determine if the surface methane 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 include a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals.	40 CFR Section 60.753(d)
CONTINUED The Permittee shall conduct a visual inspection of the dangerous areas excluded from the surface scan route.	CONTINUED 40 CFR Section 60.753(d)
CONTINUED If, at any time, evidence of leaking landfill gas is present (e.g., hissing sounds, vegetative damage, leachate outbreaks, odors), the Permittee shall monitor surface emissions in that area to determine if an exceedance of the methane surface emission limit is occurring.	CONTINUED 40 CFR Section 60.753(d); Minn. R. 7007.0800, subp. 2
CONTINUED The Permittee may exclude the following from the surface testing pattern: - roads; - the active area; - truck traffic areas; - slopes steeper than or equal to 4:1; - areas with ongoing construction or reconstruction of the gas collection system; - Construction and Demolition Cells C and D.	CONTINUED 40 CFR Section 60.753(d); 40 CFR Section 60.752(b)(2)(i) regarding alternatives <alternative>
C. TEST METHODS AND PROCEDURES	hdr
After the installation of a collection and control system in compliance with 40 CFR Section 60.755, the Permittee shall calculate the NMOC emission rate for purposes of determining when the system can be removed as provided in 40 CFR Section 60.752(b)(2)(v) by following the procedures of 40 CFR Section 60.754(b).	40 CFR Section 60.754(b)
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 Section 51.166 or 40 CFR Section 52.21 using AP-42 or other approved measurement procedures.	40 CFR Section 60.754(c)
C.01. Performance Testing	hdr
Initial Performance Test: due 60 days after achieving maximum capacity, but not later than 180 days after initial startup of the enclosed flare, to measure NMOC emissions from the enclosed flare using the test methods specified in 40 CFR Section 60.754(d). This requirement applies to the enclosed flare following changes that increase the flare's capacity to combust landfill gas. For additional applicable performance test requirements, see "General Performance Test Requirements" in Table A, Subject Item "Total Facility". "Initial performance test" means the test required under 40 CFR Section 60.8.	40 CFR Section 60.8(a); 40 CFR Section 60.752(b)(iii) regarding testing; Minn. R. 7017.2001, subp. 1
For the performance tests required above, Method 25, 25C, or Method 18 must be used to determine compliance with the 98 weight-percent efficiency or the 20 ppmv outlet concentration level. Method 3 or 3A shall be used to determine oxygen for correcting the NMOC concentration as hexane to 3 percent. In cases where the outlet concentration is less than 50 ppm NMOC as carbon (8 ppm NMOC as hexane), Method 25A should be used in place of Method 25. If using Method 18, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). "Method" means the methods contained in 40 CFR pt. 60, Appendix A.	40 CFR Section 60.754(d)
The following equation shall be used to calculate efficiency: $\text{Control Efficiency} = (\text{NMOC}_{\text{in}} - \text{NMOC}_{\text{out}}) / (\text{NMOC}_{\text{in}})$ where, NMOC _{in} = mass of NMOC entering control device NMOC _{out} = mass of NMOC exiting control device	CONTINUED 40 CFR Section 60.754(d)

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Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test. Emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction shall not be considered a violation of the applicable emission limit.	40 CFR Section 60.8(c)
Comply with the performance testing requirements of 40 CFR Section 60.8(d) [Notifications], 40 CFR Section 60.8(e) [Site preparation], and 40 CFR Section 60.8(f) [Sampling runs]	40 CFR Section 60.8(d); 40 CFR Section 60.8(e); 40 CFR Section 60.8(f)
D. COMPLIANCE PROVISIONS	hdr
At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions, in accordance with 40 CFR Section 60.11(d).	40 CFR Section 60.11(d)
D.01 Well parameters	hdr
For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with 40 CFR Section 60.752(b)(2)(ii)(A)(3) [Collect at a sufficient rate], the Permittee shall measure guage pressure in the gas collection header at each individual well, monthly.	40 CFR Section 60.755(a)(3) regarding requirement to monitor
If a positive pressure exists in the gas collection header at an individual well, action shall be initiated to correct the exceedance within 5 calendar days, except for the conditions allowed by this permit. 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 for approval.	40 CFR Section 60.755(a)(3) regarding response to positive pressure; 40 CFR Section 60.755(a)(4)
The Permittee is not required to expand the system as required above during the first 180 days after gas collection system startup.	
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 40 CFR Section 60.753(c) [Wellhead monitoring].	40 CFR Section 60.755(a)(5) regarding requirement to monitor
If a well exceeds operating parameter limits for temperature or nitrogen or oxygen, 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 for approval.	40 CFR Section 60.755(a)(5) regarding response to exceedances
For purposes of compliance with 40 CFR Section 60.753(a) [Operate to collect all gas], the Permittee shall place each well or design component as specified in the approved design plan as provided in 40 CFR Section 60.752(b)(2)(i) [Design submittal]. 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.	40 CFR Section 60.755(b) <alternative>
D.02. Surface methane	hdr
D.02.a. Surface monitoring methodology	hdr
After installation of the collection system, 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 three (3) quarterly** basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in 40 CFR Section 60.755(d).	40 CFR Section 60.755(c)(1)
** Or in accordance with the timetable established in the approved collection and control system design plan required by 40 CFR Section 60.752(b)(2)(i).	
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.	40 CFR Section 60.755(c)(2)
Surface emission monitoring shall be performed in accordance with section 4.3.1 of Method 21 of 40 CFR Section 60, Appendix A, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.**	40 CFR Section 60.755(c)(3) <alternative>
** Or in compliance with the approved collection and Control System Design Plan required by 40 CFR 60.752(b)(2)(i).	

TABLE A: LIMITS AND OTHER REQUIREMENTS

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D.02.b. Excess methane detection	hdr
For any reading of 500 parts per million or more above background at any location, actions specified in item (i) through (v) below shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of 40 CFR Section 60.753(d) [Surface methane limit].	40 CFR Section 60.755(c)(4)
(i) The location of each monitored exceedance shall be marked and the location recorded.	CONTINUED 40 CFR Section 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 then the location shall be re-monitored. The Permittee will log the range of days available for the surface monitoring, pursuant to 40 CFR Section 60.755(c)(1) or 40 CFR Section 60.756(f); the scheduled date of the surface monitoring; a 5-day weather forecast on the scheduled date, together with a 5-day weather forecast from all earlier days within the range of days available; the current weather conditions; and the cap conditions. The log will be kept with the NSPS files.	CONTINUED 40 CFR Section 60.755(c)(4); 40 CFR Section 60.753(d) regarding alternatives to timelines
(ii) CONTINUED The location shall be re-monitored within 10 calendar days of detecting the exceedance, or the log will include a justification of why the additional time for repairs is needed, and the date the repairs are made will be documented. The remonitoring of the cover after repairs are made will occur as quickly as possible. In no instance will the delay in remonitoring exceed 30 days.	CONTINUED 40 CFR Section 60.755(c)(4); 40 CFR Section 60.753(d) regarding alternatives to timelines. <alternative>
(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 40 CFR Section 40.755(c)(4)(v), shall be taken, and no further monitoring of that location is required until the action specified in 40 CFR Section 40.755(c)(4)(v) has been taken.	CONTINUED 40 CFR Section 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 40 CFR Section 60.755(c)(4) (ii) or (iii) shall be re-monitored 1 month (no fewer than 20 days but no more than 30 days) 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 40 CFR Section 60.755(c)(4) (iii) or (v) shall be taken.	CONTINUED 40 CFR Section 60.755(c)(4); 40 CFR Section 60.752(b)(2)(i) regarding alternatives to timelines
(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 for approval.	CONTINUED 40 CFR Section 60.755(c)(4)
D.02.c. Monthly surface monitoring program	hdr
The Permittee shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.	40 CFR Section 60.755(c)(5). <alternative>
D.02.d. Analyzer requirements	hdr
The portable analyzer shall meet the instrument specifications provided in section 3 of Method 21 of appendix A of this part, except that "methane" shall replace all references to VOC.	40 CFR Section 60.755(d)(1)
The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air.	40 CFR Section 60.755(d)(2)
To meet the performance evaluation requirements in section 3.1.3 of Method 21 of 40 CFR pt. 60, Appendix A, the instrument evaluation procedures of section 4.4 of Method 21 of 40 CFR pt. 60, Appendix A shall be used.	40 CFR Section 60.755(d)(3)
The calibration procedures provided in section 4.2 of Method 21 of 40 CFR pt. 60, Appendix A shall be followed immediately before commencing a surface monitoring survey.	40 CFR Section 60.755(d)(4)
D.03. Applicability	hdr
The provisions of this permit applicable pursuant to 40 CFR pt. 60, subp. WWW, 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.	40 CFR Section 60.755(e)
D.04. Compliance and Deviations	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS

02/28/06

Facility Name: Waste Management Inc/Burnsville Landfill

Permit Number: 03700156 - 002

D.04.a. Compliance with 40 CFR pt. 60, subp. WWW, including performance testing, monitoring of the collection system, continuous parameter monitoring, and other credible evidence, is a requirement for compliance with 40 CFR pt. 63, subp. AAAA.	40 CFR Section 63.1960
D.04.b. Compliance demonstration with the operating conditions for control systems includes continuous parameter monitoring data, collected under 40 CFR Section 60.756(b)(1), (c)(1)[enclosed flare temperature monitor].	CONTINUED 40 CFR Section 63.1960
D.04.c. If a deviation occurs, the Permittee has failed to meet the control device operating conditions described in 40 CFR pt. 63, subp. AAAA and have deviated from the requirements of 40 CFR pt. 63, subp. AAAA.	CONTINUED 40 CFR Section 63.1960
D.04.d. Develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in 40 CFR Section 63.6(e)(3). A copy of the SSMP must be maintained on site. Failure to write, implement, or maintain a copy of the SSMP is a deviation. See also Subject Items "GP 004 Activities subject to MACT (40 CFR pt. 63)" in Table A for additional SSMP requirements.	CONTINUED 40 CFR Section 63.1960
E. MONITORING OF OPERATIONS	hdr
E.01 Well Monitoring	hdr
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 40 CFR Section 60.755(a)(3); and (2) Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in 40 CFR Section 60.755(a)(5); and (3) Monitor temperature of the landfill gas on a monthly basis as provided in 40 CFR Section 60.755(a)(5).	40 CFR Section 60.756(a)
E.02. Control device monitoring	hdr
E.02.a. For each enclosed combustor (including enclosed flares), calibrate, maintain, and operate according to the manufacturer's specifications, a device that records flow to or bypass of the control device. The Permittee shall either: (i) 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 (ii) 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.	40 CFR Section 60.756(b)(2). <alternative>
E.02.b. Combustion monitoring For the enclosed flare, the Permittee shall comply with the requirements in E.02.b.(1).	40 CFR Section 60.752(b)(2)(i) regarding alternatives
E.02.b.(1). Flare combustion temperature monitoring	hdr
For each enclosed flare, calibrate, maintain, and operate according to the manufacturer's specifications, a temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of plus-or-minus 1 percent of the temperature being measured expressed in degrees Celsius (or degrees Fahrenheit) or plus-or-minus 0.5 degrees Celsius (0.9 degrees Fahrenheit) whichever is greater. (For the purposes of this requirement, "continuous" means "at least once every 15 minutes".)	40 CFR Section 60.756(b)(1). <alternative>
The flare temperature monitoring devices and the gas flow rate measuring devices shall be installed and operational prior to conducting performance tests under 40 CFR Section 60.8.	40 CFR Section 60.13(b)
Continuous Operation: Except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, all continuous monitoring systems shall be in continuous operation during all periods of emission unit operation. This includes periods of emission unit start-up, shutdown, or malfunction.	40 CFR Section 60.13(e)
Install the temperature monitoring devices and the gas flow rate measuring devices such that representative measurements of process parameters from the affected facility are obtained.	40 CFR Section 60.13(f)
E.03. Surface methane monitoring	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS

02/28/06

Facility Name: Waste Management Inc/Burnsville Landfill

Permit Number: 03700156 - 002

Monitor surface concentrations of methane according to the instrument specifications and procedures provided in 40 CFR Section 60.755(d) [Surface monitoring instrumentation]. 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.	40 CFR Section 60.756(f). <alternative>
F. REPORTING REQUIREMENTS	hdr
Included in the Semiannual Deviations Report shall be all deviations (as defined in 40 CFR pt. 63, subp. AAAA) that occurred during the 6-month reporting period. (Forms DRF-1 and DRF-2 are subsets of this report.) Deviations for continuous emission monitors or numerical continuous parameter monitors must be determined using a 3 hour monitoring block average.	40 CFR Section 63.1955(c) regarding report submittals
F.01. System retirement	hdr
The Permittee shall submit a closure report within 30 days of waste acceptance cessation. Additional information may be requested as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR Section 60.258. If a closure report has been submitted, no additional wastes may be placed into the landfill without filing a notification of modification as described under 40 CFR Section 60.7(a)(4).	40 CFR Section 60.757(d)
Submittal: due 30 days before Equipment Removal and/or Dismantlement. The Permittee shall submit an equipment removal report 30 days prior to removal or cessation of operation of the control equipment. (1) The equipment removal report shall contain all of the following items: (i) A copy of the closure report submitted in accordance with 40 CFR Section 60.757(d); (ii) A copy of the initial performance test report demonstrating that the 15 year minimum control period has expired; and (iii) 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. (2) Additional information may be requested as may be necessary to verify that all of the conditions for removal in 40 CFR Section 60.752(b)(2)(v) [Removal criteria] have been met.	40 CFR Section 60.757(e)
F.02. Semi-annual report	hdr
The Permittee shall submit semi-annual reports of the recorded information in (1) through (6) below. The initial semi-annual report shall be submitted within 180 days of installation and start-up of the collection and control system, and shall include the initial performance test report required under 40 CFR Section 60.8. For enclosed combustion devices and flares, reportable exceedances are defined under 40 CFR Section 60.758(c).	40 CFR Section 60.757(f); 40 CFR Section 63.1980(a); 40 CFR Section 60.752(b)(2)(i) regarding Approved Alternative Items 6, 7, and 8
CONTINUED (1) Value and length of time for exceedance of applicable parameters monitored under 40 CFR Section 60.756(a) [Wellhead temperature and nitrogen/oxygen] and 40 CFR Section 60.756(b) [Enclosed Flare temperature (or oxygen) and gas flow]. (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 Section 60.756 [Monitoring of Operations]. (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.	CONTINUED 40 CFR Section 60.757(f); 40 CFR Section 60.752(b)(2)(i) regarding Approved Alternative Items 6, 7, and 8
CONTINUED (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 Section 60.753(d) [Surface monitoring] 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 Section 60.755(a)(3) [Additional well to achieve negative pressure], 40 CFR Section 60.755(b) [Design plan installation timetable], and 40 CFR Section 60.755(c)(4) [Surface leak corrections].	CONTINUED 40 CFR Section 60.757(f)
F.03. Initial Performance Test Submittals	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS

02/28/06

Facility Name: Waste Management Inc/Burnsville Landfill

Permit Number: 03700156 - 002

Each owner or operator seeking to comply with Section 60.752(b)(2)(iii) shall include the following information with the initial performance test report required under Section 60.8: (1) 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; (2) 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;	40 CFR Section 60.757(g)
CONTINUED (3) 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; (4) 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 (5) 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 (6) The provisions for the control of off-site migration.	CONTINUED 40 CFR Section 60.757(g)
G. RECORDKEEPING	hdr
G.01. Recordkeeping under 40 CFR pt. 60	hdr
G.01.a. General Recordkeeping	hdr
Recordkeeping: Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the facility including; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.	40 CFR Section 60.7(b); Minn. R. 7019.0100, subp. 1
Recordkeeping: Maintain a file of all measurements, maintenance, reports and records required under 40 CFR Section 60.7(f) for at least five years.	40 CFR Section 60.7(f)
Monitoring Data: Reduce all temperature monitoring device, exhaust oxygen CEM, and gas flow rate measuring device data to 1-hour averages, in accordance with 40 CFR Section 60.13(h). 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period.	40 CFR Section 60.13(h) regarding continuous monitoring systems other than COMS
The Permittee shall keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report which triggered 40 CFR Section 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.	40 CFR Section 60.758(a)
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) The Permittee shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under 40 CFR Section 60.755(b) [Design plan installation timetable]. (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 Section 60.759(a)(3)(i) [Exclusion for nondegradable waste] as well as any nonproductive areas excluded from collection as provided in 40 CFR Section 60.759(a)(3)(ii) [Exclusion for nonproductive waste].	40 CFR Section 60.758(d)
The Permittee shall keep for at least 5 years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in 40 CFR Section 60.753 [Operational Standards], the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.	40 CFR Section 60.758(e)
G.01.b. Measurements during the initial performance test or compliance determination	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS

02/28/06

Facility Name: Waste Management Inc/Burnsville Landfill

Permit Number: 03700156 - 002

<p>The Permittee shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed (1) through (2) below 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.</p> <p>(1) Regarding collection and control:</p> <p>(i) The maximum expected gas generation flow rate as calculated in 40 CFR Section 60.755(a)(1) [Ongoing rate calculations]. The Permittee may use another method to determine the maximum gas generation flow rate, if the method has been approved.</p> <p>(ii) The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in 40 CFR Section 60.759(a)(1) [Professional engineer certification].</p>	40 CFR Section 60.758(b)
<p>CONTINUED</p> <p>(2) For landfill gas control through the use of an enclosed Flare combustion device.</p> <p>(i) The average combustion temperature measured at least every 15 minutes during the performance test and averaged over the same time period of the performance test.</p> <p>(ii) The percent reduction of NMOC determined as specified in 40 CFR Section 60.752(b)(2)(iii)(B) [Initial performance test] achieved by the control device.</p> <p>(iii) The average exhaust oxygen concentration recorded by the oxygen CEM measured at least every 15 minutes during the performance test and averaged over the same time period of the performance test.</p>	CONTINUED 40 CFR Section 60.758(b); 40 CFR Section 60.752(b)(2)(i) regarding Approved Alternative Item 3
G.01.c. Continuous monitoring system record	hdr
<p>The Permittee shall keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in 40 CFR Section 60.756 [Monitoring of Operations] 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.</p>	40 CFR Section 60.758(c)
<p>G.01.c.(1). The following constitute exceedances that shall be recorded and reported under 40 CFR Section 60.757(f) [Annual/semiannual report]:</p> <p>- When recording and reporting for the enclosed flare, the Permittee shall comply with the requirements in G.01.c.(1)(a).</p>	CONTINUED 40 CFR Section 60.758(c)
G.01.c.(1)(a) Enclosed flare - continuous monitoring records	CONTINUED 40 CFR Section 60.758(c)
<p>Report all periods of operation during which the 3-hour block average combustion temperature for the enclosed flare was more than 28 degrees C (50 degrees F) below the average combustion temperature during the most recent performance test at which compliance with 40 CFR Section 60.752(b)(2)(iii) [Control system] was determined.</p> <p>The compliance temperature is shown below.</p>	CONTINUED 40 CFR Section 60.758(c). <alternative>
<p>Temperature: greater than or equal to 825 degrees F using a 3-hour Block Average at the Enclosed Flare.</p> <p>This limit is based on an average temperature of 825 degrees F recorded during the 01/29/04 performance test, or most recent test.</p>	CONTINUED 40 CFR Section 60.758(c)
G.01.c.(1)(6). 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 under 40 CFR Section 60.756. [Monitoring of Operations]	CONTINUED 40 CFR Section 60.758(c). <alternative>
G.02. Recordkeeping under 40 CFR pt. 63	hdr
<p>If the Permittee adds any liquids other than leachate in a controlled fashion to the waste mass and does not comply with the bioreactor requirements in 40 CFR Section 63.1947, 40 CFR Section 63.1955(c) and 40 CFR Section 63.1980(c) through (f), 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. The Permittee must keep the record of the calculations until liquids addition ceases.</p>	40 CFR Section 63.1980(g); 40 CFR Section 63.1945(b) regarding compliance time

TABLE A: LIMITS AND OTHER REQUIREMENTS

02/28/06

Facility Name: Waste Management Inc/Burnsville Landfill

Permit Number: 03700156 - 002

3-hour block averages are calculated in the same way as they are calculated in 40 CFR pt. 60, subp. WWW, except that the data collected during the events listed in items (a), (b), (c), and (d) below are not to be included in any average computed under 40 CFR pt. 60, subp. WWW: (a) Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments. (b) Startups. (c) Shutdowns. (d) Malfunctions.	40 CFR Section 63.1975
H. SPECIFICATIONS FOR ACTIVE COLLECTION SYSTEMS	hdr
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, including all alternative procedures approved in the collection and control system design plan (Plan).	40 CFR Section 60.759(a)
CONTINUED (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.	CONTINUED 40 CFR Section 60.759(a)
CONTINUED (2) The sufficient density of gas collection devices determined in the Plan 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.	CONTINUED 40 CFR Section 60.759(a)
CONTINUED (3) The placement of gas collection devices determined in the Plan shall control all gas producing areas, except as follows in items (i) and (ii) below: (i) Any segregated area of asbestos or nondegradable material may be excluded from collection if documented as provided under 40 CFR Section 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 upon request. (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 Permittee shall follow the procedures in 40 CFR Section 60.759(a)(3)(ii).	CONTINUED 40 CFR Section 60.759(a)
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.	40 CFR Section 60.759(b)
(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.	CONTINUED 40 CFR Section 60.759(b)
(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.	CONTINUED 40 CFR Section 60.759(b)

TABLE A: LIMITS AND OTHER REQUIREMENTS

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Facility Name: Waste Management Inc/Burnsville Landfill

Permit Number: 03700156 - 002

The Permittee shall convey the landfill gas to a control system in compliance with 40 CFR Section 60.752(b)(2)(iii) [Control system] 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) For existing collection systems, the flow data shall be used to project the maximum flow rate. If no flow data exists, the procedures in paragraph (2) below shall be used. (2) For new collection systems, the maximum flow rate shall be in accordance with 40 CFR Section 60.755(a)(1).	40 CFR Section 60.759(c)
I. DEFINITIONS	hdr
I.01. Deviation	hdr
Deviation means any instance in which an affected source subject to this subpart [60 CFR pt. 63, subp. AAAAA], or an owner or operator of such a source: (1) Fails to meet any requirement or obligation established by this subpart, including, but not limited to, any emissions limitation (including any operating limit) or work practice standard; (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or (3) Fails to meet any emission limitation, (including any operating limit), or work practice standard in this subpart during SSM [startup, shutdown, or malfunction], regardless of whether or not such failure is permitted by this subpart.	40 CFR Section 63.1990 for "Deviation"
A deviation includes the definition contained in 40 CFR Section 63.1990. For the purposes (under 40 CFR pt. 63, subp. AAAAA) of the landfill monitoring and SSMP requirements, deviations include the items (a) through (c) below: (a) A deviation occurs when the control device operating parameter boundaries described in 40 CFR Section 60.758(c)(1) [exceedance recording/reporting] are exceeded. (b) A deviation occurs when 1 hour or more of the hours during the 3-hour block averaging period does not constitute a valid hour of data. A valid hour of data must have measured values for at least three 15-minute monitoring periods within the hour. (c) A deviation occurs when a SSMP is not developed, implemented, or maintained on site.	40 CFR Section 63.1965
"Deviation" means any noncompliance with an applicable requirement or permit condition.	Minn. R. 7007.0100, subp. 8a
I.02. Emissions limitation	hdr
Emissions limitation means any emission limit, opacity limit, operating limit, or visible emissions limit.	40 CFR Section 63.1990 for "Emissions limitation"
I.03. Work practice	hdr
Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the Clean Air Act.	40 CFR Section 63.1990 for "Work practice"
I.04. One-hour period (1-hour period)	hdr
One-hour period means any 60-minute period commencing on the hour.	40 CFR Section 60.2 for "One-hour period"
I.05. Three-hour block average (or 3-hour block average)	hdr
"Three-hour block average" (or "3-hour block average") means the average of all hourly emission rates measured over discrete three-hour periods beginning at midnight.	Minn. R. 7007.0100, subp. 7a; Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

02/28/06

Facility Name: Waste Management Inc/Burnsville Landfill

Permit Number: 03700156 - 002

Subject Item: GP 002 Flare**Associated Items:** CE 002 Dust Suppression by Water Spray

What to do	Why to do it
NOTE: This set of Group requirements regulates the enclosed flare both as Control Equipment and as an Emission Unit. Additional requirements for the enclosed flare are contained in the "GP001 Landfill" portion of this permit.	hdr
OPERATIONAL REQUIREMENTS	hdr
The Permittee shall operate and maintain the enclosed flare in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14
INCREASING FLARE CAPACITY	hdr
The Permittee is authorized by this permit to increase the enclosed flare capacity to a maximum of 3000 cfm. The construction authorization does not expire during the life of this permit. The Permittee must keep a record of the dates of installation and start-up on site.	Minn. R. 7007.0800, subp. 2
Notification of any physical or operational change which increases emission rate: due 60 days (or as soon as practical) before the change is commenced. Changes subject to this permit condition include any increases to enclosed flare capacity.	Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

02/28/06

Facility Name: Waste Management Inc/Burnsville Landfill

Permit Number: 03700156 - 002

Subject Item: GP 004 Activities Subject to MACT(40CFRpt.63).

What to do	Why to do it
The Permittee must comply with the following conditions by January 16, 2004.	40 CFR Section 63.1945(b); 40 CFR Section 63.1980(b)
A. PROHIBITED ACTIVITIES AND CIRCUMVENTION	hdr
Circumvention. No Permittee subject to the provisions of 40 CFR pt. 63 shall build, erect, install, or use any article, machine, equipment, or process to conceal an emission that would otherwise constitute noncompliance with a relevant standard. Such concealment includes, but is not limited to-- (1) The use of diluents to achieve compliance with a relevant standard based on the concentration of a pollutant in the effluent discharged to the atmosphere; (2) The use of gaseous diluents to achieve compliance with a relevant standard for visible emissions	40 CFR Section 63.4(b)
Fragmentation. Fragmentation after November 15, 1990 which divides ownership of an operation, within the same facility among various owners where there is no real change in control, will not affect applicability. The Permittee must not use fragmentation or phasing of reconstruction activities (i.e., intentionally dividing reconstruction into multiple parts for purposes of avoiding new source requirements) to avoid becoming subject to new source requirements.	40 CFR Section 63.4(c)
B. PRECONSTRUCTION REVIEW AND NOTIFICATION REQUIREMENTS	hdr
Prior to construction or reconstruction of an "affected source" under the promulgated MACT standards, the Permittee must apply for and obtain an air emission permit.	40 CFR Section 63.5(b)(3)
C. COMPLIANCE WITH STANDARDS AND MAINTENANCE REQUIREMENTS	hdr
C.01. Operation and maintenance requirements.	hdr
At all times (including periods of startup, shutdown, and malfunction) the Permittee shall operate and maintain the emission unit subject to the applicable standards of 40 CFR pt. 63 and its associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions, pursuant to the requirements in 40 CFR Section 63.6(e)(1)(i).	40 CFR Section 63.6(e)(1)(i)
Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan required by 40 CFR Section 63.6(e)(3). To the extent that an unexpected event arises during a startup, shutdown, or malfunction, the Permittee must comply by minimizing emissions during such a startup, shutdown, and malfunction event consistent with safety and good air pollution control practices.	40 CFR Section 63.6(e)(1)(ii)
C.02. Startup, shutdown, and malfunction plan (SSMP)	hdr
The Permittee shall prepare and implement a Startup, Shutdown, and Malfunction Plan (SSMP) for each of the emission units subject to Maximum Control Technology Standards. The SSMP shall be prepared in accordance with 40 CFR Section 63.6(e)(3) and shall include requirements specified therein.	40 CFR Section 63.6(e)(3)(i); 40 CFR Section 63.6(e)(3)(ix) regarding the need to have an SSMP
During periods of startup, shutdown, and malfunction, the Permittee shall operate and maintain the source in accordance with the procedures specified in the startup, shutdown, and malfunction plan.	40 CFR Section 63.6(e)(3)(ii); 40 CFR Section 63.6(e)(3)(ix) regarding operation pursuant to the SSMP
When actions taken during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) are consistent with the procedures specified in the affected source's SSMP, keep records for that event which demonstrate that the procedures specified in the SSMP were followed. These records may take the form of a "checklist," or other effective form of recordkeeping that confirms conformance with the SSMP for that event. Keep records of these events as specified in 40 CFR Section 63.10(b), including records of the occurrence and duration of each startup, shutdown, or malfunction of operation and each malfunction of the air pollution control and monitoring equipment. Confirm that actions taken during the relevant reporting period during periods of startup, shutdown, and malfunction were consistent with the affected source's SSMP in the semiannual (or more frequent) startup, shutdown, and malfunction report required in 40 CFR Section 63.10(d)(5)	40 CFR Section 63.6(e)(3)(iii)
If an action taken during a startup, shutdown, or malfunction (including an action taken to correct a malfunction) is not consistent with the procedures specified in the affected source's SSMP, and the source exceeds any applicable emission limitation in the relevant emission standard, then record the actions taken for that event.	40 CFR Section 63.6(e)(3)(iv) regarding recordkeeping

TABLE A: LIMITS AND OTHER REQUIREMENTS

02/28/06

Facility Name: Waste Management Inc/Burnsville Landfill

Permit Number: 03700156 - 002

The SSMP must be located at the plant site and must be kept updated. The Permittee must make the SSP available upon request for inspection and copying by the Administrator. When the SSMP is updated or revised, the Permittee must keep all previous versions of the SSMP for a period of 5 years. The Permittee must submit the SSMP when required, pursuant to the requirements in 40 CFR Section 63.6(e)(3)(v). If the affected source ceases operation or is otherwise no longer subject to the 40 CFR pt. 63, the Permittee must retain a copy of the most recent plan for 5 years from the date the source ceases operation or is no longer subject to this part and must make the plan available upon request for inspection and copying by the Administrator.	40 CFR Section 63.6(e)(3)(v)
To satisfy the requirements of this section to develop a SSMP, the Permittee may use the affected source's standard operating procedures (SOP) manual, or an Occupational Safety and Health Administration (OSHA) or other plan, provided the alternative plans meet all the requirements for the SSMP and are made available for inspection or submitted when requested by the Administrator.	40 CFR Section 63.6(e)(3)(vi)
The Permittee must make appropriate revisions to an SSMP, if the Administrator finds that the plan: (A) Does not address a startup, shutdown, or malfunction event that has occurred; (B) Fails to provide for the operation of the source (including associated air pollution control and monitoring equipment) during a startup, shutdown, or malfunction event in a manner consistent with the general duty to minimize emissions established by 40 CFR Section 63.6(e)(1)(i); (C) Does not provide adequate procedures for correcting malfunctioning process and/or air pollution control and monitoring equipment as quickly as practicable; or (D) Includes an event that does not meet the definition of startup, shutdown, or malfunction listed in 40 CFR Section 63.2.	40 CFR Section 63.6(e)(3)(vii)
The Permittee may periodically revise the SSMP as necessary to satisfy the requirements of 40 CFR pt. 63 or to reflect changes in equipment or procedures. Unless the Commissioner provides otherwise, the Permittee may make such revisions to the SSMP without prior approval by the Administrator or the Commissioner. Report each revision to the SSMP in the semiannual report required by 40 CFR Section 63.10(d)(5). If the SSMP fails to address or inadequately addresses an event that meets the characteristics of a malfunction but was not included in the SSMP at the time the Permittee developed the plan, revise the SSMP within 45 days after the event. In the revision, include detailed procedures for operating and maintaining the source during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control and monitoring equipment. [CONTINUED BELOW]	40 CFR Section 63.6(e)(3)(viii)
CONTINUED In the event that the Permittee makes any revision to the SSMP which alters the scope of the activities at the source which are deemed to be a startup, shutdown, or malfunction, or otherwise modifies the applicability of any emission limit, work practice requirement, or other requirement in a standard established under this part, the revised plan shall not take effect until after the Permittee has provided a written notice describing the revision to the Commissioner.	CONTINUED 40 CFR Section 63.6(e)(3)(viii)
Any revisions made to the SSMP in accordance with the procedures established by 40 CFR pt. 63 shall not be deemed to constitute permit revisions under 40 CFR pt. 70 or pt. 71. None of the procedures specified by the SSMP shall be deemed to fall within the permit shield.	40 CFR Section 63.6(e)(3)(ix)
D. COMPLIANCE WITH NONOPACITY EMISSION STANDARDS	hdr
D.01. Applicability	hdr
The applicable non-opacity emission standards set forth in 40 CFR pt. 63 shall apply at all times except during periods of startup, shutdown, and malfunction, and as otherwise specified in an applicable subpart. If a startup, shutdown, or malfunction of one portion of an affected source does not affect the ability of particular emission points within other portions of the affected source to comply with the non-opacity emission standards set forth in this 40 CFR pt. 63, then that emission point must still be required to comply with the non-opacity emission standards and other applicable requirements.	40 CFR Section 63.6(f)(1)
D.02. Methods for determining compliance	hdr
The Administrator will determine compliance with nonopacity emission standards in 40 CFR pt. 63 based on the results of performance tests conducted according to the procedures in 40 CFR Section 63.7, unless otherwise specified in an applicable subpart of 40 CFR pt. 63.	40 CFR Section 63.6(f)(2)(i)
The Administrator will determine compliance with nonopacity emission standards in 40 CFR pt. 63 by evaluation of the Permittee's conformance with operation and maintenance requirements, including the evaluation of monitoring data, as specified in 40 CFR Section 63.6(e) and applicable subparts of 40 CFR pt. 63.	40 CFR Section 63.6(f)(2)(ii)

TABLE A: LIMITS AND OTHER REQUIREMENTS

02/28/06

Facility Name: Waste Management Inc/Burnsville Landfill

Permit Number: 03700156 - 002

<p>If the Permittee conducts performance testing at startup to obtain an operating permit, the results of such testing may be used to demonstrate compliance with a relevant standard if--</p> <p>(A) The performance test was conducted within a reasonable amount of time before an initial performance test is required to be conducted under the relevant standard;</p> <p>(B) The performance test was conducted under representative operating conditions for the source;</p> <p>(C) The performance test was conducted and the resulting data were reduced using EPA-approved test methods and procedures, as specified in 40 CFR Section 63.7(e); and</p> <p>(D) The performance test was appropriately quality-assured, as specified in 40 CFR Section 63.7(c).</p>	40 CFR Section 63.6(f)(2)(iii)
<p>The Administrator will determine compliance with design, equipment, work practice, or operational emission standards in 40 CFR pt. 63 by review of records, inspection of the source, and other procedures specified in applicable subparts of 40 CFR pt. 63.</p>	40 CFR Section 63.6(f)(2)(iv)
<p>The Administrator will determine compliance with design, equipment, work practice, or operational emission standards in 40 CFR pt. 63 by evaluation of a Permittee's conformance with operation and maintenance requirements, as specified in 40 CFR Section 63.6(e) of and applicable subparts of 40 CFR pt. 63.</p>	40 CFR Section 63.6(f)(2)(v)
<p>E. RECORDKEEPING AND REPORTING REQUIREMENTS (see also the SSMP requirements)</p>	hdr
<p>The Permittee shall maintain files of all information required by this part in a form suitable and readily available for expeditious inspection and review. The files should be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.</p>	40 CFR Section 63.10(b)(1); Minn. R. 7007.0800, subp. 5(C) regarding record location
<p>The Permittee shall maintain relevant records for--</p> <p>(i) The occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., process equipment);</p> <p>(ii) The occurrence and duration of each malfunction of the required air pollution control and monitoring equipment;</p> <p>(iii) All required maintenance performed on the air pollution control and monitoring equipment;</p> <p>(iv) Actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) when such actions are different from the procedures specified in the affected source's SSMP;</p> <p>[CONTINUED BELOW]</p>	40 CFR Section 63.10(b)(2)
<p>CONTINUED</p> <p>(v) All information necessary to demonstrate conformance with the affected source's SSMP when all actions taken during periods of startup, shutdown, 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 the SSMP. (The information needed to demonstrate conformance with the SSMP may be recorded using a "checklist," or some other effective form of recordkeeping, in order to minimize the recordkeeping burden for conforming events);</p>	CONTINUED 40 CFR Section 63.10(b)(2)
<p>Periodic Startup, Shutdown, and Malfunction Report Submittal.</p> <p>The Permittee shall submit the Periodic Startup, Shutdown, and Malfunction Report 30 days after end of each calendar half-year following Permit Issuance, but reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The reporting shall be consistent with the requirements in 40 CFR Section 63.10(d)(5)(i).</p>	40 CFR Section 63.10(d)(5)(i)
<p>Immediate Startup, Shutdown, and Malfunction Reports. Any time an action taken during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures specified in the SSMP, contact the commissioner and report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan followed by a letter within 7 working days after the end of the event. The reports shall be in accordance with 40 CFR Section 63.10(d)(5), unless alternative reporting has been arranged, in advance, with the Administrator.</p> <p>This report is in addition to the Breakdown Notification requirements in the Total Facility portion of this permit.</p>	40 CFR Section 63.10(d)(5)(ii); 40 CFR Section 63.6(e)(3)(iv) regarding reporting
<p>AVAILABILITY OF INFORMATION AND CONFIDENTIALITY</p>	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS

02/28/06

Facility Name: Waste Management Inc/Burnsville Landfill

Permit Number: 03700156 - 002

Confidentiality. (1) If a Permittee is required to submit information entitled to protection from disclosure under section 114(c) of the Act, the Permittee may submit such information separately. The requirements of section 114(c) shall apply to such information. (2) The contents of a title V permit shall not be entitled to protection under section 114(c) of the Act; however, information submitted as part of an application for a title V permit may be entitled to protection from disclosure.	40 CFR Section 63.15(b)
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TABLE B: SUBMITTALS

02/28/06

Facility Name: Waste Management Inc/Burnsville Landfill
Permit Number: 03700156 - 002

Table B lists most of the submittals required by this permit. Please note that some submittal requirements may appear in Table A or, if applicable, within a compliance schedule located in Table C. Table B is divided into two sections in order to separately list one-time only and recurrent submittal requirements.

Each submittal must be postmarked or received by the date specified in the applicable Table. Those submittals required by parts 7007.0100 to 7007.1850 must be certified by a responsible official, defined in Minn. R. 7007.0100, subp. 21. Other submittals shall be certified as appropriate if certification is required by an applicable rule or permit condition.

Send any application for a permit or permit amendment to:

AQ Permit Technical Advisor
Industrial Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

Also, where required by an applicable rule or permit condition, send to the Permit Technical Advisor notices of:

- accumulated insignificant activities,
- installation of control equipment,
- replacement of an emissions unit, and
- changes that contravene a permit term.

Unless another person is identified in the applicable Table, send all other submittals to:

AQ Compliance Tracking Coordinator
Industrial Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

Send submittals that are required to be submitted to the U.S. EPA regional office to:

Mr. George Czerniak
Air and Radiation Branch
EPA Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

Send submittals that are required by the Acid Rain Program to:

U.S. Environmental Protection Agency
Clean Air Markets Division
1200 Pennsylvania Avenue NW (6204N)
Washington, D.C. 20460

TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS

02/28/06

Facility Name: Waste Management Inc/Burnsville Landfill

Permit Number: 03700156 - 002

What to send	When to send	Portion of Facility Affected
Application for Permit Reissuance	due 180 days before expiration of Existing Permit	Total Facility
Submittal	due 30 days before Equipment Removal and/or Dismantlement. The Permittee shall submit an equipment removal report 30 days prior to removal or cessation of operation of the control equipment. (see Table A)	GP001

TABLE B: RECURRENT SUBMITTALS

02/28/06

Facility Name: Waste Management Inc/Burnsville Landfill

Permit Number: 03700156 - 002

What to send	When to send	Portion of Facility Affected
Semiannual Deviations Report	due 30 days after end of each calendar half-year starting 02/14/2005 . The first semiannual report submitted by the Permittee shall cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31. If no deviations have occurred, the Permittee shall submit the report stating no deviations.	Total Facility
Submittal	due 30 days after end of each calendar half-year starting 02/14/2005 . The Permittee shall submit a semi-annual report. (See Table A)	GP001
Compliance Certification	due 30 days after end of each calendar year starting 02/14/2005 (for the previous calendar year). To be submitted on a form approved by the Commissioner, both to the Commissioner and to the US EPA regional office in Chicago. This report covers all deviations experienced during the calendar year.	Total Facility

APPENDIX MATERIAL

Facility Name: Waste Management - Burnsville Landfill

Permit Number: 03700156-002

Appendix I – Insignificant Activities

Storage Tank 1 (leachate)

Storage Tank 2 (leachate)

Storage Tank 3 (condensate)

Storage Tank 4 (condensate)

Storage Tank 5 (condensate)

Material Handling: Active cell (trucks dumping refuse)

Grading/Compacting: Active cell (refuse)

Grading/Compacting: Active cell (daily cover)

Wind erosion: Active cell (refuse)

Wind erosion: Active cell (daily cover)

Grading/Compacting: Closed cell (final cover)

Material Handling: New Cell (dozer excavating)

Material Handling: New cell (truck loading)

Material Handling: Active Cell (trucks dumping daily cover)

Material Handling: Closed Cell (truck dumping final cover)

TECHNICAL SUPPORT DOCUMENT
For
AIR EMISSION PERMIT NO. 03700156-002

This Technical Support Document (TSD) is intended for all parties interested in the permit and to meet the requirements that have been set forth by the federal and state regulations (40 CFR § 70.7(a)(5) and Minn. R. 7007.0850, subp.1). The purpose of this document is to provide the legal and factual justification for each applicable requirement or policy decision considered in the determination to issue the permit.

1. General Information

1.1. Applicant and Stationary Source Location:

Applicant/Address	Stationary Source/Address (SIC Code: 4953)
Waste Mangement, Inc. 1001 Fannin, Suite 4000 Houston, TX 77002	2650 Cliff Rd W Burnsville Dakota County
Contact: Mike Niewind Phone: (952) 890-3248	

1.2. Description of the Permit Action

Waste Management Inc.'s Burnsville Sanitary Landfill (BSL) is currently undergoing and Environmental Impact Statement (EIS) for the West Development Area (WDA) Expansion. The expansion project includes an approximately 42.2 acre horizontal expansion immediately west of the existing landfill, 37.8 acres of which will be for new MSW disposal cells; and a proposed vertical lift of 6.5 feet to the currently permitted 80.6 acres. The expansion project will provide approximately 6.2 million cubic yards of MSW disposal capacity.

This permit is a moderate permit amendment to BSL's current Title V air permit to allow the construction and operation of the WDA expansion.

The project does not involve the installation of any new emission sources but does change two existing emission sources which will increase emissions. These expanded sources are the fugitive LFG emissions from the landfill and the fugitive particulate emissions from unpaved roads; EU001 and FS001 respectively. Since the permit already contains all appropriate applicable requirements, no actual changes to permit language are necessary.

1.3 Facility Emissions:

Table 1. Non-Title I Emissions Increase Summary

Pollutant	After Change (lb/hr)	Before Change (lb/hr)	Net Change (lb/hr)	Insignificant Modification Thresholds (lb/hr <)	Minor and Moderate Amendment Thresholds (lb/hr < or ≥)	Type of Amendment (Minor or Moderate)
PM ₁₀	35.3	29.6	4.6	0.855	3.42	moderate
NO _x	3.7	1.5	2.3	2.28	9.13	moderate
SO ₂	0.30	0.10	0.20	2.28	9.13	minor
CO	9.5	3.9	5.6	5.70	22.80	insignificant
VOC	5.4	4.2	1.2	2.28	9.13	insignificant
Lead				-	-	

1.5. Facility Emissions:

Table 1. Total Facility Potential to Emit Summary

Facility Potential	PM tpy	PM ₁₀ tpy	SO ₂ tpy	NO _x tpy	CO tpy	VOC tpy	All HAPs Tpy
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Facility Total Emissions							
1. MM Burnsville Energy LLC #03700192-001	14.9	14.9	69.8	131	144	44.7	18.82
2. Waste Management #03700156-001	87.5	24.7	1.4	16.4	41.5	23.7	5.67
Total Facility	102	39.6	71.2	147	186	68.4	24.5

Table 2. Facility Classification

Classification	Major/Affected Source	Synthetic Minor	Minor
PSD			X
Part 70 Permit Program	X		
Part 63 NESHAP			X (Area source)

2. Regulatory and/or Statutory Basis

New Source Review

The facility is an existing minor source under the new source review program. Potential emissions are less than 250 tons per year for all criteria pollutants prior to, and after the expansion. The captured landfill emissions are either sent to an adjacent energy generating facility, MM Burnsville Energy LLC, Permit No. 03700192-001 or flared on site. Though the facilities each hold separate Title V permits, they are considered one source under Federal New Source Review.

Part 70 Permit Program

The source's emissions of Carbon Monoxide (CO) exceed 100 tons per year, and the source is a major source of hazardous air pollutants. Thus, it is a major source under the Part 70 operating permits program. This amendment does not change that status.

New Source Performance Standards (NSPS)

40 CFR pt. 60, Subp. WWW Standards of Performance for Municipal Solid Waste Landfills applies currently, and will also apply after the expansion.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The source is subject to 40 CFR pt. 63, Subp. AAAA. Subp. AAAA essentially has the same requirements as 40 CFR pt. 60, Subp. WWW, with a few additional reporting and recordkeeping requirements.

Minnesota State Rules

The entire source is subject to Minn. R. 7011.0150, Controlling Particulate Matter from Becoming Airborne.

Table 3. Regulatory Overview of Units Affected by the Modification/Permit Amendment

EU, GP, or SV	Applicable Regulations	Comments:
GP001 Landfill and collection system	40 CFR pt. 60, subp. WWW 40 CFR pt. 63, subp. AAAA	Standards of Performance for Municipal Solid Waste Landfills National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills
FC	Minn. R. 7011.0150	Preventing Particulate Matter from Becoming Airborne.

3. Technical Information

Calculations of Potential to Emit :

The company used U.S. Environmental Protection Agency's (EPA) Landfill Gas Emissions Model, Version 2.01 to calculate the emissions that would be generated from the landfill except where there was test data from the facility itself. Where there was test data, the site specific value was used. Using EPA's model to estimate emissions is recommended by AP42 2.4, Municipal Solid Waste Landfills.

Seventy-five percent of the emissions from the landfill are assumed to be captured based on Section 2.4, page 2.4-6 which states that, "Reported collection efficiencies typically range from 60 to 85 percent, with an average of 75 percent most commonly assumed."

The captured landfill emissions are either sent to an adjacent energy generating facility, MM Burnsville Energy LLC, Permit No. 03700192-001, for use as fuel, or flared on site. Though the facilities each hold separate Title V permits, they are considered one source under Federal New Source Review, as stated above.

For the two facilities, worst case emissions were calculated assuming that the engines were burning LFG at maximum capacity (1676 cubic feet per minute (cfm) LFG for six engines.), and the remainder of the landfill gas was burned at the flare. The landfill gas produced is a maximum of 3452 cfm assuming a 50 percent methane content, therefore, the maximum LFG sent to the flares would be $3452 * 0.75 \text{ cfm} - 1676 \text{ cfm} = 912 \text{ cfm}$. This translates to 480 mmcf/year used in the calculation spreadsheets (attached).

Flare CO and Nitrogen Oxides (NO_x) emissions were calculated by doubling the manufacturer's guarantee for expected emissions. Particulate Matter smaller than 10 microns (PM₁₀) and Sulfur Dioxide (SO_x) were calculated using factors from AP42 Table 2.4-5. The CO and NO_x emission factors from the manufacturer are based on parts per million of effluent necessitating calculation of the effluent from the flare. The effluent from the flare was calculated using the ratio of 14.28 fuel inlet to outlet flow which was derived from information from the manufacturer.

Control efficiency of the flare was obtained from AP42 Table 2.4-3.

Traffic emissions were calculated using the method given by EPA in AP42 Section 13.2

All calculations are attached.

3.2 Periodic Monitoring

In accordance with the Clean Air Act, it is the responsibility of the owner or operator of a facility to have sufficient knowledge of the facility to certify that the facility is in compliance with all applicable requirements.

In evaluating the monitoring included in the permit, the MPCA considers the following:

- The likelihood of violating the applicable requirements;
- Whether add-on controls are necessary to meet the emission limits;
- The variability of emissions over time;
- The type of monitoring, process, maintenance, or control equipment data already available for the emission unit;
- The technical and economic feasibility of possible periodic monitoring methods; and
- The kind of monitoring found on similar units elsewhere.

Table 4 summarizes the periodic monitoring requirements for those emission units for which the monitoring required by the applicable requirement is nonexistent or inadequate. **Table 4.**

Periodic Monitoring

Emission Unit or Group	Requirement (basis)	Additional Monitoring	Discussion
Landfill, Flare	40 CFR pt. 60 subp. WWW	No additional, regulation promulgated after 1990	Standards of Performance for Municipal Solid Waste Landfills.
Flare,	40 CFR pt. 63 subp. AAAA	No additional, regulation promulgated after 1990.	National Emission Standards for Hazardous Air Pollutants.
Flare	Minn. R.7011.0110		Visible Emission Restrictions, Daily observation.

3.3 Comments Received

EPA 45-day Review Period: 1/5/2006-2/20/2006

No comments received.

4. Conclusion

Based on the information provided by Waste Management, Inc., the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 03700156-002, and this TSD, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team: Jenny Reinertsen (permit writer/engineer)
 Suzanne Venum (enforcement)
 Curt Stock (stack testing)
 Fred Jenness (peer reviewer)

Attachments: Emission Calculations