



# Federal Register

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Friday,  
September 8, 2006

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**Part III**

## **Environmental Protection Agency**

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**40 CFR Parts 60, 62, and 63  
Standards of Performance, Emission  
Guidelines, and Federal Plan for  
Municipal Solid Waste Landfills and  
National Emission Standards for  
Hazardous Air Pollutants; Municipal Solid  
Waste Landfills; Proposed Rule**

## ENVIRONMENTAL PROTECTION AGENCY

### 40 CFR Parts 60, 62, and 63

[EPA-HQ-OAR-2003-0215; FRL-8217-6]

RIN 2060-AJ41 and A2060-AH13

### Standards of Performance, Emission Guidelines, and Federal Plan for Municipal Solid Waste Landfills and National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule; amendments.

**SUMMARY:** EPA is proposing amendments to the "Standards of Performance for Municipal Solid Waste Landfills" (Landfills NSPS), to the "Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills" (landfills emission guidelines), to the "National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills" (Landfills NESHAP), and to the "Federal Plan Requirements for Municipal Solid Waste Landfills that Commenced Construction Prior to May 30, 1991 and Have Not Been Modified or Reconstructed since May 30, 1991" (landfills Federal plan). The proposed amendments to the Landfills NSPS are supplemental amendments to those proposed on May 23, 2002. Based on public comments on the proposed amendments and additional analysis, we are proposing supplemental amendments to the Landfills NSPS to clarify what constitutes treated landfill gas. We are also proposing amendments to the Landfills NSPS, emission guidelines, Federal plan, and Landfills NESHAP to clarify who is responsible for compliance activities where multiple parties are involved in the ownership or operation of a landfill and the associated landfill gas collection, control, and/or treatment systems. In addition, we are proposing revisions to both the Landfills NSPS and the Landfills NESHAP regarding startup, shutdown, malfunction, and routine maintenance.

The proposed amendments to the Landfills NSPS would also serve to amend the emission guidelines and the Federal plan for existing municipal solid waste landfills because these rules incorporate the provisions of the "Standards of Performance for Municipal Solid Waste Landfills." We are proposing changes to the emission guidelines and Federal plan themselves to reflect the proposed changes to the

Landfills NSPS where these rules did not directly incorporate the provisions of the Landfills NSPS.

**DATES:** Comments must be received on or before November 7, 2006.

**Public Hearing.** If anyone contacts EPA by September 28, 2006 requesting to speak at a public hearing, EPA will hold a public hearing on October 10, 2006. If you are interested in attending the public hearing, contact Karen Rackley at (919) 541-0634 to verify that a hearing will be held.

**ADDRESSES:** Submit your comments, identified by Docket ID No. EPA-HQ-OAR-2003-0215, by one of the following methods:

- *www.regulations.gov.* Follow the on-line instructions for submitting comments.
- *E-mail:* Send your comments via electronic mail to *a-and-r-docket@epa.gov*, Attention Docket ID No. EPA-HQ-OAR-2003-0215.
- *Fax:* Fax your comments to (202) 566-1741, Attention Docket ID No. EPA-HQ-OAR-2003-0215.
- *Mail:* By U.S. Postal Service, send your comments to: EPA Docket Center (EPA/DC), Environmental Protection Agency, Mail Code 6102T, 1200 Pennsylvania Ave., NW., Washington, DC 20460, Attention Docket ID No. EPA-HQ-OAR-2003-0215. Please include a total of two copies. The EPA requests a separate copy also be sent to the contact person identified below (see **FOR FURTHER INFORMATION CONTACT**).
- *Hand Delivery:* In person or by courier, deliver your comments to: EPA Docket Center (EPA/DC), EPA West Building, Room B-108, 1301 Constitution Ave., NW., Washington, DC 20004, Attention Docket ID No. EPA-HQ-OAR-2003-0215. Such deliveries are accepted only during the normal hours of operation (8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays), and special arrangements should be made for deliveries of boxed information.

**Note:** The EPA Docket Center suffered damage due to flooding during the last week of June 2006. The Docket Center is continuing to operate. However, during the cleanup, there will be temporary changes to Docket Center telephone numbers, addresses, and hours of operation for people who wish to make hand deliveries or visit the Public Reading Room to view documents. Consult EPA's **Federal Register** notice at 71 FR 38147 (July 5, 2006), or the EPA Web site at *http://www.epa.gov/epahome/dockets.htm* for current information on docket operations, locations, and telephone numbers. The Docket Center's mailing address for U.S. mail and the procedure for submitting comments to *www.regulations.gov* are not affected by the flooding and will remain the same.

**Instructions:** Direct your comments to Docket ID No. EPA-HQ-OAR-2003-0215. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at *www.regulations.gov*, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through *www.regulations.gov* or e-mail. The *www.regulations.gov* Web site is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through *www.regulations.gov*, your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional information about EPA's public docket, visit the EPA Docket Center homepage at *http://www.epa.gov/epahome/dockets.htm*.

**Public Hearing:** If a public hearing is held, it will be held at the EPA Facility Complex located at 109 T.W. Alexander Drive, Research Triangle Park, NC, or an alternate site nearby.

**Docket:** All documents in the docket are listed in the *www.regulations.gov* index. Although listed in the index, some information is not publicly available, i.e., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically in *www.regulations.gov* or in hard copy at the EPA Docket Center (EPA/DC), EPA West Building, Room B-102, 1301 Constitution Ave., NW., Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744.

and the telephone number for the EPA Docket Center is (202) 566-1742.

**FOR FURTHER INFORMATION CONTACT:** Ms. Karen Rackley, Office of Air Quality Planning and Standards, Sector Policies and Programs Division, Coatings and

Chemicals Group (E143-01), U.S. EPA, Research Triangle Park, NC 27711; telephone number: (919) 541-0634, e-mail address: [rackley.karen@epa.gov](mailto:rackley.karen@epa.gov).

**SUPPLEMENTARY INFORMATION:**  
*Regulated Entities.* Categories and entities potentially regulated by the

proposed amendments include municipal solid waste (MSW) landfills and owners/operators of combustion devices that burn untreated landfill gas, which may include the following entities:

Category	NAICS* code	Examples of potentially regulated entities
Industry: Air and water resource and solid waste management	924110	Solid waste landfills.
Industry: Refuse systems—solid waste landfills .....	562212	Solid waste landfills.
State, local, and tribal government agencies .....	562212	Solid waste landfills; Air and water resource and solid waste management.
Any industry, commercial business, or institution or utility that burns untreated landfill gas in a reciprocating engine, turbine, boiler, or other combustion device (e.g., for energy recovery).	924110	Electric power generation, transmission, or distribution.
	4911	
	49	Electric, gas, and sanitary services.
	37	Manufacturers of motor vehicle parts and accessories.
	82	Educational services.
	29	Petroleum refineries and manufacturers of coal products.
	28	Chemical manufacturers.

\*North American Industry Classification System.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by the proposed amendments. To determine whether your facility would be regulated by the proposed amendments, you should carefully examine the applicability criteria in 40 CFR 60.32c of subpart Cc, 40 CFR 60.750 of subpart WWW, 40 CFR 62.14352 of subpart GGG, or 40 CFR 63.1935 and 40 CFR 63.1940 of subpart AAAA. If you have any questions regarding the applicability of the proposed amendments to a particular entity, contact the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

*Docket.* The docket number for the proposed amendments to the Landfills NSPS (40 CFR part 60, subpart WWW), emission guidelines (40 CFR part 60, subpart Cc), Federal plan (40 CFR part 62, subpart GGG), and Landfills NESHAP (40 CFR part 63, subpart AAAA) is Docket ID No. EPA-HQ-OAR-2003-0215. Docket ID No. A-88-09 contains supporting information for the landfills NSPS and emission guidelines and Docket ID No. EPA-OAR-2002-0047 and Docket ID No. A-98-28 contain the supporting information for the Landfills NESHAP. Docket ID No. A-98-03 and Docket ID No. A-88-09 contain supporting information for the landfills Federal plan.

WorldWide Web (WWW). In addition to being available in the docket, an electronic copy of the proposed amendments is available on the WWW through the Technology Transfer Network Website (TTN). Following signature, EPA will post a copy of the

proposed amendments on the TTN's policy and guidance page for newly proposed or promulgated rules at <http://www.epa.gov/ttn/oarpg>. The TTN provides information and technology exchange in various areas of air pollution control.

*Outline.* The information presented in this preamble is organized as follows:

- I. Background
  - A. What rules affect MSW landfills?
  - B. What is the purpose of the proposed amendments?
- II. Summary of the Proposed Amendments
  - A. What changes did we propose to the Landfills NSPS on May 23, 2002?
  - B. What supplemental amendments are we proposing to the Landfills NSPS, emission guidelines, and Federal plan?
  - C. What changes are we proposing to the Landfills NSPS and Landfills NESHAP regarding startup, shutdown, and malfunction?
  - D. What other corrections and clarifications are we proposing?
  - E. Are we requesting public comment on any other issues?
- III. Rationale for the Proposed Supplemental Amendments
  - A. Definition of Landfill Owner/Operator and Allowance for Off-site Control or Treatment Option
  - B. Definitions for Treated Landfill Gas and Treatment System and Clarification to the Treatment Option
- IV. Rationale for Proposed Landfills NSPS and Landfills NESHAP Amendments Regarding Startup, Shutdown, and Malfunction
  - A. Proposed Landfills NSPS Startup, Shutdown, and Malfunction Provisions
  - B. Proposed Landfills NESHAP Startup, Shutdown, and Malfunction Provisions
- V. Rationale for Other Proposed Corrections and Clarifications
  - A. Clarification of Temperature Monitoring for Enclosed Combustors

- B. Correction of Cross-Reference in the Landfills NSPS
- C. Clarification of Bioreactor Moisture Content Determination for the Landfills NESHAP
- D. Correction of Date in the Landfills NESHAP
- VI. Statutory and Executive Order Reviews
  - A. Executive Order 12866, Regulatory Planning and Review
  - B. Paperwork Reduction Act
  - C. Regulatory Flexibility Act
  - D. Unfunded Mandates Reform Act
  - E. Executive Order 13132, Federalism
  - F. Executive Order 13175, Consultation and Coordination with Indian Tribal Governments
  - G. Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks
  - H. Executive Order 13211, Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use
  - I. National Technology Transfer and Advancement Act

**I. Background**

*A. What rules affect MSW landfills?*

On March 12, 1996 (61 FR 9905), we promulgated the emission guidelines for existing MSW landfills and the NSPS for new or modified MSW landfills under authority of section 111 of the Clean Air Act (CAA). The goal of the emission guidelines and NSPS is to control landfill gas emissions to the level achievable through the application of the best system of emissions reductions which (taking into account the cost of such reduction and any non-air quality health and environmental impact and energy requirements) we determine has been adequately demonstrated. This is termed the Abest demonstrated technology." On

November 8, 1999 (64 FR 60689), we promulgated the landfills Federal plan requirements for the purpose of implementing the landfills emission guidelines in States without approved State plans.

The control of landfill gas based on the requirements of the Landfills NSPS, emission guidelines, and Federal plan results in emissions reductions of over 30 volatile organic compounds and air toxics such as toluene, benzene, and vinyl chloride. The reduction of these emissions has direct and indirect health benefits as well as environmental benefits. In addition, the control of landfill gas results in reductions of methane gas emissions, which reduces the potential for fires and explosions near landfills. Control of landfill gas reduces odor problems, which reduces the potential for local property devaluation and poorer quality of life for local residents. Some landfills control landfill gas by combusting it in a boiler, engine, or turbine to produce steam or electricity, taking advantage of landfill gas as a renewable energy source.

The landfills emission guidelines, as implemented through an approved State plan or the landfills Federal plan, and the Landfills NSPS require large landfills (at least 2.5 million megagrams (Mg) and 2.5 million cubic meters in size) with estimated nonmethane organic compound (NMOC) emissions of at least 50 megagrams per year (Mg/yr) to collect and control or treat landfill gas. The Landfills NSPS and emission guidelines provide landfill owners or operators with some degree of flexibility to achieve compliance, allowing them to incorporate site-specific factors into the design of the collection and control or treatment systems, as long as the systems meet specific performance standards. On January 16, 2003 (68 FR 2227), we promulgated the Landfills NESHAP under authority of section 112 of the CAA. The Landfills NESHAP apply to both major and area sources and contain the same requirements as the landfills emission guidelines and Landfills NSPS, but add requirements for startup, shutdown, and malfunction (SSM), add operating condition deviations for out-of-bounds monitoring parameters, require timely control of bioreactor landfills, and change the reporting frequency for one type of report.

On May 23, 2002 (67 FR 36476), we proposed amendments to the Landfills NSPS because implementation activity showed a need for clarification of some issues. Consideration of the public comments received and additional implementation activity has shown the need for even further clarification on

implementing the Landfills NSPS, emission guidelines, and Landfills NESHAP.

*B. What is the purpose of the proposed amendments?*

We are proposing supplemental amendments to the May 23, 2002 proposed amendments to the Landfills NSPS. While today's proposed supplemental amendments would, for the most part, specifically amend the Landfills NSPS, they would also serve to amend the landfills emission guidelines for existing MSW landfills because the emission guidelines incorporate many of the provisions of the Landfills NSPS. In addition, today's proposed supplemental amendments include conforming changes to certain provisions of the landfills emission guidelines that do not directly incorporate the provisions of the Landfills NSPS; make conforming changes to the landfills Federal plan for existing MSW landfills; and would affect changes to the Landfills NESHAP for MSW landfills. The supplemental proposed amendments would, in conjunction with the previously proposed amendments, further clarify the definition of landfill owners/operators; clarify compliance responsibilities in situations where multiple entities own/operate a landfill and the gas collection, control, or treatment systems (either at the landfill or off site); and clarify the definition of treated landfill gas. Today's proposed supplemental amendments do not change how you determine whether a landfill is "new" or "existing," and accordingly subject to the Landfills NSPS or emission guidelines. The determination of whether an affected facility is new or existing is still based on the date of construction or modification of the landfill itself and not the date of installation of the gas collection, control, or treatment system.

In allocating certain responsibilities to the landfill owners/operators and others to the gas collection, control, and/or treatment system owners/operators, it is not our intent to establish a precedent for any other NSPS or NESHAP. We are proposing this compliance approach specifically for landfills because of the unique nature of landfill operations and to encourage energy recovery. Landfill gas is commonly collected and combusted to produce electricity, steam, or other useful energy; combustion for energy recovery often occurs miles away from the landfill itself at a separate industrial, commercial, or institutional facility. Combusting landfill gas for energy recovery is a reasonable approach to meeting the control

requirements of the Landfills NSPS and also makes use of a renewable energy resource and reduces combustion of scarce fossil fuels and emissions produced during their combustion. This unique situation raises unique issues on the respective responsibilities of landfill owners/operators and gas collection, control, and/or treatment system owners/operators for complying with the Landfills NSPS.

Although today's proposed supplemental amendments allocate responsibility for complying with certain specified requirements to the owners/operators of the MSW landfill and responsibility for complying with other specified requirements to the owners/operators of gas collection, control and/or treatment systems used to comply with the Landfills NSPS, they do not alter compliance responsibilities where affected sources<sup>1</sup> are under common control.<sup>2</sup> (Today's proposed supplemental amendments also continue to recognize that the owner/operator of the MSW landfill may also be the owner/operator of the gas collection, control, and/or treatment system.) The question of whether affected sources are under common control may be determined as part of permitting activities. In a common control determination, various affected sources are aggregated together, and the owner/operator of the resulting single source is ultimately responsible for ensuring compliance with all applicable requirements (including requirements applicable to each of the affected sources/emissions units that make up the single source). To ensure that the proposed amendments to the Landfills NSPS allocating various compliance responsibilities among the owners/operators of affected sources do not conflict with determining compliance responsibilities when the affected sources are under common control, 40 CFR 60.750(a) of the Landfills NSPS, related sections of the landfills emission guidelines, the landfills Federal plan, and the Landfills NESHAP specify that responsibility for compliance cannot be allocated where landfills and associated

<sup>1</sup> The Landfills NSPS define the affected sources subject to the NSPS and the requirements to which these affected sources are subject. However, a single source is defined by the program in question, e.g., title V, new source review, and in many cases, requires the aggregation of emissions units, including affected sources.

<sup>2</sup> Common control is a key element in defining whether and how activities at a site are to be aggregated in determining whether they constitute a single source. See, for example, *Alabama Power v. Costle*, 636 F.2d 323 (District of Columbia Circuit, 1979), section 112(a)(1) of the CAA, 40 CFR 70.2, and 40 CFR 51.166(b)(5) and (6).

gas collection, control, and/or treatment systems are under common control.

It is important to note that in cases of common control, although the owner/operator of the single source (e.g., the owner/operator of the landfill and/or gas collection, control, and/or treatment system) is ultimately responsible for ensuring compliance at the source, enforcement action could be taken by EPA or a State against the owners/operators of individual affected sources/emissions units in addition to the owner/operator of the single source. This is because enforcement action is not limited by the determination of who is ultimately in control of a single source, but rather can be taken against the owners/operators of each individual affected source/emissions unit comprising that source.

Additionally, regardless of the various regulatory approaches that are discussed in today's package, all landfills that are at least 2.5 Mg and 2.5 million cubic meters in size, and all stationary equipment that is required by the Landfills NSPS, emission guidelines, Federal plan, and Landfills NESHAP to collect, control, and/or treat landfill gas from MSW landfills of this size, continue to be subject to the requirement to apply for and obtain a title V permit. This is because section 502(a) of the CAA requires any source, including an area source, subject to standards or regulations under section 111 or 112 of the CAA to operate in compliance with a title V permit after the effective date of a title V permits program. Thus, regardless of the number of affected sources or owner/operators that are relevant in a particular MSW landfill situation, all affected sources are required to be covered by a title V operating permit. The final regulatory language will provide additional clarification on this point after a regulatory approach is selected.

We are proposing further clarifications to the landfill gas treatment compliance option, including more specific definitions of "treated landfill gas" and "treatment system" in the Landfills NSPS.

We are proposing clarifications that would amend the time allowed for malfunction events in the Landfills NSPS. The amendments would also clarify the SSM plan requirements and reports and the incorporation of maintenance activities in those plans in the Landfills NESHAP.

The proposed supplemental amendments would correct a test method citation in the Landfills NSPS; clarify Landfills NSPS temperature monitoring for enclosed combustors; clarify that bioreactor moisture content

should be determined on a wet weight basis for the Landfills NESHAP; and correct a compliance date in the Landfills NESHAP.

As stated earlier, the proposed supplemental amendments to the Landfills NSPS would also serve to amend the landfills emission guidelines and Federal plan for MSW landfills where these rules specifically incorporate the provisions of the Landfills NSPS. We are also proposing direct changes to the landfills emission guidelines to maintain consistency with the proposed changes to the Landfills NSPS where the emission guidelines did not directly incorporate the provisions of the Landfills NSPS. Changes to the landfills Federal plan implementing the landfills emission guidelines are being proposed to ensure the plan remains consistent with the landfills emission guidelines.

## II. Summary of the Proposed Amendments

### A. What changes did we propose to the Landfills NSPS on May 23, 2002?

On May 23, 2002, EPA proposed amendments to the Landfills NSPS to clarify who is responsible for compliance activities where multiple entities are involved in the ownership/operation of a landfill and the associated landfill gas collection, control, and/or treatment systems; clarify what constitutes treated landfill gas; and correct the omission of an exemption for specific boilers and process heaters from the initial performance test.

To be specific, we proposed to amend 40 CFR 60.751 of subpart WWW by adding a landfill-specific definition for MSW landfill owners/operators. This landfill-specific definition would identify MSW landfill owners/operators as entities that own or operate the landfill or any stationary equipment located on the landfill property that is used in the collection, control, and/or treatment of landfill gas. We also proposed to amend 40 CFR 60.752 of subpart WWW to allow landfill owners/operators to transfer untreated landfill gas off site for control or treatment, provided the transferee certifies to us (and provides a copy to the landfill owner/operator) that it will control or treat the landfill gas in accordance with the Landfills NSPS provisions.

We further proposed to amend 40 CFR 60.751 of subpart WWW by adding a definition for treatment system. The May 23, 2002 proposed definition for treatment system specified that the system must filter, de-water, and compress landfill gas.

We proposed to amend 40 CFR 60.752(b)(2)(iii)(C) of subpart WWW to specify that to achieve compliance with this section, landfill gas must be processed in a system that meets the treatment system definition in the proposed amendment. We also proposed to amend this section to clarify that venting of treated landfill gas to the ambient air is not permitted.

We proposed to amend 40 CFR 60.752(b)(2)(iii)(B) of subpart WWW to exempt owners/operators of boilers and process heaters with design input capacities of 44 megawatts (MW) or greater from the requirement to conduct an initial performance test.

### B. What supplemental amendments are we proposing to the Landfills NSPS, emission guidelines, and Federal plan?

Public comments on the May 23, 2002 proposed amendments raised new questions and caused us to reconsider the approach we had taken on several proposed amendments. Based on further analysis, we are proposing supplemental amendments that we expect to help owners/operators to comply with the Landfills NSPS. As mentioned previously, the proposed supplemental amendments clarify: The definition of landfill owner/operator; compliance responsibilities when multiple entities own/operate a landfill and the associated landfill gas collection, control, and/or treatment systems; and what constitutes treated landfill gas. Additional proposed amendments, including SSM provisions, and other corrections are discussed later in this section of this preamble.

To address compliance responsibilities at landfills where multiple entities own/operate the landfill and the associated landfill gas collection, control, or treatment systems, we are proposing to add a specific definition of "landfill gas collection, control, or treatment system owner/operator" and to revise the May 2002 proposed definition of "landfill owner/operator" by removing references to stationary gas collection, control, or treatment systems. We are also proposing to revise the applicability section to clarify compliance responsibilities. We are proposing that the landfill owners/operators would be responsible for complying with the requirements of the Landfills NSPS that apply to the landfills and any portion of the collection, control, or treatment system that they own or operate. The owners/operators of the landfill gas collection, control, or treatment systems would be responsible for complying with the requirements of the Landfills

NSPS that apply to the portion of the landfill gas collection, control, or treatment system that they own or operate. To maintain consistency between the Landfills NSPS, emission guidelines, Federal plan, and Landfills NESHAP with regard to owner/operator responsibilities, we are also proposing similar revisions to the landfills emission guidelines, Federal plan, and Landfills NESHAP. As discussed later in this preamble, we are requesting comment on this approach, as well as an alternative approach regarding compliance responsibilities.

To clarify what constitutes landfill gas treatment, we propose to refine the May 23, 2002 proposed definitions of "treated landfill gas" and "treatment system" in the Landfills NSPS. For filtration and de-watering, the refined proposed definitions contain specific numerical values that would provide long-term protection of the combustion equipment, which would support good combustion. For particulate matter filtration, a filter system would be required to have an absolute rating no greater than 10 microns. For de-watering, the system would be required to reduce the dew point by at least 20 degrees Fahrenheit.

We are also clarifying the monitoring requirements for treatment systems. To ensure that treatment systems are operating properly to achieve the filtration and de-watering levels specified in the revised proposed treatment system definition, we are proposing more specific monitoring, recordkeeping, and reporting requirements for treatment systems used to comply with the Landfills NSPS. We are proposing that owners/operators of treatment systems monitor pressure drop across the filtration system and temperature or dew point for de-watering systems, depending on the type of de-watering system. However, we are proposing to allow owners/operators to use other monitoring parameters if they demonstrate that such parameters would effectively monitor filtration or de-watering system performance. We are clarifying that owners/operators must develop operating ranges for each monitored operating parameter based on manufacturer's recommendations or engineering analysis and submit those ranges, along with justification, for approval in the design plan required by 40 CFR 60.752(b)(2) of subpart WWW. Then, owners/operators would be required to monitor the required parameters and keep them within the ranges specified in their approved design plan. For recordkeeping and reporting purposes, we are clarifying

that owners/operators would continuously monitor treatment system operating parameters and calculate 24-hour block averages. The 24-hour block averages would be compared with the operating ranges justified in the design plan to determine compliance. The specific recordkeeping and reporting requirements for treatment systems would be similar to those for control device temperature monitoring requirements already detailed in the Landfills NSPS. Owners/operators of treatment systems installed prior to today's proposed supplemental amendments would be required to comply with the revised treatment system requirements as expeditiously as practicable, but no later than 1 year after the date the final amendments are promulgated. We are also proposing clarifications to various sections of the Landfills NESHAP that cross-reference the Landfills NSPS treatment system and monitoring requirements to maintain consistency.

We are not altering the May 23, 2002 proposal to amend 40 CFR 60.752(b)(2)(iii)(B) of subpart WWW to exempt owners/operators of boilers and process heaters with design capacities of 44 MW or greater from the requirement to conduct an initial performance test.

#### *C. What changes are we proposing to the Landfills NSPS and Landfills NESHAP regarding startup, shutdown, and malfunction?*

The current Landfills NSPS limit the duration of SSM events to 5 days for the landfill gas collection system and 1 hour for treatment or control devices. Since promulgation of the Landfills NSPS, we have become aware that some malfunctions cannot be corrected within these time frames. Therefore, we propose to revise 40 CFR 60.755(e) of subpart WWW to remove the 5 day and 1 hour time limitations. The proposed revisions would clarify that the NSPS General Provisions in 40 CFR 60.11(d) of subpart A continue to apply during malfunctions, and that routine maintenance activities must be completed and malfunctions must be corrected as soon as practicable after their occurrence in order to minimize emissions. To prevent free venting of landfill gas to the atmosphere during control device malfunctions or maintenance, we would retain the requirement in 40 CFR 60.753(e) of subpart WWW which states that 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 gas to the

atmosphere shall be closed within 1 hour.

The Landfills NESHAP have no allowance for shutdown of control devices for routine maintenance. Furthermore, after the Landfills NESHAP were promulgated, there were revisions to the SSM requirements in the NESHAP General Provisions in 40 CFR part 63, subpart A. The revised General Provisions contain some changes that are not relevant or can be difficult to interpret for landfills. We are, therefore, proposing revisions to the Landfills NESHAP that require routine maintenance of landfill gas collection, control, and treatment systems to be included in the SSM plan. We are also clarifying SSM reporting requirements for landfills and the applicability of SSM sections of the General Provisions to the Landfills NESHAP.

#### *D. What other corrections and clarifications are we proposing?*

We propose to amend 40 CFR 60.758(b)(2)(i) and 40 CFR 60.758(c)(1)(i) of subpart WWW by removing the term "combustion" from the requirement to monitor temperature of enclosed combustors. Temperature monitoring is required for enclosed combustors, including enclosed flares, turbines, reciprocating engines, and boilers less than 44 MW. For some enclosed combustors, it is not possible to monitor temperature inside the combustion chamber to determine combustion temperature. The proposed amendment clarifies that the "combustion" temperature does not have to be monitored. Temperature could be monitored at another location, as long as the monitored temperature relates to proper operation of the enclosed combustor.

We propose to correct a test method cross-reference in 40 CFR 60.755(c)(3) of subpart WWW necessitated by the reorganization of Method 21 in appendix A to 40 CFR part 60.

In the Landfills NESHAP, we propose to correct 40 CFR 63.1990 of subpart AAAA to clarify that the 40 percent moisture content in the definition of "bioreactor" is determined on a wet weight basis.

The proposed supplemental amendments would also correct a Landfills NESHAP compliance date for existing major sources to read January 16, 2004 instead of January 13, 2004 in 40 CFR 63.1945(d) of subpart AAAA.

We propose to amend the definition of "household waste" and add a definition of "segregated yard waste" in 40 CFR 60.751 of subpart WWW to clarify our intent regarding the applicability of the Landfills NSPS,

emission guidelines, Federal plan, and Landfills NESHAP to landfills that do not accept household waste, but accept segregated yard waste. We intended the rules to apply to municipal solid waste landfills that accept general household waste (including garbage, trash, sanitary waste), as indicated in the definitions sections of these rules. Our regulatory analyses for the Landfills NSPS, emission guidelines, and Landfills NESHAP were based on landfills containing mixed household waste streams. A question has recently arisen on whether a landfill that accepts only construction and demolition waste and segregated yard waste would be subject to the municipal solid waste Landfills NSPS. We did not intend these rules to apply to landfills that accept only segregated yard waste or that accept a combination of segregated yard waste and non-household waste (such as construction and demolition waste or industrial waste). The proposed definition changes in the Landfills NSPS would also affect the emission guideline, Federal plan, and Landfills NESHAP because they reference the definitions in the Landfills NSPS.

*E. Are we requesting public comment on any other issues?*

We are requesting public comment on alternative approaches for addressing three issues the landfill industry and regulatory agencies face in implementing the Landfills NSPS, emission guideline, Federal plan, and Landfills NESHAP.

The first issue deals with closed areas of landfills and when they are allowed to remove controls. The current Landfills NSPS define an MSW landfill as: “\* \* \* an entire disposal facility in a contiguous geographical space where household waste is placed in or on land \* \* \*.” We have clearly stated in previous documents that the entire contiguous area, including both closed landfill sections and new landfill sections, is considered a single landfill, even if the landfill is bisected by a road, right of way, golf course, etc. Our intent has always been to consider the entire contiguous area in determining whether a landfill meets the design capacity and emission rate criteria for applying controls. Similarly, to remove controls, the entire area would need to meet the control removal criteria in the Landfills NSPS (e.g., the entire landfill must emit less than 50 Mg NMOC per year, must be closed, and the control system must have been in operation for at least 15 years). Also, 40 CFR 60.759(a)(3)(ii) allows landfill owners/operators to stop collecting gas from “nonproductive” areas of the landfill if they demonstrate

that the excluded areas emit less than 1 percent of total NMOC emissions from the landfill.

It has come to our attention that in many cases, a contiguous area will contain unconnected landfill sections that were developed sequentially over time. An initial landfill is constructed, filled, closed, and capped. Then a new one with a separate liner opens on contiguous property. Under the Landfills NSPS, these are part of the same landfill and controls cannot be removed from the closed and capped area until it emits less than 1 percent of the total NMOC, or until the entire contiguous landfill is closed and meets the control system removal criteria. In some cases, gas production from the separate section that closed many years ago has declined, and the gas composition has changed to the point where it is difficult to continuously collect and combust the gas. However, the closed area may not meet the 1 percent NMOC criteria that would allow removal of the control system from that section of the landfill. We request comments on any approaches for dealing with such a situation, and the specific criteria that could be applied to determine which areas warrant control and which may remove control.

The second issue deals with approval of collection and control system design plans. The Landfills NSPS and emission guidelines require landfill owners/operators to submit a gas collection and control system design plan within 1 year of when their calculated uncontrolled NMOC emissions reach 50 Mg/yr. The plan may include requests for alternative designs, alternative operational standards, and alternative monitoring and recordkeeping. The plan is submitted to the regulatory authority that implements the Landfills NSPS or emission guidelines (usually a State agency) for approval. The Landfills NSPS and emission guidelines require that landfill gas collection and control systems must be installed and begin operation within 30 months of the report that calculated NMOC emissions have reached 50 Mg/yr, which is 18 months after the design plan is submitted. In the 1999 document “Municipal Solid Waste Landfills, Volume 1: Summary of Requirements for New Source Performance Standards and Emission Guidelines for Municipal Solid Waste Landfills” (EPA-453R/96-004), we stated that EPA expected that implementing agency review and approval of the design plan would take approximately 6 months, leaving approximately 12 months for the landfill to install the gas collection and control system. It has come to our

attention that some design plans have been submitted but have not been approved or disapproved for a year or even 2 years. As a result, some landfills may be faced with the prospect of installing a gas collection and control system that they are not sure will be approved or may be implementing monitoring approaches that might later be disapproved.

While there must always be an opportunity for the implementing agency to review and approve or disapprove each design plan, one approach would be that if the implementing agency chooses not to review or act on a design plan within a specified amount of time, then the design plan would have de facto approval. This would be one way to allow the landfill to move ahead to meet the gas collection and control provisions within the time allowed by the Landfills NSPS and emission guidelines. Note that all design plans must be certified by a registered Professional Engineer (P.E.). Also, after the collection and control system is installed, quarterly monitoring of the landfill surface methane concentration is required to verify that the collection system is working properly, and testing and monitoring of control devices is also required. Thus, even if a design plan was not reviewed and approved, the system will be professionally designed and there will still be proof that the collection and control system is achieving the level of control required by the Landfills NSPS and emission guidelines. We request comment on this approach or other alternative approaches to address the issues surrounding timeliness of design plan approvals. We also request comment on what period of time would be appropriate for review and approval of initial design plans, and whether the time period should be different for review and approval of amendments or updates to design plans.

The third issue deals with surface monitoring locations. The intent of the rule is to maintain a tight cover that minimizes any emissions of landfill gas through the surface. The Landfills NSPS and emission guidelines require quarterly surface monitoring to demonstrate that the cover and gas collection system are working properly. The operational requirements in 40 CFR 60.753(d) of the Landfills NSPS specify that the landfill must “\* \* \* operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfills. To determine if this level is exceeded, the owner or operator 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 issue has arisen as to whether the quarterly monitoring path should include monitoring of every cover penetration. Cover penetrations can be observed visually and are clearly a place where gas would be escaping from the cover, so monitoring of them would be required by the regulatory language. The regulatory language gives distressed vegetation and cracks as an example of a visual indication that gas may be escaping, but this example does not limit the places that should be monitored by landfill staff or by enforcement agency inspectors. Thus, under the current language, the landfill should monitor any openings that are within an area of the landfill where waste has been placed and a gas collection system is required. However, monitoring of every cover penetration every quarter could substantially increase monitoring time relative to monitoring only along a path at 30 meter intervals and may not be necessary every quarter. We request comment on this rule interpretation and alternatives for monitoring cover penetrations that do not show distressed vegetation, cracks, or similar indications of high landfill gas levels.

### III. Rationale for the Proposed Supplemental Amendments

#### A. Definition of Landfill Owner/Operator and Allowance for Off-Site Control or Treatment Option

Amendments were proposed in 2002 to clarify which entities are considered landfill owners/operators and are subject to the Landfills NSPS, and to clarify compliance responsibilities when landfill gas is sent off site for treatment or control. The May 2002 proposed amendments and today's proposed supplemental amendments recognize the unique natures of the landfills source category and landfill gas. Because landfill gas contains methane and can be used as a renewable resource to produce useful energy, it is common for landfill gas to be sold to entities, other than the landfill, that combust the gas for energy recovery. These entities often own and/or operate portions of the gas collection system and the control or treatment systems required by the Landfills NSPS, emission guidelines, Federal plan, and Landfills NESHAP. Control or treatment systems may be located on or adjacent to the landfill, or they may be located

miles away at a business, institution, or industrial plant that is using landfill gas to fuel a boiler or other combustion device. This situation is different from most source categories where the same entity that generates emissions typically controls the emissions within their facility. We recognize and encourage beneficial use of landfill gas, but we also want to clarify that entities collecting, controlling, or treating the gas are responsible for complying with the Landfills NSPS, emission guidelines, Federal plan, and Landfills NESHAP.

Based on a review of the comments that we received on our May 23, 2002 proposed amendments to clarify the owner/operator definition and responsibilities, we have determined that a new approach and further revisions are needed to effectively address compliance responsibilities in situations where multiple entities own/operate the landfill and associated gas collection, control, and/or treatment systems. In May 2002, we proposed to define "landfill owner/operator" as "\* \* \* any entity that owns or operates a MSW landfill or any stationary equipment located on the same property as the MSW landfill facility that is used to collect, control, or treat landfill gas." We also proposed an allowance for off-site control or treatment by another entity if that entity accepted compliance responsibility through a certification process. The certification process would have allowed transfer of control or treatment responsibility in specified circumstances without holding the landfill owners/operators responsible for the actions of the off-site entity.

However, many commenters stated that the revised definition of "landfill owner/operator" was too broad. Some argued that the inclusion of "\* \* \* any stationary equipment located on the same property as a MSW facility that is used to collect, control, or treat landfill gas \* \* \*" would result in "confusion" as to who is responsible for compliance at a landfill where one or more entities operate on the landfill site or in conjunction with the landfill owner/operator. The commenters explained that the proposed definition was so broad that it potentially included entities that act in a supportive role on a landfill site. Some commenters also objected to the "joint and several liability" they believe is inherent in this definition. Some commenters cited an example where a developer who may own only a portion of the landfill gas collection system and has no rights to gas from other sections of the landfill could be considered responsible for all NSPS compliance issues at the landfill under the proposed definition. Another

example cited was a gas collection system operator who has a contract with a landfill to perform specific activities, such as monitoring and adjusting the gas collection system to maintain compliance with the temperature, nitrogen, and oxygen requirements of the Landfills NSPS could now be considered a landfill owner/operator and held liable for compliance with NSPS requirements beyond their contract authority and control. Similarly, a company that owned/operated only the gas control device could be held responsible for landfill and collection system operation activities over which they have no control.

Several of the commenters suggested that compliance responsibility at a landfill that operates with multiple on-site entities be established, on a voluntary basis, through a certification process similar to the off-site certification process proposed in the May 2002 Landfills NSPS amendments. Ownership and operation of on-site landfill gas collection, control, or treatment systems by another entity is a common practice, and the commenters wanted the owner/operator of the landfill and the on-site entity to have the flexibility to determine any division of compliance responsibility. The commenters suggested that the landfill owner/operator and the additional entity provide EPA with a written certification and an outline of compliance responsibilities for the various compliance assurance activities. Other commenters noted that limiting the compliance certification option to off-site entities would unnecessarily inhibit the flexibility EPA seeks to create and would impose an artificial distinction between on-site and off-site recipients of untreated landfill gas.

Based on further consideration, we are proposing supplemental amendments that would replace the May 23, 2002 proposed definition of "landfill owner/operator" and the proposed off-site certification approach. We recognize that many landfills accomplish control of their untreated landfill gas by providing the gas to a business, industry, or institutional facility that combusts the untreated gas in a reciprocating engine or gas turbine to produce electricity or in a boiler, process heater, or furnace to produce steam or heat for a useful purpose. This may occur at the landfill or at another location. The beneficial use of landfill gas, a renewable energy source, offsets the use of fossil fuels that can generate greater emissions. To facilitate the beneficial use of landfill gas, we propose to clarify compliance



responsibilities in cases where multiple entities are involved in a way that will ensure Landfills NSPS compliance and enforceability, but will not discourage beneficial use of the gas.

We are now proposing that compliance responsibility at landfills that operate with multiple entities be divided based on which entity owns/operates each specific collection, control, or treatment system, or a portion thereof. To retain consistency between the Landfills NSPS, emission guidelines, Federal plan, and Landfills NESHAP, the same approach is proposed for all four rules. The proposed supplemental amendments state that the landfill owners/operators are responsible for complying with the requirements of the NSPS for the landfill and any portion of the landfill gas collection, control, or treatment system that they own/operate. The owners/operators of the gas collection, control, and/or treatment system(s) would be responsible for complying with the requirements for the portion of the landfill gas collection, control, or treatment system that they own/operate.

We are proposing to accomplish this division of responsibility through the addition of a definition of "landfill gas collection, control, or treatment system owner/operator," and by revising the May 2002 proposed definition of "landfill owner/operator" to remove any reference to landfill gas collection, control, or treatment systems. We are placing responsibility for compliance with the Landfills NSPS with the owner/operator of the various equipment used to achieve compliance by making landfill gas collection, control, or treatment systems (as well as the landfill itself) affected sources under the Landfills NSPS and assigning responsibility for compliance with requirements applicable to such systems to the owners/operators of the landfill gas collection, control, and/or treatment system located on or off the landfill property. In the proposed supplemental amendments, we are revising the applicability requirements of the Landfills NSPS to indicate that responsibility for compliance with the provisions of the Landfills NSPS is based on which portions of the landfill gas collection, control, and/or treatment system each entity owns or operates. The owner/operator of the landfill itself is responsible for determining when control is required, ensuring that the equipment necessary to comply with the Landfills NSPS is properly installed, and complying with other regulatory requirements that apply to the landfill itself and to any portions of the gas collection, control, and/or treatment

system that the landfill itself owns/operates. Furthermore, we are proposing a default compliance provision in the applicability section of the Landfills NSPS that would automatically shift all future responsibilities, including compliance responsibilities, to the landfill owner/operator if another entity that owns/operates the gas collection, control, or treatment system ceases to accept the landfill gas for any reason (e.g., bankruptcy, abandonment of operation).

We believe that this is a reasonable approach to addressing compliance issues at landfills where multiple entities are involved in the emission control infrastructure (regardless of whether treatment or control of the landfill gas is accomplished at the landfill or at another location). This approach enables direct enforcement of the Landfills NSPS on the responsible entity in all cases and is consistent with the original intent of the Landfills NSPS. In many cases, landfill gas control system owners/operators (for example) are different entities from the landfill owners/operators, and the landfill owners/operators have no direct control over the operation of the control system. Because they are distinct entities, it may be impractical and may not be good policy to require the landfill owners/operators to retain responsibility for all aspects of the Landfills NSPS compliance. Landfill owners/operators may not have unrestricted access to the location where the treatment or control of the landfill gas is occurring (e.g., an industrial plant using the gas in a boiler several miles away from the landfill) and often do not have direct control of the daily operation of the treatment or control system. Furthermore, clarification of the division of responsibilities is a practical means to encourage the use of landfill gas for energy recovery and is consistent with EPA policy to foster the use of landfill gas as a renewable energy resource, thereby reducing the use of scarce fossil fuels and associated emissions.

We are also proposing that all entities keep a list documenting which aspects of the Landfills NSPS requirements (by paragraph and section number) each entity will comply with. The list would have to include all requirements of the Landfills NSPS, and would be required as expeditiously as practicable, but no later than 1 year after the final rule amendments are promulgated. The list would help assure that all required compliance activities are considered and will be performed by the responsible entity. The Landfills NSPS would require that the list be kept up-

to-date and that all owners/operators maintain a copy of the list onsite and comply with the responsibilities in the list that are assigned to them. The compliance responsibilities of each entity will be incorporated in title V permits if the entities are subject to title V.

Because the landfills emission guidelines and Federal plan cross-reference the Landfills NSPS, the changes to the Landfills NSPS would automatically affect the landfills emission guidelines and Federal plan. However, to be consistent and clear, we are proposing similar language on the responsibilities of the landfill owners/operators and the owners/operators of the gas collection, control, or treatment system to 40 CFR 60.32c of subpart Cc and to 40 CFR 62.14352 of subpart GGG. Because the landfills emission guidelines are implemented through CAA section 111(d) State plans, the States would be required to adopt revisions to their landfills State plans and submit them to EPA for approval within 9 months after the final amendments to the emission guidelines are promulgated. The 9-month time frame is consistent with 40 CFR part 60 subpart B, which establishes procedures for State plans to implement section 111(d) emission guidelines. Similarly, EPA is proposing to amend the landfills Federal plan that implements the landfills emission guidelines in areas where there is no approved State plan.

In addition, we are proposing similar amendments to the Landfills NESHAP. The proposed amendments include revising the sections of 40 CFR part 63, subpart AAAA, that define affected sources and describe who is subject to the Landfills NESHAP, to include owners/operators of gas collection, control, and/or treatment systems. The proposed revisions to the Landfills NESHAP contain similar language on responsibilities and the requirement for all entities to keep a list documenting which aspects of Landfills NESHAP compliance each entity will comply with.

Given the proposed revisions to the definitions and the rule applicability sections describing responsibilities, we believe that compliance responsibilities would be clearly delineated among the entities involved, and EPA would retain clear enforcement ability for all entities subject to compliance with the Landfills NSPS, emission guidelines, Federal plan, and Landfills NESHAP. The entities that own/operate the collection, control, and/or treatment equipment needed to comply with the Landfills NSPS, emission guidelines, Federal plan, and Landfills NESHAP, and are

performing the activities needed to comply with them, would be held directly responsible for compliance.

The proposed approach previously discussed contains a provision that immediately shifts all future compliance responsibilities to the landfill owners/operators if another entity that owns/operates the gas collection, control, or treatment system ceases to accept the landfill gas (e.g., due to bankruptcy, abandonment of operation). We are considering an alternative approach (called alternative approach #1) that would retain this provision and would further require the landfill owners/operators to assume responsibility for future compliance in some situations where the owners/operators of a gas collection, control, or treatment system fail to comply with the Landfills NSPS requirements for which they are responsible. The intent of this approach would be to address situations where the owners/operators of the gas collection, control, or treatment system do not achieve the required levels of collection, control, or treatment, or repeatedly violate other requirements of the Landfills NSPS, and do not correct these violations and come into compliance in a timely manner. In such circumstances, responsibility for future compliance would automatically shift to the landfill owners/operators. As a result, the landfill owners/operators would need to find a way to immediately start meeting all Landfill NSPS requirements. Such a provision would ensure that the landfill owners/operators could not knowingly send landfill gas to entities that flagrantly violate the Landfill NSPS, thereby inflicting potential harm on the environment, and still avoid responsibility for fully complying with the Landfills NSPS. It is not our intent for this approach to shift responsibility to the landfill owners/operators for isolated or minor violations that the collection, control, or treatment system owners/operators timely corrects. We solicit comments on this alternative approach and suggestions for how to make clear within what time frame and under what circumstances responsibility shifts to the landfill owners/operators.

We are also considering a different alternative approach to compliance responsibility (called alternative approach #2) that would add the same definitions of "landfill owner/operator" and "landfill gas collection, control, or treatment system owner/operator" as the proposed approach. Both entities would be subject to the Landfills NSPS. This approach would differ in that the alternative approach would make the

landfill owner/operator responsible for compliance with all aspects of the Landfills NSPS. Like the proposed approach, the alternative approach would make the landfill gas collection, control, and/or treatment system owners/operators responsible for complying with only the Landfills NSPS requirements applicable to the portion of the landfill gas collection, control, and/or treatment system they own/operate. Thus, a violation of gas collection, control or treatment requirements could be enforced against both the landfill owners/operators and the collection, control, or treatment system owners/operators. This approach would also include the requirement to document which aspects of the Landfills NSPS requirements (by paragraph and section number) each entity will accept compliance responsibility.

The regulatory language for the alternative approach would be very similar to the regulatory language shown for the proposed approach, except that 40 CFR 60.750(a)(1) of subpart WWW, 40 CFR 60.32c of subpart Cc, 40 CFR 62.14352 of subpart GGG, and 40 CFR 63.1935(d)(1) of subpart AAAA might read as follows: "Municipal solid waste landfill owners/operators are responsible for complying with all requirements of this subpart."

Alternative approach #2 would be consistent with the division of responsibilities in many single source (i.e., common control) determinations for landfills and associated gas collection, control, and/or treatment systems. It would also encourage landfill owners/operators who contract with other companies to collect, control, or treat the landfill gas to be sure to do business only with reliable companies that will meet the Landfills NSPS requirements.

There are some concerns that this alternative approach could inhibit the beneficial use of landfill gas. Landfill owners/operators may choose to flare the gas themselves rather than enter into agreements that allow other entities to combust the untreated landfill gas for energy recovery purposes if the landfill owners/operators are held legally and financially liable for the actions of a separate entity over which they have no control. Landfill owners/operators may be particularly reluctant to enter into such agreements in cases where the landfill gas is used at a separate industrial or commercial facility located several miles away from the landfill and the landfill owners/operators do not have access to the facility or control over its operation.

We specifically request comment on the alternative approach. Based on the

public comments, the final Landfills NSPS may incorporate the proposed approach, one of the two alternative approaches, or another similar approach that is a logical outgrowth of the public comments. If, after consideration of comments, we select an alternative approach for the Landfills NSPS, we would use a consistent approach for the emission guidelines, Federal plan, and Landfills NESHAP.

#### *B. Definitions for Treated Landfill Gas and Treatment System and Clarification to the Treatment Option*

In the May 23, 2002 proposed amendments, we proposed a definition for "treatment system" that would be used to determine if a facility qualifies for the treatment option provided in 40 CFR 60.752(b)(2)(iii)(C) of subpart WWW. The purpose of this definition was to provide consistency as to what would qualify as a treatment system and to reduce the burden on State and local agencies and EPA Regions currently performing case-by-case determinations related to the adequacy of treatment options being employed across the Nation. The proposed definition of treatment system was "a system that filters, de-waters, and compresses landfill gas."

Following proposal of the treatment system definition, several commenters requested further clarification as to what levels of filtration and de-watering would be considered acceptable to meet the definition of treatment. Some commenters noted that given the different specifications for landfill gas-derived fuels and the different levels of treatment currently practiced, any lack of clarity may result in inconsistent case-by-case determinations by local permitting authorities. Some commenters requested that EPA allow owners/operators to treat their gas such that it would meet the end-use combustion equipment "manufacturer's requirements" for fuel quality as the benchmark for what qualifies as a treatment system. Commenters requested that we link the phrase "refer to manufacturer requirements" to the combustion device's specific level of gas treatment to ensure complete combustion. Other commenters requested that EPA develop specific particulate, moisture, and compression targets that demonstrate "treated landfill gas."

We agree with commenters that the definition of treatment system needs additional detail. We contacted manufacturers of combustion devices that are used to recover energy from landfill gas, and we obtained their written specifications and

recommendations for fuel quality. As suggested by the commenters, we reviewed the available manufacturers' specifications for acceptable moisture and particulate levels. Because different manufacturers have different specifications, our proposed definition of "treatment system" does not refer directly to the manufacturers' requirements. Instead, we developed specific filtration and de-watering targets based on those requirements.

The selected levels of de-watering and filtration are consistent with most manufacturers' specifications for landfill gas burned in energy recovery devices such as reciprocating engines, gas turbines, and boilers; they are protective of the combustion equipment and promote good combustion. The supplemental proposed definition of treatment system is:

\* \* \* a system that has an absolute filtration rating of 10 microns or less, lowers the water dew point of the landfill gas by at least 20 degrees Fahrenheit with a de-watering process, and compresses the landfill gas.

The term "absolute filtration rating" used in the above definition means the diameter of the largest hard spherical particle that would pass through the filter. The supplemental proposed definition would specify treatment levels that will minimize degradation of the combustion device and promote proper destruction of NMOC.

To ensure continuous compliance with the treatment option, we are clarifying monitoring, recordkeeping, and reporting requirements for treatment systems that are used to comply with the Landfills NSPS. Owners/operators of treatment systems used to comply with the Landfills NSPS would be required to establish, monitor, and record operating parameters that indicate proper operation of the various treatment system components, consistent with the proposed revised definition of treatment system. These requirements would ensure that the treatment system is continuously operating in the manner in which it was designed to operate to achieve the specific filtration, de-watering, and compression targets that define a treatment system for the purposes of the Landfills NSPS. Owners/operators who installed treatment systems prior to today's proposed amendments would be required to comply with the amended treatment system requirements as expeditiously as practicable, but no later than 1 year after the date the final amendments are promulgated. This provides time needed to upgrade the treatment system (if necessary), submit

design information, install monitoring equipment, and establish operating parameter levels.

The proposed amendments would require that owners/operators of treatment systems monitor and maintain specified operating parameters or apply to monitor alternative parameters. For filtration systems, the pressure drop (24-hour average) across the filter would be continuously monitored and maintained above the minimum pressure drop established by engineering analysis or manufacturer's specifications. Alternatively, the owners/operators could get approval to monitor another parameter that indicates proper performance of the filtration system. Pressure drop was selected as a monitoring parameter because it is a good indicator of proper filter operation. A noticeable reduction in pressure drop across the filter indicates a breach of the filter material.

Continuous monitoring of temperature reduction for a chiller-based de-watering system, dew point from a de-watering system that is not chiller-based, or another approved parameter that is indicative of proper performance of the de-watering system, would also be required. The monitored parameter (24-hour average) would have to be kept within the operating range established by engineering analysis or manufacturer's specifications. The owners/operators would submit the treatment system design and justification for the operating parameter ranges for approval in the design plan required by 40 CFR 60.752(b)(2) of subpart WWW.

For chiller-based de-watering systems, temperature was selected as a monitoring parameter because it indicates that the chiller is operating properly and the desired reduction in dew point is occurring. Untreated landfill gas is saturated with moisture as it comes out of the landfill (i.e., the relative humidity is 100 percent, and the dew point temperature equals the landfill gas temperature). Therefore, if the gas is chilled by at least 20 degrees, the dew point has been correspondingly reduced, and moisture removal has occurred through condensation. Continuous measurement of the gas temperature at the treatment system inlet and the chiller outlet would be required unless the owners/operators demonstrate that monitoring the temperature at a single location (e.g., the chiller outlet) is sufficient to indicate that the temperature of the gas, and thus, the dew point, has been reduced by at least 20 degrees Fahrenheit. The owners/operators would be required to submit, as part of the design plan,

treatment system design specifications that demonstrate the treatment system meets the definition (including the 20 degree dew point reduction) and a justification that their proposed temperature monitoring location(s) are adequate to demonstrate that the gas temperature, and thus, the dew point, has been reduced by at least 20 degrees. For example, owners/operators might submit information demonstrating that the lowest landfill gas temperature at their treatment system inlet during the coldest month of the year is 85 degrees Fahrenheit. They might elect to operate their chiller to reduce the gas temperature to, for example, 60 degrees Fahrenheit, and apply to continuously monitor only chiller outlet temperature and maintain it at or below 60 degrees. Because the design and operation of this system results in a minimum temperature reduction of at least 25 degrees below the site-specific coldest treatment system inlet temperature, the regulatory authority might approve the continuous monitoring of chiller outlet temperature in this case, rather than requiring continuous monitoring at both the treatment system inlet and the chiller outlet. Temperature monitors are readily available, commonly used, reliable, and less expensive than alternative monitoring systems.

If a de-watering system that is not based on chilling, for example, a desiccant system, is used, then temperature would not be an appropriate parameter to monitor. In such cases, monitoring of the dew point would indicate whether the system is operating properly to reduce the dew point by 20 degrees. As with temperature, the dew point would be monitored at the inlet and outlet of the treatment system, unless the owner/operator demonstrates that monitoring at a single location (e.g., the treatment system outlet) is sufficient to indicate that the dew point has been reduced by at least 20 degrees. Dew point monitors are available and suitable for landfill gas applications.

We are proposing continuous monitoring with a 24-hour averaging period for treatment system monitoring parameters for several reasons. Monitoring is needed to assure continuous compliance. Continuous monitoring systems are available for the selected treatment system operating parameters. Data collection would be required at 15-minute intervals, consistent with current Landfills NSPS requirements for flare pilot flame monitoring and enclosed combustor temperature monitoring that apply to landfills that opt to comply with the control options rather than the

treatment option. A 24-hour block average for determining compliance with the treatment system operating parameter limits is sufficient to indicate any significant change in treatment system operation and would be less burdensome than more frequent averaging. Owners/operators of treatment systems would be required to report periods when the 24-hour block average for a monitored parameter (e.g., pressure drop, temperature, dew point) is outside the operating range established in the approved design plan.

#### **IV. Rationale for Proposed Landfills NSPS and Landfills NESHAP Amendments Regarding Startup, Shutdown, and Malfunction**

##### *A. Proposed Landfills NSPS Startup, Shutdown, and Malfunction Provisions*

The Landfills NSPS specify in 40 CFR 60.755(e) of subpart WWW, that the emission standards do not apply during SSM events, but they limit the duration of SSM events to 5 days for the landfill gas collection system and 1 hour for treatment or control devices. At the time we developed this provision, we believed that malfunctions could be corrected within these time frames. Since promulgation of the Landfills NSPS, we have learned that many malfunctions cannot be corrected within these time limits. This causes landfills that do not have back-up control devices to have unavoidable violations of the Landfills NSPS. Most landfills use flares to control landfill gas emissions and do not have back-up control devices. In developing NSPS, EPA is required by CAA section 111 to consider cost and other impacts. In developing the Landfills NSPS, we did not consider any costs for requiring back-up controls for flares in our determination that the selected requirements were reasonable. We did not intend for the Landfills NSPS to require back-up control devices for flares. For these reasons, we conclude that the 1-hour and 5-day time limitations are not feasible and should be changed. Furthermore, most NSPS do not set specific limits on the duration of SSM events. Most NSPS rely on the NSPS General Provisions (40 CFR part 60, subpart A), which require owners/operators, to the extent practicable, to operate in a manner that minimizes emissions during SSM events.

The Landfills NSPS also has no allowance for shutdown of collection, control, or treatment systems for routine preventive maintenance. Periodic maintenance is needed to provide continued good operation of the gas collection and control systems and to avoid malfunctions, but shutdowns for

maintenance could result in a violation. This issue arises because of the unique nature of landfills. Most NSPS regulate manufacturing processes that can be stopped when a control device needs to be maintained or repaired. For example, chemical plants typically shut down their processes on a regular schedule (e.g., for 1 week each year) and maintain their control devices at the same time, when no emissions are being generated from the production process. Landfills are a biological process, and once waste is deposited in the landfill, gas is continuously generated and cannot be stopped. Routine control device maintenance procedures often cannot be completed in 1 hour, and some types of maintenance take days.

Therefore, we propose to amend 40 CFR 60.755(e) of subpart WWW to remove the 1-hour and 5-day time limits on SSM events, and to allow routine maintenance of collection, control, and treatment systems. The proposed amendments also clarify that the NSPS General Provisions in 40 CFR 60.11(d) of subpart A continue to apply during maintenance and malfunctions, and that routine maintenance activities must be completed and malfunctions must be corrected as soon as practicable after their occurrence in order to minimize emissions. To prevent free venting of landfill gas to the atmosphere during control device malfunctions or maintenance, we propose to retain the current requirement in 40 CFR 60.753(e) of subpart WWW. This section requires that in the event the collection or control system is inoperable, the gas mover system must be shut down and all valves in the collection and control system contributing to venting of gas to the atmosphere must be closed within 1 hour.

##### *B. Proposed Landfills NESHAP Startup, Shutdown, and Malfunction Provisions*

The Landfills NESHAP has no allowance for shutdown of control devices for routine maintenance. Periodic maintenance is needed to provide continued good operation of the gas collection and control systems and to avoid malfunctions, but shutdowns for maintenance could result in a violation. As explained previously, this issue arises because of the unique nature of landfills. Most NESHAP regulate manufacturing processes that can be stopped when a control device needs to be maintained or repaired. Landfills are a biological process, and once waste is deposited in the landfill, gas is continuously generated and cannot be stopped. To allow for routine maintenance of gas collection, control, and treatment systems, while ensuring

that emissions are minimized during routine maintenance events, we propose to amend the Landfills NESHAP to require owners/operators to include routine maintenance in their SSM plans. The Landfills NESHAP already require owners/operators to develop an SSM plan. The plan must describe, in detail, procedures for operating and maintaining the source during SSM events and a program of corrective action for malfunctioning air pollution control and monitoring equipment used to comply with the Landfills NESHAP. The purpose of the SSM plan is to ensure that owners/operators have fully considered how best to comply with the general duty to minimize emissions during SSM events. While the requirements of the SSM plan are not themselves applicable requirements, the SSM plan is a useful tool for sources to demonstrate, and for permitting authorities to confirm that the general duty to minimize emissions is met. We propose to add a requirement that the SSM plan must include a plan for conducting routine maintenance on the landfill gas collection, control, and treatment systems. The routine maintenance plan must include maintenance procedures and actions that will be taken to minimize emissions during maintenance, shutdown frequency, shutdown duration, and procedures for minimizing emissions during startup and shutdown of the collection, control, and/or treatment systems for routine maintenance. A copy of the SSM plan would be maintained on site. Failure to prepare or maintain a copy of the SSM plan on site would be a deviation from the requirements of the Landfills NESHAP.

We are also proposing changes to the periodic reporting and immediate reporting requirements for SSM events. After the Landfills NESHAP were promulgated, there were revisions to the SSM reporting requirements in the NESHAP General Provisions in 40 CFR part 63, subpart A. Because of the unique nature of landfills, some sections of the revised General Provisions are not relevant to landfills or can be difficult to interpret for landfills. We propose to revise the Landfills NESHAP to clarify the SSM reporting requirements for landfills. We propose to remove the Landfills NESHAP cross-reference in table 1 of 40 CFR part 63, subpart AAAA to the periodic and immediate SSM reporting requirements in 40 CFR 63.10(d)(5) of subpart A (the General Provisions), and to instead include similar SSM reporting provisions that apply specifically to landfills in 40 CFR 63.1980 of subpart AAAA.

The Landfills NESHAP and the General Provisions require periodic (semiannual) reporting when actions taken during a startup or shutdown causing an exceedance of an applicable emission limit or a malfunction are consistent with the procedures specified in the SSM plan. Because we are proposing that the landfills SSM plan must include routine maintenance of landfill gas collection, control, and treatment systems, we are proposing to add a requirement in 40 CFR 63.1980 of subpart AAAA that the semiannual SSM report include a description of routine maintenance activities that were conducted during the period. We propose that the landfills periodic SSM report include the date, duration, and identification of each SSM event (including shutdowns of the landfill gas collection, control, or treatment system for routine maintenance) that occurred during the reporting period. For landfills, the duration of such events is particularly important, because, unlike traditional industrial sources, there is no way to stop the biological processes that result in landfill emissions. While collection system blowers can be turned off and vents to the atmosphere closed for a period of hours to a couple of days to retain most gas within the landfill, eventually the pressure in the landfill will build up and the gas will be released uncontrolled through vents or as fugitive emissions. We expect that there will be few malfunction or maintenance events during a 6-month period, and all such events must already be recorded under the Landfills NESHAP and the General Provisions (40 CFR 63.6(e)(3) of subpart A), so including the date and duration of each event in the periodic report is not a burden. If the owners/operators follow their SSM plan during all SSM and routine maintenance events, then no further information is required in the periodic report. This will minimize the reporting burden for owners/operators who follow their SSM plans.

The Landfills NESHAP periodic report would also require a brief description of any actions taken during a malfunction or routine maintenance event that are inconsistent with the SSM plan. This was a requirement of the NESHAP General Provisions at the time the Landfills NESHAP were developed. The General Provisions have since been changed to require sources to "identify" any instance where an action was taken that was inconsistent with the SSM plan but the source did not exceed any applicable emissions limitations. A "description" is required only if an emissions limitation was exceeded. For

landfills, it is unclear how to determine if any emissions limitation was exceeded because the Landfills NESHAP do not require continuous emissions monitoring. They require continuous parametric monitoring of control devices, quarterly monitoring of surface methane concentrations, and monthly monitoring of collection system well head parameters. If there is a malfunction or shutdown of a control device for routine maintenance, the collection system blowers must be turned off and vents to the atmosphere must be closed. However, despite these precautions, landfill gas continues to be generated and can escape the landfill as fugitive emissions, potentially increasing landfill NMOC emissions above the level achieved when the control device is operating and increasing surface methane concentrations. To avoid having to make subjective judgments on whether emissions limitations were exceeded, we propose that landfills provide a brief description of any malfunction or maintenance event where actions are taken that are inconsistent with the SSM plan. This is consistent with the intent during development of the Landfills NESHAP, and was already accounted for in the estimates of the recordkeeping and reporting burden for the final rule. Events where the SSM plan is not followed should be infrequent and would not occur during most semiannual reporting periods.

We are proposing revisions in 40 CFR 63.1980 of subpart AAAA to clarify immediate SSM reporting requirements for landfills. We propose that immediate reports be required if actions taken during a startup or shutdown (including shutdown of the collection, control, or treatment system for routine maintenance) that caused an exceedance of an applicable emission limit, or during a malfunction are inconsistent with the SSM plan. Such events would be reported by telephone or fax within 2 days, followed by a letter within 7 days of the end of the event. This is the same timing and method of submission contained in the NESHAP General Provisions requirements for immediate SSM reports. We also propose immediate reports if the duration of a shutdown or malfunction (including shutdown of the landfill gas collection, control, or treatment system for routine maintenance) exceeds 5 days. The Landfills NESHAP compliance provisions have always referred to the Landfills NSPS, which require that control system malfunctions not exceed 1 hour and collection systems malfunctions not exceed 5 days. For the

reasons described earlier in this preamble, we are proposing to remove these time limits from the Landfills NSPS, so the Landfills NESHAP would no longer include these time limits by reference. Instead of limiting the duration of malfunction and routine maintenance events to no more than 5 days, we propose to require landfills to report, as part of their Landfills NESHAP immediate SSM reports, any events that last longer than 5 days. This will allow the enforcement agency and the landfill to discuss the specific situation, the reason that more than 5 days is needed, and any actions that can be taken to minimize emissions during the event and complete repairs or maintenance as expeditiously as practicable in the given situation. It should be noted that the Landfills NESHAP already refer to the SSM plan requirements in 40 CFR 63.6(e) of subpart A, which require sources to correct malfunctions as soon as practicable after their occurrence.

Finally, we propose a minor amendment in the calculation of 3-hour block averages for control device operating parameters that are continuously monitored. The proposed amendment would reduce burden, improve consistency with other rules, and ensure that all the necessary information is available for compliance determination. In particular, 40 CFR 63.1975 of subpart AAAA specifies that 3-hour averages are calculated in the same way as the Landfills NSPS except that periods of SSM should not be included. We have received comments that this difference in the calculations requires landfills to keep two sets of records that are similar, but not identical, creating an unnecessary burden. Furthermore, other NESHAP require all operating parameter deviations to be recorded, regardless of whether they occur during an SSM event. For these reasons, we propose to amend the Landfills NESHAP calculations to be more similar to the Landfills NSPS, and no longer exclude periods of SSM. This amendment in the calculations will not change the way in which compliance is determined or the NESHAP are enforced. The enforcement agency still determines whether a deviation is a violation. For example, if a parameter deviation occurred because of a malfunction, and the source took appropriate actions to minimize emissions during the malfunction and to correct the malfunction as soon as practicable, then the enforcement agency may determine that the deviation is not a violation.

## V. Rationale for Other Proposed Corrections and Clarifications

### A. Clarification for Temperature Monitoring for Enclosed Combustors

Currently, the language in 40 CFR 60.758(b)(2)(i) and (c)(1)(i) of subpart WWW (the Landfills NSPS) requires sources to keep records of the combustion temperature in an enclosed combustion device that is used to meet the NMOC destruction requirements in 40 CFR 60.752(b)(2)(iii) of subpart WWW. The definition of "enclosed combustor" includes enclosed flares, boilers, reciprocating engines, and turbines. The literal meaning of this requirement is that a temperature monitor would be installed in the combustion zone of an enclosed combustor. However, we realize that installing a temperature monitor in the combustion zone of a reciprocating engine or turbine is not feasible, and we did not intend for the Landfills NSPS to specifically require monitoring of combustion chamber temperature. The purpose of the temperature monitoring requirement is to ensure that the enclosed combustor is operating in a manner similar to the conditions at which it was operating during the most recent performance test, thereby demonstrating continuous compliance with the NMOC reduction requirements of the Landfills NSPS. Therefore, the temperature monitor should be located in a place that provides a reasonable indication of the operation of the enclosed combustor. For example, monitoring the temperature at the cylinder exhaust port or in the exhaust manifold before the turbocharger are acceptable temperature monitoring locations for reciprocating engines. To minimize further confusion on this issue, we are revising the language in 40 CFR 60.758(b)(2)(i) and (c)(1)(i) of subpart WWW to remove the word "combustion" prior to "temperature." The Landfills NSPS will continue to require that at least one temperature measurement must be recorded every 15 minutes as specified in 40 CFR 60.758(b)(2)(i) of subpart WWW, and any measurement frequency that is longer than 15 minutes is not acceptable for compliance under the Landfills NSPS. The Landfills NSPS also continue to allow landfill owners/operators to propose site-specific alternatives to the monitoring requirements, subject to Administrator approval, as specified in 40 CFR 60.752(b)(2)(i) of subpart WWW.

### B. Correction of Cross-Reference in the Landfills NSPS

We are proposing an amendment to a cross-reference in 40 CFR 60.755(c)(3) of

subpart WWW (the Landfills NSPS) as a result of the reorganization of EPA Method 21 in appendix A to 40 CFR part 60. The Landfills NSPS reference section 4.3.1 of EPA Method 21. In 2001, the wording that used to be in section 4.3.1 was moved to section 8.3.1, so the Landfills NSPS need to be corrected to refer to section 8.3.1 of EPA Method 21.

### C. Clarification of Bioreactor Moisture Content Determination for the Landfills NESHAP

The Landfills NESHAP definition of bioreactors in 40 CFR 63.1990 of subpart AAAA include a provision that the average moisture content of the waste in the area into which liquid is added must be at least 40 percent (by weight) for the landfill or portion of the landfill to be considered a bioreactor. It was not explicit that the 40 percent moisture content should be determined on a wet weight basis. The information EPA originally used to establish the 40 percent moisture criteria was on a wet weight basis. To clarify this, we are amending the bioreactor definition in 40 CFR 63.1990 of subpart AAAA by adding the words "wet weight basis."

### D. Correction of Date in the Landfills NESHAP

We are proposing to amend a typographical error that appears in 40 CFR 63.1945(d) of subpart AAAA. The compliance date for existing major sources should read January 16, 2004, instead of January 13, 2004.

## VI. Statutory and Executive Order Reviews

### A. Executive Order 12866, Regulatory Planning and Review

This action is not a "significant regulatory action" under the terms of Executive Order 12866 (58 FR 51735, October 4, 1993) and is therefore not subject to review under the Executive Order.

### B. Paperwork Reduction Act

Information Collection Requests (ICR) were prepared for the Landfills NSPS, the Landfills NESHAP, and the Federal plan that implements the landfills emission guidelines, and all three ICR were approved by OMB. A copy of the Landfills NSPS ICR (ICR No. 1557.04), landfills Federal plan ICR (ICR No. 1893.01), and the Landfills NESHAP ICR (ICR No. 1938.02) may be obtained from Susan Auby by mail at U.S. EPA, Office of Environmental Information, Collection Strategies Division (2822T), 1200 Pennsylvania Avenue, NW., Washington, DC 20460, by e-mail at [auby.susan@epa.gov](mailto:auby.susan@epa.gov), or by calling (202)

566-1672. A copy may also be downloaded off the Internet at <http://www.epa.gov/icr>.

The proposed amendments to the Landfills NSPS, emission guidelines, Federal plan, and Landfills NESHAP will have no impact on the information collection burden estimates made previously. The proposed treatment monitoring system requirements are within the burden estimated in the previous ICR for the Landfills NSPS, Federal plan, and Landfills NESHAP. In the previous ICR burden estimates, we assumed that all landfills meeting the NSPS and emission guidelines criteria would install combustion control devices and would continuously monitor control device operating parameters (e.g., presence of flare pilot flame or temperature of an enclosed combustion device). Thus, the cost of continuous monitoring systems and associated recordkeeping and reporting were included for every landfill. Landfills that choose to comply with the Landfills NSPS, emission guidelines, Federal plan, or Landfills NESHAP by using a treatment system instead of a control device typically make that choice because it is a less expensive compliance alternative. Therefore, the previous cost analysis and ICR provide a conservatively high estimate of the costs of compliance, monitoring, recordkeeping, and reporting, and the proposed treatment system monitoring requirements would not result in a change to the ICR burden estimates. The proposed amendments to clarify the inclusion of control device shutdowns for maintenance in the SSM plan are consistent with the original estimate of costs to prepare an SSM plan in the Landfills NESHAP ICR, No. 1938.02. Consequently, the ICR have not been revised.

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An agency may not conduct or sponsor, and a person is not required to

respond to a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations in 40 CFR are listed in 40 CFR part 9.

### C. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedures Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small government jurisdictions.

For purposes of assessing the impact of the proposed amendments, small entity is defined as: (1) A small business that is primarily engaged in the collection and disposal of refuse in a landfill operation as defined by NAICS codes 562212 and 924110 with annual receipts less than \$10 million; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000, and (3) a small organization that is any not-for-profit enterprise that is independently owned and operated and is not dominant in its field.

After considering the economic impacts of the proposed amendments on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. In determining whether a rule has a significant economic impact on a substantial number of small entities, the impact of concern is any significant *adverse* economic impact on small entities, since the primary purpose of the regulatory flexibility analyses is to identify and address regulatory alternatives "which minimize any significant economic impact of the rule on small entities." 5 U.S.C. 603 and 604. Thus, an agency may certify that a rule will not have a significant economic impact on a substantial number of small entities if the rule relieves regulatory burden, or otherwise has a positive economic effect on all of the small entities subject to the rule.

EPA has determined that it is not necessary to prepare a regulatory flexibility analysis in connection with the proposed amendments. The proposed amendments clarify the applicability of control requirements in the Landfills NSPS, emission guidelines, Federal plan, and Landfills NESHAP and do not include provisions

that create a new burden for regulated entities.

The proposed amendments do not increase the stringency of the Landfills NSPS, emission guidelines, Federal plan, or Landfills NESHAP, nor do the proposed amendments add additional control requirements. The proposed amendments do not increase the control, monitoring, recordkeeping, and reporting requirements of the promulgated Landfills NSPS, emission guidelines, Federal plan, or Landfills NESHAP, and may decrease these requirements under specific conditions for some entities. We have therefore concluded that today's proposed rule will relieve regulatory burden for all affected small entities.

### D. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act (UMRA) of 1995, Public Law 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures by State, local, and tribal governments, in the aggregate, or by the private sector, of \$100 million or more in any 1 year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective, or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective, or least burdensome alternative if the Administrator publish with the final rule an explanation why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising

small governments on compliance with the regulatory requirements.

EPA has determined that the proposed amendments do not contain a Federal mandate that may result in expenditures of \$100 million or more for State, local, and tribal governments, in the aggregate, or the private sector in any 1 year. Thus, the proposed amendments are not subject to the requirements of sections 202 and 205 of the UMRA. In addition, we have determined that the proposed amendments contain no regulatory requirements that might significantly or uniquely affect small governments because they consist of new definitions and clarifications and do not impose new costs on government entities or the private sector. Therefore, the proposed amendments are not subject to the requirements of section 203 of the UMRA.

### E. Executive Order 13132, Federalism

Executive Order 13132 (64 FR 43255, August 10, 1999) requires EPA to develop an accountable process to ensure "meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" is defined in the Executive Order to include regulations that have "substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government."

The proposed amendments do not have federalism implications. They do not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132.

The proposed amendments do not impose additional costs or result in additional control requirements above those considered at promulgation of the 1996 Landfills NSPS and emission guidelines and the 2003 Landfills NESHAP. In developing the 1996 Landfills NSPS and emission guidelines, we consulted extensively with State and local governments to enable them to provide meaningful and timely input in the development of those rulemakings. Because the control requirements of the proposed amendments are the same as those developed in 1996, these previous consultations still apply. In addition, State and local government agencies participated in a conference call on the

Landfills NESHAP, and provided comments on the 2000 Landfills NESHAP proposal and a 2002 supplemental proposal, which we considered. For a discussion of our consultations with State and local governments, the nature of the governments' concerns, and our position supporting the need for the specific control requirements included in the Landfills NSPS, emission guidelines, and Landfills NESHAP, see the preamble to the 1996 Landfills NSPS (61 FR 9905, March 12, 1996). Thus, Executive Order 13132 does not apply to the proposed amendments.

On May 23, 2002, in the spirit of Executive Order 13132, we specifically solicited comments on the proposed amendments from State and local officials (67 FR 36479). We are again soliciting comments on today's supplemental proposed amendments.

*F. Executive Order 13175, Consultation and Coordination With Indian Tribal Governments*

Executive Order 13175 (65 FR 67249, November 9, 2000) requires EPA to develop an accountable process to ensure "meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications."

The proposed amendments do not have tribal implications as specified in Executive Order 13175. They will not have substantial direct effects on tribal governments, on the relationship between the Federal government and Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes, as specified in Executive Order 13175. Thus, Executive Order 13175 does not apply to the proposed amendments.

On May 23, 2002, we specifically solicited comment from tribal officials on the proposed amendments (67 FR 36479). None were received. Information received from EPA Regional Offices during development of the landfills Federal plan showed no landfills on tribal land large enough to require control under the landfills emission guidelines/Landfills NSPS.

In the spirit of Executive Order 13175 and consistent with EPA policy to promote communications between EPA and tribal governments, we specifically solicit comment on the proposed amendments from tribal officials.

*G. Executive Order 13045, Protection of Children From Environmental Health Risks and Safety Risks*

Executive Order 13045 (62 FR 19885, April 23, 1997) applies to any rule that: (1) Is determined to be "economically

significant" as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

EPA interprets Executive Order 13045 as applying only to those regulatory actions that are based on health or safety risks, such that the analysis required under section 5-501 of the Executive Order has the potential to influence the regulation.

The proposed amendments are not subject to Executive Order 13045 because they are not economically significant as defined in Executive Order 12866 and because they are based on technology performance and not on health and safety risks. Furthermore, as no alternative technologies exist that would provide greater stringency at a reasonable cost, the results of any children's health analysis would have no impact on the stringency decision.

*H. Executive Order 13211, Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use*

The proposed amendments are not subject to Executive Order 13211 "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355, (May 22, 2001)) because it is not a significant regulatory action under Executive Order 12866.

*I. National Technology Transfer and Advancement Act*

Section 12(d) of the National Technology Transfer and Advancement Act (NTTAA) of 1995, Public Law 104-113, 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards (VCS) in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. VCS are technical standards (e.g., material specifications, test methods, sampling procedures, and business practices) that are developed or adopted VCS bodies. The NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable VCS.

The proposed amendments do not involve new technical standards; thus, the requirements of section 12(d) of the NTTAA do not apply.

**List of Subjects in 40 CFR Parts 60, 62, and 63**

Environmental protection, Administrative practice and procedure, Air pollution control, Hazardous substances, Intergovernmental relations, Reporting and recordkeeping requirements.

Dated: August 31, 2006.

**Stephen L. Johnson,**  
*Administrator.*

For the reasons stated in the preamble, title 40, chapter I, parts 60, 62, and 63 of the Code of Federal Regulations are proposed to be amended as follows:

**PART 60—[AMENDED]**

1. The authority citation for part 60 continues to read as follows:

**Authority:** 42 U.S.C. 7401-7601.

**Subpart Cc—[Amended]**

2. Section 60.31c is amended by adding the definitions of "Municipal solid waste landfill gas collection, control, or treatment system owner/operator" and "Municipal solid waste landfill owner/operator," in alphabetical order to read as follows:

**§ 60.31c Definitions.**

\* \* \* \* \*

*Municipal solid waste landfill gas collection, control, or treatment system owner/operator* means any entity that owns or operates any stationary equipment that is used, as specified in § 60.33c, to collect, control, or treat landfill gas from an MSW landfill that is a designated facility under § 60.32c of this subpart, regardless of the location of the control or treatment system.

*Municipal solid waste landfill owner/operator* means any entity that owns or operates a municipal solid waste landfill that is a designated facility under § 60.32c(a).

3. Section 60.32c is amended by:

- Revising paragraph (a); and
- Adding paragraph (e) to read as follows:

**§ 60.32c Designated facilities.**

(a) The designated facilities to which the guidelines apply are each existing MSW landfill for which construction, reconstruction, or modification was commenced before May 30, 1991 and/or the stationary equipment used to collect, control, or treat the landfill gas from such MSW landfills as required by § 60.33c(c).

\* \* \* \* \*

(e) For approval, a State plan shall require each MSW landfill owner/



operator and each MSW landfill gas collection, control, or treatment system owner/operator, as defined in § 60.31c, to be responsible for compliance as specified in paragraphs (e)(1) and (2) of this section; provided, however, that if the MSW landfill and the associated gas collection, control, and/or treatment system are under common control, the entity exercising such control shall be responsible for complying with the requirements in both paragraphs (e)(1) and (2) of this section.

(1) Municipal solid waste landfill owners/operators are responsible for complying with the requirements of this subpart for the landfill and any portion of the landfill gas collection, control, or treatment system they own/operate. In addition, if another entity owns/operates the gas collection, control, or treatment system used to comply with the applicable requirements of this subpart and for any reason (e.g., bankruptcy, abandonment of operation) that entity ceases to accept the landfill gas, responsibility for complying with all applicable requirements to which that entity was subject under this subpart shall immediately apply to, and be binding on, the landfill owner/operator. The title V permits for landfill owner/operator must be written to require that the requirements applicable to the owner/operator of the landfill gas collection, control, and/or treatment system immediately become applicable requirements of the landfill owners/operators whenever the owners/operators of the landfill gas collection, control, and/or treatment system cease to accept the landfill gas.

(2) Municipal solid waste landfill gas collection, control, or treatment system owners/operators are responsible for complying with the requirements of this subpart for the portion of the landfill gas collection, control, or treatment system they own/operate.

4. Section 60.33c is amended by revising paragraphs (c)(2) and (c)(3) to read as follows:

**§ 60.33c Emission guidelines for municipal solid waste landfill emissions.**

\* \* \* \* \*

(c) \* \* \*

(2) A control system designed and operated to reduce nonmethane organic compounds (NMOC) by 98 weight percent, or, when an enclosed combustion device is used for control, to either reduce NMOC by 98 weight percent or to reduce the outlet to less than 20 parts per million by volume, dry basis as hexane at 3 percent oxygen. The reduction efficiency or parts per million by volume shall be established by an initial performance test to be completed

no later than the applicable compliance date specified in § 60.36c. The performance test is not required for boilers and process heaters with design heat input capacities equal to or greater than 44 megawatts that burn landfill gas for compliance with this subpart.

(3) Route the collected gas to a treatment system that processes the collected gas for subsequent sale as fuel for combustion or use as a fuel for combustion. Landfill gas sold as fuel for combustion or used as a fuel for combustion shall be treated in a treatment system as defined in § 60.751 that meets the requirements of § 60.752(b)(2)(i)(D) and the monitoring, recordkeeping, and reporting requirements listed in §§ 60.756, 60.757, and 60.758 that apply to treatment systems. All emissions from any atmospheric vent from the gas treatment system shall be subject to the requirements of paragraph (c)(1) or (2) of this section. For purposes of this subpart, atmospheric vents located on the condensate storage tank are not part of the treatment system and are exempt from the requirements of paragraph (c)(1) or (c)(2) of this section. The owners/operators of the landfill gas treatment system must ensure compliance with these requirements. The owner/operators of a combustion device who use treated landfill gas as fuel in a combustion device or purchase treated landfill gas for fuel in a combustion device shall be exempt from further compliance with this subpart. The treated gas must be used as a fuel, and venting of treated landfill gas to the ambient air or combustion in a flare is not allowed under this option.

\* \* \* \* \*

5. Section 60.36c is amended by adding paragraph (c) to read as follows:

**§ 60.36c Compliance Times.**

\* \* \* \* \*

(c) Within nine months after [DATE THE FINAL RULE AMENDMENTS ARE PUBLISHED IN THE **Federal Register**], each State shall adopt and submit to the Administrator, revisions to their State plan that implement the emission guidelines and compliance times in this subpart, as amended. Except as provided under § 60.24, the revised State plan shall include the revised definitions in § 60.31c; the designated facilities provisions in § 60.32c(a) through (e) and the associated recordkeeping requirement in § 60.758(g); the control and treatment system requirements in § 60.33c(2) and (3); the associated treatment system monitoring, recordkeeping, and reporting requirements in §§ 60.756

through 60.758 that are cross-referenced in §§ 60.34c and 60.35c; and a supplemental revised compliance schedule.

**Subpart WWW—[Amended]**

6. Section 60.750 is amended by revising paragraph (a) to read as follows:

**§ 60.750 Applicability, designation of affected facility, and delegation of authority.**

(a) The provisions of this subpart apply to each municipal solid waste (MSW) landfill that commenced construction, reconstruction, or modification on or after May 30, 1991 and the stationary equipment used to collect, control, or treat the landfill gas from such MSW landfills required by § 60.752(b)(2). Physical or operational changes made to an existing MSW landfill solely to comply with an applicable State plan or the Federal plan implementing the requirements of subpart Cc (Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills) of this part are not considered construction, reconstruction, or modification for the purposes of this subpart. Each MSW landfill owner/operator and each MSW landfill gas collection, control, or treatment system owner/operator, as defined in § .751, is responsible for compliance with this subpart as specified in paragraphs (a)(1) and (2) of this section; provided, however, that if the MSW landfill and the associated gas collection, control, and/or treatment system are under common control, the entity exercising such control shall be responsible for complying with the requirements in both paragraphs (a)(1) and (2) of this section.

(1) MSW landfill owners/operators are responsible for complying with the requirements of this subpart for the landfill and any portion of the landfill gas collection, control, or treatment system they own/operate. In addition, if another entity owns/operates the gas collection, control, or treatment system used to comply with the applicable requirements of this subpart and for any reason (e.g., bankruptcy, abandonment of operation) that entity ceases to accept the landfill gas, responsibility for complying with all applicable requirements to which that entity was subject under this subpart shall immediately apply to, and be binding on, the landfill owner/operator. The title V permits for landfill owners/operators must be written to require that the requirements applicable to the owners/operators of the landfill gas collection, control, and/or treatment system immediately become applicable

requirements of the landfill owner/operator, whenever the owners/operators of the landfill gas collection, control, and/or treatment system cease to accept the landfill gas.

(2) Municipal solid waste landfill gas collection, control, or treatment system owners/operators are responsible for complying with the requirements of this subpart for the portion of the landfill gas collection, control, or treatment system they own/operate.

\* \* \* \* \*

7. Section 60.751 is amended by:

- a. Revising the definition of "Household waste"; and
- b. Adding the definitions of "Absolute filtration rating," "Municipal solid waste landfill gas collection, control, or treatment system owner/operator," "Municipal solid waste landfill owner/operator," "Segregated yard waste," "Treated landfill gas," "Treatment system," and "Untreated landfill gas" in alphabetical order to read as follows:

**§ 60.751 Definitions.**

\* \* \* \* \*

*Absolute filtration rating* means the diameter of the largest hard spherical particle that would pass through a filter.

\* \* \* \* \*

*Household waste* means any solid waste (including garbage, trash, and sanitary waste in septic tanks) derived from households (including, but not limited to, single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas). Household waste does not include fully segregated yard waste.

\* \* \* \* \*

*Municipal solid waste landfill gas collection, control, or treatment system owner/operator* means any entity that owns or operates any stationary equipment required by § 60.752(b)(2) of this subpart that is used to collect, control, or treat landfill gas from an MSW landfill that is subject, regardless of the location of the control or treatment system.

*Municipal solid waste landfill owner/operator* means any entity that owns or operates a municipal solid waste landfill.

\* \* \* \* \*

*Segregated yard waste* means vegetative matter resulting exclusively from the cutting of grass, the pruning and/or removal of bushes, shrubs, and trees, the weeding of gardens, and other landscaping maintenance activities.

\* \* \* \* \*

*Treated landfill gas* means landfill gas processed in a treatment system according to this subpart.

*Treatment system* means a system that has an absolute filtration rating of 10 microns or less, lowers the water dew point of the landfill gas by at least 20 degrees Fahrenheit with a de-watering process, and compresses the landfill gas.

*Untreated landfill gas* means any landfill gas that is not treated landfill gas.

8. Section 60.752 is amended by:

- a. Revising paragraph (b)(2)(i)(D), paragraph (b)(2)(iii)(B) introductory text, and paragraph (b)(2)(iii)(C); and
- b. Adding paragraph (b)(2)(i)(E) and paragraph (b)(2)(iii)(D) to read as follows:

**§ 60.752 Standards for air emissions from municipal solid waste landfills.**

\* \* \* \* \*

- (b) \* \* \*
- (2) \* \* \*
- (i) \* \* \*

(D) If the owner or operator chooses to demonstrate compliance with the emission control requirements of this subpart using a treatment system as defined in this subpart and according to the requirements of paragraph (b)(iii)(C) of this section, then the collection and control system design plan must include:

(1) Design specifications for the filtration, de-watering, and compression systems that demonstrate conformance with the treatment system definition contained in § 60.751.

(2) The minimum pressure drop across the filtration system, or other monitoring parameter(s) and operating ranges that indicate proper performance of the filtration system. The collection and control plan must include information, such as manufacturer's recommendations or engineering analyses, to justify the minimum pressure drop or operating ranges for other monitoring parameters.

(3) The minimum landfill gas temperature reduction across a chiller-based de-watering system, the minimum landfill gas dew point reduction for a non-chiller-based de-watering system, or other operating parameters and operating ranges that indicate proper performance of the de-watering system. If the owner/operator requests approval to monitor temperature or dew point at a single location, such as the outlet of the chiller or de-watering system, rather than at both the inlet and outlet, the design plan must demonstrate that the proposed monitoring location and site-specific maximum temperature or maximum dew point are sufficient to indicate that the dew point has been

reduced by at least 20 degrees Fahrenheit, according to the treatment system definition. The collection and control plan must include information, such as manufacturer's recommendations or engineering analyses, to justify the operating ranges for temperature, dew point, or other monitoring parameters.

(E) The Administrator shall review the information submitted under paragraphs (b)(2)(i)(A), (B), (C), and (D) of this section and either approve, disapprove, or request that additional information be submitted. Because of the many site-specific factors involved with landfill gas system design, alternative systems may be necessary. A wide variety of system designs are possible, such as vertical wells, combination horizontal and vertical collection systems, or horizontal trenches only, leachate collection components, and passive systems.

\* \* \* \* \*

(iii) \* \* \*

(B) A control system designed and operated to reduce NMOC by 98 weight percent, or, when an enclosed combustion device is used for control, to either reduce NMOC by 98 weight percent or to reduce the outlet to less than 20 parts per million by volume, dry basis as hexane at 3 percent oxygen. The reduction efficiency or parts per million by volume shall be established by an initial performance test to be completed no later than 180 days after the initial startup of the approved control system using the test methods specified in § 60.754(d). The performance test is not required for boilers and process heaters with design heat input capacities equal to or greater than 44 megawatts that burn landfill gas for compliance with this subpart.

\* \* \* \* \*

(C) Route the collected gas to a treatment system that processes the collected gas for subsequent sale as a fuel for combustion or use as a fuel for combustion. Landfill gas sold as a fuel for combustion or used as a fuel for combustion shall be treated in a treatment system as defined in § 60.751 that meets the requirements of § 60.752(b)(2)(i)(D) and the monitoring, recordkeeping, and reporting requirements of this subpart that apply to treatment systems. All emissions from any atmospheric vent from the gas treatment system shall be subject to the requirements of paragraph (b)(2)(iii)(A) or paragraph (b)(2)(iii)(B) of this section. For purposes of this rule, atmospheric vents located on the condensate storage tank are not part of the treatment system and are exempt from the requirements

of paragraph (b)(2)(iii)(A) or (b)(2)(iii)(B) of this section. The owner/operator of the landfill gas treatment system must ensure compliance with the treatment requirements. The owner/operator of a combustion device who uses treated landfill gas as a fuel in a combustion device or purchases treated landfill gas for fuel in a combustion device shall be exempt from further compliance with this subpart. The treated gas must be used as a fuel, and venting of treated landfill gas to the ambient air or combustion in a flare is not allowed under this option.

(D) If an owner/operator complied with the requirements of paragraph (b)(2)(iii) of this section by installing and operating a gas treatment system on or before September 8, 2006, the owner/operator must ensure that the treatment system meets the treatment system definition in § 60.751, submit a design plan update including the information specified in paragraph (b)(2)(i)(D) of this section, meet the requirements of paragraph (b)(2)(iii)(C) of this section, and implement all treatment system operating, compliance, monitoring, recordkeeping, and reporting requirements of this subpart as expeditiously as practicable, but no later than [DATE 1 YEAR AFTER THE FINAL RULE AMENDMENTS ARE PUBLISHED IN THE Federal Register]. Alternatively, the owner/operator may elect to comply with the control requirements in paragraph (b)(2)(iii)(A) or paragraph (b)(2)(iii)(B) of this section; submit a design plan update for the control system; and comply with all control system operational, testing, compliance, monitoring, recordkeeping, and reporting requirements of this subpart as expeditiously as practicable, but no later than [DATE 1 YEAR AFTER THE FINAL RULE AMENDMENTS ARE PUBLISHED IN THE Federal Register].

\* \* \* \* \*

9. Section 60.755 is amended by revising paragraph (c)(3) and paragraph (e) to read as follows:

**§ 60.755 Compliance provisions.**

\* \* \* \* \*

(c) \* \* \*

(3) Surface emission monitoring shall be performed in accordance with section 8.3.1 of Method 21 of appendix A of this part, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.

\* \* \* \* \*

(e) The provisions of the subpart apply at all times, except during periods of startup, shutdown, and malfunction

and periods of routine maintenance of the landfill gas collection, control, or treatment systems. The provisions of § 60.11(d) continue to apply during periods of startup, shutdown, malfunction, and routine maintenance of the landfill gas collection, control, or treatment systems. Routine maintenance activities must be completed and malfunctions must be corrected as soon as practicable after their occurrence in order to minimize emissions.

10. Section 60.756 is amended by adding paragraph (g) to read as follows:

**§ 60.756 Monitoring of operations.**

\* \* \* \* \*

(g) Each owner or operator seeking to demonstrate compliance with § 60.752(b)(2)(iii) using a landfill gas treatment system shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment.

(1) A device that monitors pressure drop across, or other approved parameter(s) for, the filtration system that is equipped with a continuous recorder that shall record such parameters at least once every 15 minutes. Records of hourly and 24-hour block averages computed from the continuous monitoring data must also be retained.

(2) A device that monitors the landfill gas temperature for a chiller-based dewatering system, the landfill gas dew point for a non-chiller-based dewatering system, or the approved operating parameter(s) for the dewatering system at the monitoring locations specified in the approved design plan required under § 60.752(b)(2)(i)(D). Each monitoring device must be equipped with a continuous recorder that shall record such parameters at least once every 15 minutes. Records of hourly and 24-hour block averages computed from the continuous monitoring data must also be retained.

(3) A device that records flow to or bypass of the treatment system. The owner or operator 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.

11. Section 60.757 is amended by revising paragraphs (f) introductory text

and (f)(1) through (f)(3) to read as follows:

**§ 60.757 Reporting requirements.**

\* \* \* \* \*

(f) The owner or operator seeking to comply with § 60.752(b)(2) using an active collection system designed in accordance with § 60.752(b)(2)(ii) shall submit to the Administrator annual reports of the recorded information in paragraphs (f)(1) through (6) of this section. The initial annual report shall be submitted within 180 days of installation and start-up of the collection, control, or treatment system, and shall include the initial performance test report required under § 60.8, as applicable. For enclosed combustion devices, treatment systems, and flares, reportable exceedances are defined under § 60.758(c).

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

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

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

\* \* \* \* \*

12. Section 60.758 is amended by:

a. Revising paragraph (b) introductory text, paragraph (b)(2)(i), paragraph (c) introductory text; and paragraph (c)(1)(i); and

b. Adding paragraph (b)(5), paragraph (c)(1)(iii); and paragraph (g) to read as follows:

**§ 60.758 Recordkeeping requirements.**

\* \* \* \* \*

(b) Except as provided in § 60.752(b)(2)(i)(B), for controlled landfills, the owner or operator shall keep up-to-date, readily accessible records for the life of the control equipment or treatment system of the data listed in paragraphs (b)(1) through (5) of this section as measured during the initial performance test or compliance demonstration, or as submitted and approved under § 60.752(b)(2)(i)(D). Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the control device or treatment system vendor specifications shall be maintained until removal.

\* \* \* \* \*

(2) \* \* \*

(i) The average temperature measured at least every 15 minutes and averaged over the same time period of the performance test.

\* \* \* \* \*

(5) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with § 60.752(b)(2)(iii) through the use of a treatment system:

(i) The approved minimum pressure drop across the filtration system, or the approved operating ranges for the other monitoring parameter(s) that indicate proper performance of the filtration system, as specified in the approved design plan required by § 60.752(b)(2)(i)(D).

(ii) The approved minimum temperature reduction or approved maximum outlet temperature of a chiller-based de-watering system, the approved minimum dew point reduction or maximum outlet dew point of a non-chiller-based de-watering system, or the approved operating ranges for other monitoring parameter(s) that indicate proper performance of the de-watering system, as specified in the approved design plan required by § 60.752(b)(2)(i)(D).

(c) Except as provided in § 60.752(b)(2)(i)(B), for a controlled landfill subject to the provisions of this subpart, the owner or operator shall keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored under § 60.756 as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries measured during the most recent performance test or submitted and approved under § 60.752(b)(2)(i)(D) are exceeded.

(1) \* \* \*

(i) For enclosed combustors, except for boilers and process heaters with design heat input capacity of 44 megawatts (150 million British thermal units (Btu) per hour) or greater, all 3-hour periods of operation during which the average temperature was more than 28 °C below the average temperature during the most recent performance test at which compliance with § 60.752(b)(2)(iii) was determined.

\* \* \* \* \*

(iii) For treatment systems used to demonstrate compliance with § 60.752(b)(2)(iii), all 24-hour periods of operation during which the average operating parameter values are outside of the approved ranges identified in § 60.752(b)(2)(i)(D) as those that indicate

proper performance of the treatment system.

\* \* \* \* \*

(g) Where multiple entities exist under the definitions of "Municipal solid waste landfill owner/operator" and "Municipal solid waste landfill gas collection, control, or treatment system owner/operator" for an individual MSW landfill and its required gas collection, control, or treatment systems, all entities must keep a list that shows regulatory section and paragraph numbers, documenting which aspects of the requirements of §§ 60.752 through 60.759 each party will comply with. The list must include all requirements of this subpart that apply to the MSW landfill and all required gas collection, control, or treatment systems. If the list does not correctly identify all applicable provisions, all entities involved are responsible for compliance with the missing items. All entities must keep an identical copy of the list on site and must comply with those provisions on the applicable list that are assigned to them until such time as the list may be modified. The list must be kept up-to-date. The current list and all previously modified lists must be maintained on site for 5 years after the date each list was modified. If a gas collection, control, or treatment system was installed to comply with this subpart on or before September 8, 2006, the list showing the requirements that each party will comply with must be completed as expeditiously as practicable, but no later than [DATE 1 YEAR AFTER THE FINAL RULE AMENDMENTS ARE PUBLISHED IN THE **Federal Register**]. Entities meeting the definition of "Municipal solid waste landfill owner/operator" or "Municipal solid waste landfill gas collection, control, or treatment system owner/operator" may be held responsible for compliance with this subpart as specified in § 60.750(a)(1) and (2).

**PART 62—[AMENDED]**

13. The authority citation for part 62 continues to read as follows:

**Authority:** 42 U.S.C. 7401, *et seq.*

**Subpart GGG—[Amended]**

14. Section 62.14351 is amended by adding the definitions of "Municipal solid waste landfill gas collection, control, or treatment system owner/operator" and "Municipal solid waste landfill owner/operator" in alphabetical order to read as follows:

**§ 62.14351 Definitions**

\* \* \* \* \*

*Municipal solid waste landfill gas collection, control, or treatment system owner/operator* means any entity that owns or operates any stationary equipment required by § 62.14353 that is used to collect, control, or treat landfill gas from an MSW landfill that is a designated facility under § 62.14352(a), regardless of the location of the control or treatment system.

*Municipal solid waste landfill owner/operator* means any entity that owns or operates a municipal solid waste landfill that is a designated facility under § 62.14352(a).

\* \* \* \* \*

- 15. Section 62.14352 is amended by:
  - a. Revising paragraph (a) introductory text; and
  - b. Adding paragraph (g) to read as follows:

**§ 62.14352 Designated facilities.**

(a) The designated facility to which this subpart applies is each existing MSW landfill, and the stationary equipment used to collect, control, or treat the landfill gas from such MSW landfills as required by § 62.14353 of this subpart, in all States, protectorates, and Indian Country that meets the conditions of paragraphs (a)(1) and (2) of this section, except for landfills exempted by paragraphs (b) and (c) of this section.

\* \* \* \* \*

(g) Each MSW landfill owner/operator and each MSW landfill gas collection, control, or treatment system owner/operator, as defined in § 62.14351, is responsible for compliance as specified in paragraphs (g)(1) and (2) of this section; provided, however, that if the MSW landfill and the associated gas collection, control, and/or treatment system are under common control, the entity exercising such control shall be responsible for complying with the requirements in both paragraphs (g)(1) and (2) of this section.

(1) Municipal solid waste landfill owners/operators are responsible for complying with the requirements of this subpart for the landfill and any portion of the landfill gas collection, control, or treatment system they own/operate. In addition, if another entity owns/operates the gas collection, control, or treatment system and for any reason (e.g., bankruptcy, abandonment of operation) that entity ceases to accept the landfill gas, responsibility for complying with all applicable requirements to which that entity was subject under this subpart shall immediately apply to, and be binding on, the landfill owner/operator. The title V permits for landfill owners/operators

must be written to require that the requirements applicable to the owners/operators of the landfill gas collection, control, and/or treatment system immediately become applicable requirements of the landfill owner/operator whenever the owners/operators of the landfill gas collection, control, and/or treatment system cease to accept the landfill gas.

(2) Municipal solid waste landfill gas collection, control, or treatment system owners/operator are responsible for complying with the requirements of this subpart for the portion of the landfill gas collection, control, or treatment system they own/operate.

**PART 63—[AMENDED]**

16. The authority citation for part 63 continues to read as follows:

**Authority:** 42 U.S.C. 7401, *et seq.*

**Subpart AAAA—[Amended]**

17. Section 63.1935 is amended by adding paragraphs (c) and (d) to read as follows:

**§ 63.1935 Am I subject to this subpart?**

\* \* \* \* \*

(c) You are subject to this subpart if you own or operate stationary equipment required by § 63.1947 or § 63.1955 that is used to collect, control, or treat landfill gas from a municipal solid waste landfill that is subject to this subpart (regardless of the location of the control or treatment system).

(d) Each municipal solid waste landfill owner/operator and each municipal solid waste landfill gas collection, control, or treatment system owner/operator, as defined in § 63.1990, is responsible for compliance with this subpart as specified in paragraphs (d)(1) and (2) of this section; provided, however, that if the municipal solid waste landfill and the associated gas collection, control, and/or treatment system are under common control, the entity exercising such control shall be responsible for complying with the requirements in both paragraphs (d)(1) and (2) of this section.

(1) Municipal solid waste landfill owners/operators are responsible for complying with the requirements of this subpart for the landfill and any portion of the landfill gas collection, control, or treatment system they own/operate. In addition, if another entity owns/operates the gas collection, control, or treatment system and for any reason (*e.g.*, bankruptcy, abandonment of operation) that entity ceases to accept the landfill gas, responsibility for complying with all applicable requirements to which that entity was

subject under this subpart shall immediately apply to, and be binding on, the landfill owner/operator. The title V permits for landfill owners/operators must be written to require that the requirements applicable to the owners/operators of the landfill gas collection, control, and/or treatment system immediately become applicable requirements of the landfill owner/operator whenever the owners/operators of the landfill gas collection, control, and/or treatment system cease to accept the landfill gas.

(2) Municipal solid waste landfill gas collection, control, or treatment system owners/operators are responsible for complying with the requirements of this subpart for the portion of the landfill gas collection, control, or treatment system they own/operate.

18. Section § 63.1940 is amended by revising paragraph (a) to read as follows:

**§ 63.1940 What is the affected source of this subpart?**

(a) An affected source of this subpart is a MSW landfill, as defined in § 63.1990, that meets the criteria in § 63.1935(a) or § 63.1935 (b). The affected source includes the entire disposal facility in a contiguous geographic space where household waste is placed in or on land, including any portion of the MSW landfill operated as a bioreactor. The affected source also includes stationary equipment required by § 63.1947 or § 63.1955 that is used to collect, control, or treat landfill gas from a MSW landfill that is subject to this subpart (regardless of the location of the control or treatment system).

\* \* \* \* \*

19. Section 63.1945 is amended by revising paragraph (d) to read as follows:

**§ 63.1945 When do I have to comply with this subpart?**

\* \* \* \* \*

(d) If your landfill is an existing affected source and is a major source or is collocated with a major source, you must comply with the requirements in § 63.1955(b) and §§ 63.1960 through 63.1980 by the date your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2) of subpart WWW, the Federal plan, or EPA approved and effective State or tribal plan that applies to your landfill or by January 16, 2004, whichever occurs later.

\* \* \* \* \*

20. Section 63.1955 is amended by revising paragraph (c) to read as follows:

**§ 63.1955 What requirements must I meet?**

\* \* \* \* \*

(c) For approval of collection and control systems that include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping, or reporting provisions, you must follow the procedures in 40 CFR 60.752(b)(2) of subpart WWW. If alternatives have already been approved under 40 CFR part 60, subpart WWW, or the Federal plan, or EPA-approved and effective State or tribal plan, those alternatives can be used to comply with this subpart, except that all affected sources must comply with the startup, shutdown, and malfunction requirements in subpart A of this part as specified in Table 1 of this subpart; and all affected sources must submit compliance reports every 6 months as specified in § 63.1980(a) and (b), including information on all deviations that occurred during the 6-month reporting period. Deviations for continuous emission monitors or numerical continuous parameter monitors must be determined using a 3-hour monitoring block average for control systems used to demonstrate compliance with 40 CFR 60.752(b)(iii)(B) of subpart WWW, or a 24-hour monitoring block average for treatment systems used to demonstrate compliance with 40 CFR 60.752(b)(iii)(C) of subpart WWW.

\* \* \* \* \*

21. Section 63.1960 is revised to read as follows:

**§ 63.1960 How is compliance determined?**

Compliance is determined in the same way it is determined for 40 CFR part 60, subpart WWW, including performance testing, monitoring of the collection system, continuous parameter monitoring, and other credible evidence. In addition, continuous parameter monitoring data, collected under 40 CFR 60.756(b)(1), (c)(1), (d) and (g) of subpart WWW, are used to demonstrate compliance with the operating conditions for control systems or treatment systems. If a deviation occurs, you have failed to meet the control device or treatment system operating conditions described in this subpart and have deviated from the requirements of this subpart. Finally, you must develop a written SSM plan according to the provisions in § 63.6(e)(3). Your SSM plan must include a plan for conducting routine maintenance on the landfill gas collection, control, and treatment systems. The routine maintenance plan must include maintenance procedures, actions that will be taken to minimize

emissions during maintenance, shutdown frequency, shutdown duration, and procedures for minimizing emissions during startup and shutdown of the collection, control, and/or treatment systems for routine maintenance. A copy of the SSM plan must be maintained on site. Failure to write or maintain a copy of the SSM plan is a deviation from the requirements of this subpart.

22. Section 63.1965 is amended by revising paragraphs (a) and (b) to read as follows:

**§ 63.1965 What is a deviation?**

\* \* \* \* \*

(a) A deviation occurs when the control device or treatment system operating parameter boundaries described in 40 CFR 60.758(c)(1) of subpart WWW are exceeded.

(b) A deviation occurs when 1 hour or more of the hours during the applicable 3-hour, or 24-hour, block averaging period specified in 40 CFR 60.758(c)(1) of subpart WWW 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.

\* \* \* \* \*

23. Section 63.1975 is revised to read as follows:

**§ 63.1975 How do I calculate the block average used to demonstrate compliance?**

Averages are calculated in the same way as they are calculated in 40 CFR part 60, subpart WWW, except that averages computed under this subpart shall not include periods of monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments.

24. Section 63.1980 is amended by adding paragraphs (i) and (j) to read as follows:

**§ 63.1980 What records and reports must I keep and submit?**

\* \* \* \* \*

(i) In lieu of meeting the requirements of § 63.10(d)(5)(i) and (ii) of subpart A for periodic and immediate startup, shutdown, and malfunction reports, you must comply with the requirements of paragraphs (i)(1) and (2) of this section.

(1) *Periodic startup, shutdown, and malfunction reports.* The owner or operator shall report each startup, shutdown, and malfunction (including startups and shutdowns of the landfill gas collection, control, or treatment system for routine maintenance) that occurred during the semiannual compliance reporting period. Such report shall include the date, duration, and identification of each startup,

shutdown, and malfunction event (including startups and shutdowns of the landfill gas collection, control, or treatment system for routine maintenance) and any actions taken that were inconsistent with the SSM plan. In any instance where any action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction and actions taken during startup or shutdown of the landfill gas collection, control, or treatment system for routine maintenance) is not consistent with the affected source's SSM plan, the report also shall include a brief description of the startup, shutdown, or malfunction event. Reports shall be required only if a startup, shutdown, or malfunction (including startups or shutdowns of the landfill gas collection, control, or treatment system for routine maintenance) occurred during the reporting period. The startup, shutdown, and malfunction report shall consist of a letter, containing the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy, that shall be submitted to the Administrator every 6 months with the reports described in paragraph (a) or paragraph (c) through (f) of this section.

(2) *Immediate startup, shutdown, and malfunction reports.* Any time an action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction and actions taken during startup or shutdown of the landfill gas collection, control, or treatment system for routine maintenance) is not consistent with the procedures specified in the affected source's SSM plan, the owner or operator shall 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. If the duration of any shutdown or malfunction event (including any shutdown of the landfill gas collection, control, or treatment system for routine maintenance) exceeds 5 days, the owner or operator shall report the event within 2 working days of the date the duration of the event exceeds 5 days, followed up by a letter within 7 working days after the end of the event. The immediate reports required under this paragraph (i)(2) shall consist of a telephone call (or facsimile (fax) transmission) to the Administrator within 2 working days, and it shall be followed by a letter, delivered or postmarked within 7 working days after the end of the event, that contains the name, title, and

signature of the owner or operator or other responsible official who is certifying its accuracy, explaining the circumstances of the event and the reasons for not following the SSM plan. If the duration of any shutdown or malfunction event (including any shutdown of the landfill gas collection, control, or treatment system for routine maintenance) exceeds 5 days, the immediate report shall also include the reasons that the duration of the event exceeded 5 days and actions taken to minimize the duration of the event. Notwithstanding the requirements of the previous sentences in this paragraph (i)(2), after the effective date of an approved permit program in the State in which an affected source is located, the owner or operator may make alternative reporting arrangements, in advance, with the permitting authority in that State. Procedures governing the arrangement of alternative reporting requirements under this paragraph (i)(2) are specified in § 63.9(i) of subpart A.

(j) Where multiple entities exist under the definitions of "Municipal solid waste landfill owner/operator" and "Municipal solid waste landfill gas collection, control, or treatment system owner/operator" for an individual MSW landfill and its required gas collection, control, or treatment systems, all entities must keep a list that shows regulatory section and paragraph numbers, documenting which aspects of the requirements of §§ 63.1945 through 63.1980 each entity will comply with. The list must include all requirements of this subpart that apply to the MSW landfill and all required gas collection, control, or treatment systems. If the list does not correctly identify all applicable provisions, all entities involved are responsible for compliance with the missing requirements. All entities must keep an identical copy of the list on site and must comply with those provisions on the applicable list that are assigned to them until such time as the list may be modified. The list must be kept up-to-date. The current list and all previously modified lists must be maintained on site for 5 years after the date each list was modified. If a gas collection, control, or treatment system was installed to comply with this subpart on or before September 8, 2006, the list showing the requirements that each party will comply with must be completed no later than [DATE 1 YEAR AFTER THE FINAL RULE AMENDMENTS ARE PUBLISHED IN THE **Federal Register**]. Entities meeting the definition of "Municipal solid waste landfill owner/operator" or "Municipal solid waste landfill gas collection,

control, or treatment system owner/operator” may be held responsible for compliance with this subpart as specified in § 63.1935(d)(1) and (2).

25. Section 63.1990 is amended by revising the definition of “Bioreactor” and adding a definition of “Municipal solid waste landfill gas collection, control, or treatment system owner/operator” in alphabetical order to read as follows:

**§ 63.1990 What definitions apply to this subpart?**

*Bioreactor* means an MSW landfill or portion of a municipal solid waste

landfill where any liquid other than leachate (leachate includes landfill gas condensate) is added in a controlled fashion into the waste mass (often in combination with recirculating leachate) to reach a minimum average moisture content of at least 40 percent by weight, calculated on a wet weight basis, to accelerate or enhance the anaerobic (without oxygen) biodegradation of the waste.

\* \* \* \* \*

*Municipal solid waste landfill gas collection, control, or treatment system owner/operator* means any entity that owns or operates any stationary

equipment required by 40 CFR 60.752(b)(2) of subpart WWW or § 63.1947 or § 63.1955 that is used to collect, control, or treat landfill gas from a municipal solid waste landfill that is subject to this subpart (regardless of the location of the control or treatment system).

\* \* \* \* \*

26. Table 1 to subpart AAAA of part 63 is amended by:  
 a. Revising the entry for § 63.6(e).  
 b. Adding a new entry in numerical order for § 63.9(i).  
 c. Removing the entry for § 63.10(d)(5) to read as follows:

TABLE 1 TO SUBPART AAAA OF PART 63.—APPLICABILITY OF NESHAP GENERAL PROVISIONS TO SUBPART AAAA

Part 63 citation	Description	Explanation
§ 63.6(e), except § 63.6(e)(3)(iv) .....	Operation and maintenance requirements, SSM plan provisions.	Affected sources are subject to the provisions in § 63.1980(i)(2) instead of § 63.6(e)(3)(iv).
§ 63.9(i) .....	Provisions to adjust the time periods for post-mark deadlines for submitting required reports.	Allows adjustment of timing of reports.