

that do not meet the control device applicability thresholds of the EG/NSPS.

*Comment:* Several other comments included suggested changes to proposed rule applicability language.

*Response:* We have revised sections 63.1935, 63.1940, and 63.1945 to clarify the application of the final rule to major sources, area sources and smaller landfills collocated with major sources, as well as identify the affected source for the final rule and clarify the timing of the regulatory requirements. We also added language to section 63.1955 to further explain that landfills required to install a collection and control system under NSPS, Federal, State or tribal plans that implement the EG must also meet the requirements in sections 63.1960 through 63.1980 of the final rule.

*Comment:* Two commenters requested clarification of the timing of the final rule regulatory requirements. They pointed out that the proposal preamble indicated that the additional requirements of the final rule (compared to the NSPS) do not take effect until the landfill is required to install controls under the EG/NSPS, but the regulation language was not clear.

*Response:* In response to this comment, we revised section 63.1945 to be consistent with our intent at proposal. The wording of this section continues to require that new sources comply with the final rule on the date of publication of the final rule or at the time they begin operation, whichever is later; and that existing sources comply with the final rule by January 16, 2004. At that time, the source is required to comply with the NSPS or the Federal, State, or tribal plan that implements the EG. We have added language to this section to clarify when landfills must comply with certain requirements within the final rule. New affected sources must comply with the additional final rule requirements (such as the SSM plan and the semiannual reporting of deviations) on the date the landfill is required to install collection and control systems under the NSPS. Existing affected sources must comply with the additional final rule requirements on the date the landfill is required to install collection and control systems under the NSPS, Federal, State or tribal plan or 1 year after publication of the final rule, whichever is later.

#### B. Major Source Determination

*Comment:* Several commenters expressed concern that we overestimated the number of major source landfills. The commenters contend that AP-42 emissions factors

are incorrect and provide overestimates of landfill gas emissions, that EG/NSPS controls should be taken into account when determining major source status of landfills, and that using NMOC as a HAP surrogate is too arbitrary.

*Response:* We respond that we used the best method for calculating emissions that is currently available and accepted, which is the current version of AP-42. The EPA program responsible for AP-42 factors is reviewing existing reports and technical data as well as undertaking a landfill testing program to collect additional HAP data. Currently, the data collection and analysis are not yet complete, and could not be completed prior to promulgation of the final rule. When we update the AP-42 chapter on landfill emissions, we will consider all relevant data. However, any update of AP-42 or adjustment of calculation procedures would not affect our regulatory decisions in developing the final rule. We find that the MACT floor is the EG/NSPS level of control. The floor is based on the current level of control at major and synthetic area sources and would not change if there were somewhat fewer or more major sources than previously estimated.

We agree that in determining whether a source is major, enforceable control requirements should be considered. The statement in the proposal preamble identifying 1,140 facilities as major sources may not have been clear. The intent was to say that based on estimates of maximum uncontrolled emissions, 1,140 landfills have potential emissions greater than 10 tpy individual HAP or 25 tpy of a combination of HAP. Some of the 1,140 landfills are major sources and others are "synthetic area" sources (sources that would otherwise be major if not for enforceable emissions controls). Both major and synthetic area sources were correctly included in the MACT floor determination. The CAA does not suggest we exclude a control technology from consideration in the MACT floor because it is so effective it reduces emissions from a source such that the source is no longer a major source of HAP.

To determine major source status for rule applicability, a landfill owner/operator would consider enforceable control requirements such as the NSPS. Since the landfills NESHAP requirements for area sources that meet the NSPS capacity criteria and have uncontrolled NMOC emissions of 50 Mg/yr or greater are the same as for major sources, this classification would not change the control or reporting requirements for the landfill. It should be noted that the final rule has not redefined major source. Major source

status is determined according to the NESHAP general provisions definition. Nonmethane organic compounds are a surrogate for HAP control, not for whether a facility is a major source. Nonmethane organic compounds are an appropriate surrogate for HAP control because all HAP regulated by the final rule are contained in the NMOC portion of the landfill gas. Landfill owners/operators are already required to estimate NMOC under the EG/NSPS, and it is not necessary to increase the burden by requiring specific HAP measurements as well.

#### C. Bioreactors

*Comment:* We received several comments about the timing of startup of the gas collection and control system. Three commenters expressed concern that due to a wide range of possible development scenarios, commencing operation of the gas collection and control system within 90 days of liquids addition may not be appropriate in all cases. Two of the commenters stated that the generation rates of landfill gas during the initial development phases of bioreactors are a function of many factors and substantial quantities of recoverable landfill gas may not be available due to low waste acceptance rates, hybrid bioreactor operations, high inorganic waste fractions, or low liquids addition rates where gas generation is likely to be similar to that of conventional landfills. Under these circumstances, premature startup of the gas control system may result in significant volumes of air being introduced into the bioreactor, thus killing methane-producing bacteria. These commenters recommended extending the startup time frame to 180 days or establishing a process for waiving or delaying the startup date if local conditions warrant.

*Response:* In response to this comment, we have changed the final rule to allow 180 days instead of 90 days to begin operation of the collection and control system. We are aware that bioreactors may experience variable emissions rates upon initial liquids addition due to site-specific factors such as those described by the commenters. Furthermore, gas collection systems for bioreactors are site-specific and are likely to use newer designs, so operators may require time to gain experience and make operational adjustments to their systems. The 180 day period will allow time for landfill operators to adjust their collection systems such that they can achieve continuous, stable collection and control system operation.

*Comment:* Four commenters requested clarification as to whether the