

should examine the applicability criteria in §§ 63.7181 and 63.7182 of the final rule to decide whether your facility

is regulated by the standards. If you have any questions about whether your facility is subject to the standards, call

the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

CATEGORIES AND ENTITIES POTENTIALLY REGULATED BY THE STANDARDS

Category	NAICS code	SIC code	Examples of regulated entities
Industrial	334413	3674	Semiconductor crystal growing facilities, semiconductor wafer fabrication facilities, semiconductor test and assembly facilities.

Judicial Review. Under section 307(b) of the CAA, judicial review of the final rule is available only by filing a petition for review in the United States Court of Appeals for the District of Columbia Circuit by July 21, 2003. Under section 307(d)(7)(B) of the CAA, only an objection to the rule which was raised with reasonable specificity during the period for public comment can be raised during judicial review. Moreover, under section 307(b)(2) of the CAA, the requirements established by this final action may not be challenged separately in any civil or criminal proceeding we bring to enforce these requirements.

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

I. Background

A. What Is the Source of Authority for Development of NESHAP?

B. What Criteria Do We Use in the Development of NESHAP?

II. What Changes and Clarifications Have We Made for the Final Standards?

A. MACT Floors and Emission Limits

B. Compliance Options and Procedures

III. Response to Comments on the Proposed NESHAP for Semiconductor Manufacturing

IV. What Are the Final Standards?

A. What Is the Source Category?

B. What Is the Affected Source?

C. What Are the Emission Standards?

V. When Must I Comply With the Final Rule?

VI. What Are the Testing and Initial Compliance Requirements?

A. Test Methods and Procedures

B. Monitoring Requirements

VII. What Notification, Recordkeeping, and Reporting Requirements Must I Follow?

VIII. What Are the Environmental, Energy, and Economic Impacts of the Final Rule?

A. What Are the Secondary and Energy Impacts?

B. What Are the Cost Impacts?

C. What Are the Economic Impacts?

IX. 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 & Safety Risks

H. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution, or Use

I. National Technology Transfer Advancement Act

J. Congressional Review Act

I. Background

A. What Is the Source of Authority for Development of NESHAP?

Section 112 of the CAA requires us to list categories and subcategories of major sources and area sources of HAP and to establish NESHAP for the listed source categories and subcategories. On July 16, 1992, major source categories covered by the NESHAP were listed under the Semiconductor Manufacturing industry group (57 FR 31576). Major sources of HAP are those that have the potential to emit considering controls, in the aggregate, 10 tons per year (tpy) or more of any HAP or 25 tpy or more of any combination of HAP.

B. What Criteria Do We Use in the Development of NESHAP?

Section 112 of the CAA requires that we establish NESHAP for the control of HAP from both new and existing major sources. The CAA requires the NESHAP to reflect the maximum degree of reduction in emissions of HAP that is achievable. This level of control is commonly referred to as MACT.

The MACT floor is the minimum control level allowed for NESHAP and is defined under section 112(d)(3) of the CAA. In essence, the MACT floor ensures that the standard is set at a level that assures that all major sources achieve the level of control at least as stringent as that already achieved by the better-controlled and lower-emitting sources in each source category or subcategory. For new sources, the MACT floor cannot be less stringent than the emission control that is achieved in practice by the best-controlled similar source. The MACT standards for existing sources can be less stringent than the standards for new sources, but they cannot be less stringent than the average emission limitation achieved by the best

performing 12 percent of existing sources in the category or subcategory (or the best performing five sources for categories with fewer than 30 sources).

In developing MACT, we also consider control options that are more stringent than the floor. We may establish standards more stringent than the floor based on consideration of the cost of achieving the emission reductions, any health and environmental impacts, and energy requirements.

II. What Changes and Clarifications Have We Made for the Final Standards?

In response to public comments received on the proposed standards, we made several changes in developing the final rule. Some of the changes had a direct effect on the MACT floors and emission limits, while other changes clarified the substantive requirements for the final rule. A more comprehensive summary of comments and responses can be found in Docket No. A-97-15 and E-Docket No. OAR-2002-0086.

A. MACT Floors and Emission Limits

Process vents. When we developed the original MACT floors for process vents, we first determined the control efficiency, expressed as percent emission reduction, for each process vent for which we had inlet and outlet HAP concentration data. We then ranked the process vents based on the control efficiency achieved. Based on the best performing five process vents, we determined that thermal oxidation was used for emission control on four of them. Consequently, we selected thermal oxidation as the MACT floor. For the emission limit, we chose 98 percent control as representative of the level of control typically achieved by thermal oxidizers in practice. We decided not to base the emission limit on the reported performance of the thermal oxidizers because, in all cases, the inlet streams were high volume with low concentration of HAP. Under those conditions, measurements of the actual performance of a thermal oxidizer can be unreliable. As such, we believe