

United States  
Environmental Protection  
Agency

Office of Air Quality  
Planning and Standards  
Research Triangle Park, NC 27711

EPA-456/R-99-001 ✓  
September 1999

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# Municipal Solid Waste Landfills: Background Information Document for Federal Plan

## Public Comments and Responses



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U.S. Environmental Protection Agency  
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**Municipal Solid Waste Landfills:  
Background Information Document for Federal Plan**

**Public Comments and Responses**

U.S. Environmental Protection Agency  
Office of Air and Radiation  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

September 10, 1999

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## 1.0 LIST OF COMMENTERS

The U.S. Environmental Protection Agency (EPA) received comments from the following individuals on the proposed rule, "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" (63 FR 69364, December 16, 1998). The docket number for this regulation is A-98-03.

Docket number	Commenter and affiliation
IV-D-01	C.A. James, Acting Director Engineering and Technical Services Division Bureau of Air Management Connecticut Department of Environmental Protection Hartford, CT
IV-D-02/IV-G-02	M.H. Naylor, Director Clark County Health District Las Vegas, NV
IV-D-03	F.R. Caponi, Supervising Engineer Solid Waste Management Department County Sanitation Districts of Los Angeles Los Angeles, CA
IV-D-04	J.W. Brooks, Director Bureau of Air Quality Maine Department of Environmental Protection Augusta, ME
IV-D-05	E.J. Skernolis, Director of Government Affairs Waste Management Washington, DC
IV-G-01	B. Guzzone, Technical Divisions Manager C. Voell, Director of Technical Services Solid Waste Association of North America Silver Springs, MD

## 2.0 DISRUPTED LANDFILLS (§ 62.14351)

Comment: One commenter (IV-D-01) requested that the final rule apply to landfills for which vertical or horizontal dimensions change, regardless of whether the change results in an increase or decrease in dimensions. (The commenter is describing the definition of “modification,” as added to 40 CFR part 60, subpart WWW; see the landfills direct final rule, 63 FR 32743, June 16, 1998.) The commenter was concerned about cases where the landfill owner or operator disrupts the landfill by removing all or a portion of the disposed solid waste. Under this situation, the commenter stated that there is a potential for a significant increase in air pollutant emissions from the landfill with corresponding potential adverse effects on the environment and human health. The commenter requested that these emission increases be subject to the provisions of 40 CFR part 60, subparts Cc and WWW. (The proposed Federal plan, 40 CFR part 62, subpart GGG, has the same emission limits and control requirements as 40 CFR part 60, subparts Cc and WWW.)

Response: The EPA is not revising 40 CFR part 60, subpart Cc (emission guidelines), 40 CFR part 60, subpart WWW (new source performance standards), nor 40 CFR part 62, subpart GGG (Federal plan) to address reductions in a landfill’s permitted horizontal or vertical dimensions. The comment period on subparts Cc and WWW direct final rule clarifications ended on July 16, 1998. The commenter submitted the same comment after the close of the comment period of the subparts Cc and WWW direct final rule (63 FR 32743, June 16, 1998). This response is consistent with EPA’s memorandum dated September 16, 1998 and located in Docket No. A-98-03, Item No. IV-B-02.

The EPA is aware of activities involving the removal of waste from municipal solid waste landfills conducted pursuant to Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Resource Conservation and Recovery Act

(RCRA), or State remedial actions. As stated in § 60.750(c) of the subpart WWW, activities conducted pursuant to these programs do not by themselves trigger the applicability of the new source performance standards to these landfills. However, if the activities do not fall into the categories stated above, EPA would need to consider if emissions could increase in the situation described by the commenter. The EPA believes that emissions would not increase under the conditions described because the mass of solid waste does not increase. Since the mass does not increase, the methane generation potential,  $L_0$ , does not increase. Therefore, the EPA does not expect an increase of emissions. In addition, landfill emissions are typically generated in an anaerobic environment. Since the removal of waste will introduce oxygen into the landfill, anaerobic conditions will be retarded. Under these conditions, the potential for an increase in emissions is decreased rather than increased. Therefore, EPA concludes that activities to remove waste from a landfill should not be regulated under the emission guidelines or new source performance standards. The EPA is not revising the Federal plan because the Federal plan implements the emission guidelines and must be consistent with the emission guidelines.

### 3.0 STATE PLAN INTERIM APPROVAL (§ 62.14252(b))

Comment: Two commenters (IV-G-01 and IV-D-03) suggested that EPA issue a final rulemaking to provide interim approval of State plans that have been submitted to EPA but have not yet been approved or disapproved, while retaining the right to amend these plans upon its final review. These commenters suggested that if EPA approved State plans on an interim basis, the landfill owner or operator would be subject to only the State regulations without duplication of Federal requirements. Similarly, another commenter (IV-D-05) suggested that in order to avoid the costs and other burdens of duplicate or inconsistent regulation during the review period, EPA should defer to the provisions of State plans that have been submitted but not yet approved by EPA. The commenters were concerned that some States that have submitted State plans already have existing State requirements that remain in effect while EPA is reviewing the plans. If the EPA review is not completed before the final Federal plan takes effect, the Federal plan would also apply to landfills in these States. The MSW landfills in such States could then be subject to duplicative or inconsistent regulatory requirements.

One of the commenters (IV-D-05) provided an example of the potential for concurrent or conflicting requirements. Florida has had State regulations in place since the end of 1996 that are identical to the emission guidelines (40 CFR part 60, subpart Cc) for existing landfills. If the Federal plan is promulgated before the Florida State plan is approved, the commenter was concerned that these existing landfills may face Federal and State emission guidelines under two different time lines. He stated that these landfills should be allowed to follow the State's compliance deadlines and monitoring, recordkeeping and reporting requirements.

One commenter (IV-G-01) stated that the interim approval approach would simplify rule compliance because only the State would review the site-specific design plan, rather than EPA first, followed by the State. The commenter contended that 3 days (24 person-hours) is not enough time for EPA to review a design plan. Two commenters (IV-G-01 and IV-D-03) contended that the EPA has not committed the resources for adequate and comprehensive review of design plans. They stated that if EPA does not have time to review site-specific design plans that propose alternate designs or monitoring requirements, then the Federal plan may preclude landfill owners or operators from implementing simpler, less costly, and more effective alternatives on the local level. For example, the South Coast Air Quality Management District (SCAQMD) in California has implemented a rule to control active landfills. The SCAQMD rule employs a route monitoring strategy in lieu of grid monitoring. One of the commenters (IV-D-03) and many other landfill owners and operators undertook an extensive test program to show the equivalency of route monitoring. The commenter was concerned that if the proposed Federal plan is promulgated as is, landfill owners and operators could be faced with administering two separate monitoring programs that are redundant or conflicting. The commenters (IV-G-01 and IV-D-03) noted that States are more likely to be familiar with compelling site-specific issues requiring the need for suitable design plan alternatives and States have the resources to better verify the equivalency of alternatives.

Response: The EPA will not approve State plans on an interim basis for two reasons: (1) there is no legal basis for interim approval and (2) overlapping requirements are not likely. Subpart B of 40 CFR part 60, which was promulgated under authority of section 111(d) of the Clean Air Act, requires States with existing MSW landfills to submit State plans to EPA within 9 months of EPA's adoption of the emission guidelines. The EPA only has the authority to approve or disapprove a State plan based on whether it is consistent with subparts B and Cc. While section 502 of the Clean Air Act and 40 CFR 70.4(d) specifically authorize interim approval for title V permit programs, neither subpart B nor section 111(d) of the Clean Air Act authorizes EPA to grant similar interim approval of State or Tribal plans. The EPA will continue to accept and review State plans according to the criteria for State plans that are described in "Municipal Solid Waste



Landfill, Volume 2: Summary of the Requirements for Section 111(d) State Plans for Implementing the Municipal Solid Waste Emission Guidelines" (guidance document).

In addition, the EPA does not expect landfill owners or operators to be subject to duplicate or inconsistent regulation. The EPA expects that State plans that were submitted by December 1998 (when the Federal plan was proposed) will be approved or disapproved before the landfills Federal plan becomes effective. Once the State plan is approved and becomes effective, the owner or operator of a landfill covered by the State plan will not be subject to the Federal plan. If, as expected, State plans become effective prior to promulgation of the Federal plan, owners or operators of landfills in those States will have to comply only with the State plans and will not be subject to two different time lines or other inconsistent requirements. States like Florida and California that submitted State plans and are prepared to implement the emission guidelines will not be penalized.

Regarding review of design plans, the EPA expects that State plans will certainly be in effect before it is time to review site-specific design plans. Therefore, the State will in all likelihood be the only reviewer. Site-specific design plans are due within 1 year of first reporting NMOC emissions of 50 megagrams per year or more. For a landfill subject to the Federal plan, the earliest this date could be is 1 year and 90 days after the effective date of the Federal plan, or the fall of 2000. The EPA expects that State plans that have been submitted would have become effective well before this time.

If a State does not submit a State plan and EPA reviews the site-specific design plan, it will commit the necessary resources to ensure an expeditious review. The EPA has increased the estimate of the time required to review site-specific design plans to 30 hours. (See the revised Information Collection Request, ICR No. 1893.01 and Docket No. A-98-03, Item No. IV-B-04). The EPA did further analysis and determined that increasing the time allocated for reviewing and approving the design plan to 30 hours would be appropriate. The EPA based this estimate on a survey of EPA Regional Offices and several States. The EPA will fully consider simpler, less costly, and more effective alternatives at the local level as proposed in the site-specific design plans. The EPA intends to review design plans as expeditiously as possible so that there is sufficient time after approval of the plans for the landfills to install controls prior to the compliance date. (See 63 FR 69375.)

The EPA has designed the landfills Federal plan to facilitate the transfer of authority from EPA to States, Tribes, and local agencies. Parts of the Federal plan enforcement can be delegated to the State, including review of the design plans if a State requests delegation of that authority and demonstrates that it meets the criteria for delegation.

#### 4.0 INVENTORY OF LANDFILLS (§ 62.14355(a)(1))

Comment: One commenter (IV-D-04) stated that one purpose of the Federal plan appears to be to create a database of MSW landfills in order to estimate emissions. The commenter stated that the vast majority of small, closed landfills in Maine will never be able to be assessed due to lack of information. The commenter stated that the remaining operational landfills could keep records from this time forward, and where feasible, calculate their existing fill; however, there is little or nothing to be gained. The commenter provided a list of 396 landfills in Maine that are subject to the emission guidelines.

Response: The EPA will continue to require States that develop State plans to submit an inventory of existing landfills that accepted waste after November 8, 1987, consistent with 40 CFR 60.25, subpart B. The purpose of the inventory is to provide a record to the public of the existing MSW landfills in a State or Indian country. As part of the Federal plan, EPA prepared an inventory of landfills in States without State plans. The updated inventory can be found in Docket No. A-98-03, Item No. IV-B-03, supplemented by Item Nos. IV-J-04 and IV-J-15. The EPA appreciates the commenter's information on landfills in Maine. The information provided by the commenter is a useful supplement to EPA's inventory. The EPA is encouraging States to continue work on State plans, including inventories.

The EPA believes it is reasonable to expect States to know what landfills are in their geographic area and to provide this information in their State plans. While the inventory should list landfills of all sizes, it does not necessarily need to include estimated emissions for landfills with design capacities less than 2.5 million megagrams or 2.5 million

cubic meters where it may be unreasonable or impractical. This determination is explained in a memorandum from Bruce C. Jordan, Director of the Emission Standards Division, Office of Air Quality Planning and Standards, U.S. EPA. The January 27, 1997 memorandum allows States, in limited circumstances, to submit emission inventories as part of State plans without requiring in all cases, that States develop emissions data for smaller landfills, if development of such data is unreasonable or impractical. For example, it may be unreasonable or impractical for a State to estimate emissions for an MSW landfill below 2.5 million megagrams or 2.5 million cubic meters when the landfill is closed and there are no records of waste in place. The memo is available on the EPA Technology Transfer Website (TTN Web) at <http://www.epa.gov/ttn/uatw/landfill/landflpg.html> or in Docket No. A-98-03, Item No. IV-B-1).

## 5.0 CALCULATING EMISSIONS RATE FOR INVENTORY

Comment: One commenter (IV-D-04) contended that volatile organic compounds (VOC) cannot reliably or meaningfully be estimated from Maine municipal solid waste landfills and that there are likely other rural States with the same situation. (The landfills regulations measure emissions of landfill gas as nonmethane organic compounds or NMOC.) The commenter claimed that calculations to estimate the amount of future VOC emissions from Maine's landfills will be inaccurate and misleading because in many landfills the carbon has been driven off by legal and illegal open burning. The commenter stated that the "dumps" and then the small landfills in rural Maine had most of their trash burned during the 1980s and even in the early 1990s. The commenter stated that even after the State prohibited open burning of municipal solid waste in 1989, after-hour visitors commonly ignited trash on their own. The commenter also cited an article, "A Dirty Business," concluding that much of the wood and paper placed in landfills never decomposes, so emissions may be less than estimated. A copy of the article, which appeared in the January 23, 1999 edition of "New Scientist," was attached.

Response: States or EPA must develop inventories of landfills and their emissions as part of State plans or the Federal plan. The States should use whatever information is available to develop a reasonable estimate of emissions, and document the basis of the estimate. As explained in Section 4.0, under certain circumstances, States do not need to estimate emissions from small landfills in their inventory.

The EPA appreciates the article, "A Dirty Business." The article, which addresses the decomposition of paper and wood in landfills, however, is not relevant to this Federal.

plan rulemaking. This Federal plan rulemaking implements, but does not revise, the emission guidelines.

## 6.0 DESIGN CAPACITY ESTIMATES AND REPORTS (§ 62.14355)

Comment: One commenter (IV-D-04) contended that it is a meaningless task for towns to create design capacity reports based on uncertain data and where the landfills are no longer operating. Many of the small towns of Maine do not know and cannot determine the design capacity of their landfills. The commenter provided limited data on the 400 landfills in Maine: name, closure date, acreage, and population served. However, the height and density, which would be used to calculate the design capacity, are not available. The commenter stated that there is no way to recreate the history needed to get the height or density. However, based on the landfill acreage, the waste would need to be 36 to 4000 feet deep to reach the 2.5 million cubic meter design capacity cutoff. The commenter stated that there is at least one existing (and closed) landfill that would be covered by this rule. Most of the landfills are much smaller than the design capacity cutoff. In addition, most of Maine's landfills have been closed and have no additional capacity for future waste disposal. The commenter estimates that by the end of the year, 358 of Maine's 400 landfills will be closed.

The commenter (IV-D-04) also stated that in the final emission guidelines, municipalities were required to report regularly. The commenter stated that in this proposed rule, that reporting requirement is dropped.

Response: The emission guidelines require owners and operators subject to the Federal plan to submit design capacity reports, regardless of the size of the landfill. The Federal plan must be as stringent as the emission guidelines, therefore, the requirement to submit a design capacity report remains in the final Federal plan. The purpose of the design capacity report is to help determine which landfills may be subject to the

requirement to install a collection and control system. Closed landfills that accepted waste since 1987 are included because landfills continue to emit NMOC years after they have closed and are subject to the emission guidelines that are implemented by the Federal plan.

If data are not available on waste acceptance rates, then owners and operators should estimate their landfill's design capacity based on the best information available. For example, if owners or operators know the acreage of their landfills (the commenter provided the acreage for 396 landfills in the State), they could estimate the depth of waste based on available information, and document their assumption on depth. Then they could calculate the approximate volumetric design capacity of the landfill and submit the report. If capacity is clearly below 2.5 million cubic meters (or 2.5 million megagrams) no further action is required. Based on the data provided by Maine, it appears that most of the landfills in Maine would fall well below the design capacity cutoff for installing controls. For the larger landfills, the owner or operator would estimate NMOC emissions to determine whether a collection and control system would need to be installed.

Regarding the commenter's belief that the reporting requirements are not the same as the final emission guidelines, the EPA intended to and believes it has incorporated all of the requirements of the emission guidelines in the Federal plan, including reporting requirements.



## 7.0 CALCULATING EMISSIONS RATE FOR CONTROL APPLICABILITY (§ 62.14354(a))

Comment: One commenter (IV-D-02/IV-G-02) suggested that the nonmethane organic compound (NMOC) emissions at the Sunrise Mountain Landfill may not be as high as the emissions calculated using EPA methodology. The commenter noted that because of Nevada's dry climate, the actual emissions may be closer to the 50 metric tons (50 megagrams) threshold for installing a collection and control system, rather than the calculated amount of 859 megagrams per year. However, the commenter noted that as the installation of the collection system proceeds, a better estimate will accrue.

Response: It is unlikely that dry climate alone would result in a difference of emissions from 859 megagrams to 50 megagrams. However, EPA recognizes that landfills in dry climates have lower emission rates. The recent amendments to the landfill new source performance standards and emission guidelines (63 FR 32743, June 16, 1998) include a separate default methane generation rate (k) value to be used to calculate the NMOC emission rate in arid areas (those with 30-year average annual precipitation of less than 25 inches as measured at the nearest representative meteorological site). The arid (k) value is also included in the proposed and final Federal plan. The arid (k) value accounts for the slower decomposition rate of waste in those areas. The Federal plan includes a 3-tier procedure to calculate NMOC emission rates to determine whether a landfill is required to install controls. The commenter does not specify which "EPA methodology" they used to calculate emissions of 859 megagrams per year and whether or not they used the arid (k) value if they performed Tier 1 calculations. Tier 1 calculations, which the commenter may have used, tend to overstate NMOC emission rates for most landfills and are intended to indicate the need to install a collection and control system or perform a

more detailed Tier 2 analysis. Many factors can influence site-specific emissions. Tier 2 or 3 emission estimation procedures allow any owner or operator to measure and use site-specific values instead of Tier 1 default values for NMOC concentration and (k). The site-specific values would reflect any unique characteristics that would affect the emission rate of NMOC for that particular landfill. Tier 3 testing is, however, expensive, so if a landfill is well above 50 megagrams per year under Tier 2, they will want to consider whether to do Tier 3 testing or simply install controls.

Comment: One commenter (IV-D-05) recommended that the landfills Federal plan defer to alternative emission estimation methods, particularly State-approved methods. This would ensure that consistent and accurate emissions estimates are used in determining actions under the emission guidelines and new source performance standards (40 CFR part 60, subparts Cc and WWW) and related State programs, such as Title V permitting and New Source Review. Under the Federal plan as proposed, the EPA Administrator retains the authority to approve alternative methods to determine site-specific NMOC concentrations (and does not transfer this authority to the State or Tribe upon delegation of authority to implement and enforce the Federal plan). The commenter stated that facilities should be allowed to employ the most accurate emissions estimates.

The commenter also expressed concern that EPA may rely on default estimates based on AP-42 estimation methodology while States are using more recent and sophisticated emission methods that are proving more accurate. The commenter included a document on landfill emissions prepared by the Illinois Environmental Protection Agency. The document highlights the potential differences between methods of calculating landfill emissions.

The commenter also suggested that emission estimation procedures in AP-42, "Compilation of Air Pollution Emission Factors," as well as tiered estimation procedures in 40 CFR 60.754 be modified to establish more precise default values and calculation methods. (The landfills Federal plan, 40 CFR part 62, subpart GGG cross references the emission estimation procedures in 40 CFR 60.754.) Also, the commenter suggested that new scientific methods must be agreed upon and used in the guidance document and the regulation.

The commenter (IV-D-05) made the following points and recommendations:

- Develop better gas generation rate estimates for MSW.
- Give credit to reduction in emissions already achieved by existing gas collection and control systems. Once an appropriate gas generation model is chosen, then the gas collection and control system reductions in emissions can be more appropriately used in calculating potential net emissions.
- Recognize that the reduction of gas constituents occurs within the landfill and the soil cover and/or capping materials.
- The 1:1 correlation of methane generation and NMOCs has not been observed.
- There are temporal and spatial differences in gas generation rates and emissions even within the same landfill.

Response: The emission guidelines require the MSW landfill owner or operator to use the tiered calculation procedure described in 40 CFR 60.754 of subpart WWW to determine the eventual need for controls. The guidelines do not allow the use of AP-42 emission factors to determine whether a landfill must install controls. The tier calculation procedure was established during development of the new source performance standards and emission guidelines. The Federal plan implements the emission guidelines and must therefore use the same procedure. The EPA is not revising the new source performance standards or emission guidelines as part of this Federal plan rulemaking. The appropriate time to comment on the tier calculation procedure was during the public comment period for these regulations.

The tiered calculation procedure involves the calculation of the NMOC emission rate from a landfill. If the emission rate equals or exceeds a specified threshold (50 Mg NMOC/yr), the landfill owner or operator must install a gas collection and control system.

The first tier of the tiered calculation procedure is purposefully conservative to ensure that landfill emissions are controlled as appropriate. Tiers 2 and 3 allow site-specific measurements to determine emissions more accurately. Tier 2 calculations are based on site-specific measured NMOC concentrations ( $C_{\text{NMOC}}$ ) and yield a more accurate

estimate of the NMOC emission rate. Tier 3 calculations are based on both site-specific NMOC concentrations and a site-specific methane generation rate constant (k) and provide the most accurate NMOC emission rate estimate using the tiered procedures.

In addition, the Federal plan allows flexibility for States and landfill owners and operators to apply to use other more accurate methods to determine the NMOC concentration or a site-specific (k) as an alternative to the methods required in the regulation (§ 62.14354(b)). Section 60.754(b)(3) of subpart WWW (which is cross-referenced by § 62.14354 of Subpart GGG) allows an alternative method if the method has been approved by the Administrator. The EPA provides the mechanism for approving alternatives (§ 62.14350(b)). The landfill owner or operator can use the approved alternative methods to provide a better estimate of emissions for a particular landfill.

To ensure national consistency, the Administrator is retaining the authority to approve alternative methods to determine site-specific NMOC concentrations and methane generation rate constants and is not transferring this authority to the State or Tribe upon delegation of authority to implement and enforce the Federal plan. The EPA will review and consider any applications for site-specific methods that it receives.

For estimating emissions for State inventories and related State programs, such as Title V permitting and New Source Review, a State may use its own procedures. Tier 1 default values are not recommended for inventories because they tend to overestimate emissions from many landfills. As mentioned previously, the default values are purposely conservative because they serve as an indicator of the need to install a collection and control system.

Although AP-42 emission factors are not allowed in the calculations for determining the need for controls, the Federal plan, emission guidelines, and guidance document recommend using AP-42, which has values that are more typical than Tier 1 defaults, for permitting and inventories. AP-42 is referenced in the Federal plan, emission guidelines and new source performance standards in two cases. First, § 60.764(c) of the new source performance standards (which is referenced by the Federal plan and emission guidelines), states that when calculating emissions for Prevention of Significant Deterioration (PSD) permitting purposes, AP-42 or other approved procedures should be used. Second, § 60.755(a)(1) states that AP-42 default values for (k) and  $L_0$  or site-

specific values demonstrated to be appropriate and approved by the Administrator should be used for calculating the maximum expected gas generation flow rate in preparing the design plan for collection system equipment.

## 8.0 INCREMENTS OF PROGRESS (§§ 62.14351 AND 62.14355(b))

Comment: One commenter (IV-D-05) stated that the proposed Federal plan increments of progress are more stringent than the emission guidelines for existing landfills and the new source performance standards for new landfills. The commenter contended that the proposed Federal plan would impose a more burdensome regulatory requirement on existing landfills above and beyond that which is included in the emission guidelines. The commenter recommended eliminating the increments of progress and in their place requiring owners or operators to comply with the recordkeeping and reporting provisions of the new source performance standards. The commenter stated that existing landfills should be given the same flexibility for achieving compliance with Federal plan emission guidelines as are new landfills under the new source performance standards.

Response: The requirements for existing landfills under the emission guidelines and the Federal plan are essentially the same as the requirements for new landfills under the new source performance standards. For existing MSW landfills, five increments of progress are required by 40 CFR part 60, subpart B. These five increments of progress are:

- (1) Submit final control plan (collection and control system design plan);
- (2) Award contracts;
- (3) Begin construction;

- (4) Complete construction, and
- (5) Reach final compliance.

Increments 1, 4, and 5 are also required by the emission guidelines for existing landfills. For new MSW landfills, three increments of progress are required by the new source performance standards. These three increments of progress are:

- Submit final control plan;
- Complete construction; and
- Reach final compliance.

Subpart B does not apply to new landfills, thus, the increments to award contracts and begin construction are not required for new landfills.<sup>1</sup> Although these two increments of progress do apply to existing landfills, there is flexibility in the dates for meeting them. Unlike the compliance time periods for increments 1, 4, and 5, which are specified in the emission guidelines, no time periods are specified for increments 2 and 3 in either subpart B or the emission guidelines. Thus, the Federal plan allows the State, local or Tribal authority, or the landfill owner or operator to request different time periods for these increments versus the generic time periods specified in the Federal plan.

The EPA believes the proposed interim dates for increments 2 and 3 are achievable, but the landfill owner or operator also has the flexibility to submit alternative interim dates under § 62.14356(d) of the Federal plan. This option (option 3) is discussed in detail in the proposal preamble (see 63 FR 69374).

Comment: One commenter (IV-D-05) suggested that the final control plan (collection and control system design plan or design plan) should be consistent with the new source performance standards. The commenter noted that the last sentence of the definition of final control plan in § 62.14351 could be deleted without consequence. That

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<sup>1</sup>While subpart B does not apply to new MSW landfills, the general provisions (40 CFR 60.7) do and they require owners or operators of affected facilities (which include new MSW landfills) to provide notification to EPA of certain actions they plan to take or have taken. One of these actions is when they begin construction. This notification requirement for new MSW landfills is not altered by EPA's promulgation of the MSW landfills Federal plan.

sentence reads: "The final control plan also must include the same information that will be used to solicit bids to install the collection and control system."

The commenter (IV-D-05) stated that this requirement is inconsistent with the commenter's conversations with EPA in 1997 during negotiations over technical corrections to 40 CFR part 60, subpart Cc and WWW. The commenter says that those conversations clarified that the new source performance standards design plans should show the gas collection system for sites at final grade only.

The commenter provided the following reasons for deleting the bid information in the design plan.

- The requirement is more stringent than the new source performance standards requirement.
- Bid information in the design plan would not be practical for sites that still have several additional years of life, and whose gas systems will be installed in multiple phases.
- Bid information would have to be prepared before the design plan is approved, therefore the bid information might have to be redone if EPA disapproves the plan.
- It was not the intent of the new source performance standards to utilize the design plan as a tool for bidding purposes. Rather, the design plan is a technical document with the specific purpose of demonstrating that the landfill gas collection system planned for the facility will meet the control requirements of the regulations.

Response: The EPA agrees that it is appropriate to delete the last sentence from the proposed definition of final control plan to make the definition consistent with the emission guidelines and the guidance document. However, other requirements for submitting the final control plan remain the same. The owner or operator must submit the final control plan within 1 year after the NMOC emission rate first equals or exceeds 50 megagrams per year.

The design plan must cover the area to be controlled over the intended period of use (lifetime) of the gas control system, not just areas at final grade. As specified in § 60.752(b)(2)(ii), the collection system must be designed to handle the maximum



expected gas generation rate from the entire area of the landfill that warrants control over the intended period of use of the gas control or treatment system. Active areas in which the initial waste has been in place 5 years and closed or final grade areas where the initial waste has been in place 2 years must be controlled. As the landfill expands, the collection system must be expanded into areas that meet these criteria. Thus, if a control system is expected to last 15 years (for example), the design plan must take into account all active areas of the landfill that are expected to meet the 2-year/5-year criteria within the next 15 years, given the expected waste acceptance rate. The design plan should include the initial design and plans for system expansion.

## 9.0 DELEGATION

Comment: One commenter (IV-D-04) recommended that States should not be the enforcement agent under the Federal plan. The commenter, a State agency, noted that it did not want to take delegation of the Federal plan, especially if it requires collection of design capacity reports from hundreds of rural towns with small, closed landfills.

Response: A State is not obligated to take delegation of the Federal plan. However, the EPA believes that the State, Tribal, and local agencies are in the best position to design, adopt, and implement the control programs needed to meet the requirements of the MSW landfills Federal plan in their jurisdictions. This is consistent with Congress' overarching intent that the primary responsibility for air pollution control rests with State and local agencies. See 63 FR 69375, December 16, 1998 and the Clean Air Act section 101(a)(3).

The EPA continues to strongly encourage States, Tribes, and local agencies to submit approvable State plans. For States that are unable to submit plans, the EPA strongly encourages them to request delegation of the Federal plan, if feasible. The EPA has designed the Federal plan to facilitate the transfer of authority from EPA to States, Tribes, and local agencies.

## TECHNICAL REPORT DATA

*(Please read Instructions on reverse before completing)*

1. REPORT NO <b>EPA-456/R-99-001</b>	2.	3. RECIPIENT'S ACCESSION NO
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