

**ENVIRONMENTAL PROTECTION AGENCY****40 CFR Parts 63, 264, 265, 266, 270, and 271**

[FRL-7143-3]

RIN 2050-AE79

**NESHAP: Interim Standards for Hazardous Air Pollutants for Hazardous Waste Combustors (Interim Standards Rule)****AGENCY:** Environmental Protection Agency (EPA).**ACTION:** Final rule.

**SUMMARY:** On September 30, 1999, EPA promulgated standards to control emissions of hazardous air pollutants from incinerators, cement kilns and lightweight aggregate kilns that burn hazardous wastes. A number of parties sought judicial review of the rule. On July 24, 2001, the United States Court of Appeals for the District of Columbia Circuit (the Court) granted the Sierra Club's petition for review and vacated the challenged portions of the rule. In its decision, the Court invited EPA or any of the parties that challenged the regulations to file a motion with the Court to request either that the current standards remain in place, or that EPA be allowed time to develop interim standards, pending further time in which EPA develops standards complying with the Court's opinion. On October 19, 2001, EPA, together with all other petitioners, jointly moved the Court to stay the issuance of its mandate for four months to allow EPA time to develop interim standards. The motion contemplates that EPA will issue final standards by June 14, 2005. The joint motion also details other actions EPA intends to take. These actions include promulgating, by February 14, 2002, a rule with amended interim emission standards and several compliance and implementation amendments to the rule which EPA proposed on July 3, 2001. The Court has granted this motion and stayed issuance of its mandate until February 14, 2002.

Today's rule amends the September 1999 emission standards, with certain provisions amended as set out in the parties' joint motion. The rule also adopts the compliance and implementation amendments described in that motion. Although this Interim Standards Rule results in emission reductions that are less stringent than those of the September 1999 rule, we believe it achieves most of the emission gains of that rule. Promulgation of the rule now, before the Court issues its

mandate, also avoids the severe problems relating to developing the Maximum Achievable Control Technology (MACT) on a source-by-source basis pursuant to section 112(j)(2) of the Clean Air Act, which applies if there are no national standards in place. We believe that adopting this Interim Standards Rule now best fulfills the statutory requirement to have national emission standards in place by a specified time, while avoiding unnecessary disruption and burden to regulated industry and affected state and federal administrative agencies.

**DATES:** Effective Date: This final rule is effective on February 13, 2002.

Compliance Date: You are required to comply with these promulgated standards by September 30, 2003.

**ADDRESSES:** You may view the docket to this rulemaking in the RCRA Information Center (RIC), located at Crystal Gateway I, First Floor, 1235 Jefferson Davis Highway, Arlington, VA. The docket number is F-2002-RC7F-FFFF. The RIC is open from 9 a.m. to 4 p.m., Monday through Friday, excluding federal holidays. To review docket materials, we recommend that you make an appointment by calling (703) 603-9230. You may copy a maximum of 100 pages from any regulatory docket at no charge. Additional copies cost \$0.15/page.

**FOR FURTHER INFORMATION CONTACT:** For general information, call the RCRA Call Center at 1-800-424-9346 or TDD 1-800-553-7672 (hearing impaired). Callers within the Washington Metropolitan Area must dial 703-412-9810 or TDD 703-412-3323 (hearing impaired). The RCRA Call Center is open Monday-Friday, 9 am to 4 pm, Eastern Standard Time. For more information, contact Frank Behan at 703-308-8476, [behan.frank@epa.gov](mailto:behan.frank@epa.gov), or Michael Galbraith at 703-605-0567, [galbraith.michael@epa.gov](mailto:galbraith.michael@epa.gov), or write to them at the Office of Solid Waste, 5302W, U.S. EPA, Ariel Rios Building, 1200 Pennsylvania Avenue, NW., Washington, DC 20460.

**SUPPLEMENTARY INFORMATION:****Acronyms Used in the Rule**

APCD—Air pollution control device  
 ASME—American Society of Mechanical Engineers  
 CAA—Clean Air Act  
 CEMS—Continuous emissions monitors/monitoring system  
 COMS—Continuous opacity monitoring system  
 CFR—Code of Federal Regulations  
 DOC—Documentation of Compliance

DRE—Destruction and removal efficiency dscf—Dry standard cubic feet dscm—Dry standard cubic meter  
 EPA/USEPA—United States Environmental Protection Agency  
 gr—Grains  
 HAP—Hazardous air pollutant  
 HWC—Hazardous waste combustor  
 MACT—Maximum Achievable Control Technology  
 NESHAP—National Emission Standards for HAPs ng—Nanograms  
 NIC—Notice of Intent to Comply  
 NOC—Notification of compliance  
 OPL—Operating parameter limit  
 PM—Particulate matter  
 POHC—Principal organic hazardous constituent ppmv—Parts per million by volume  
 RCRA—Resource Conservation and Recovery Act  
 TEQ—Toxicity equivalence

*Official Record.* The official record is the paper record maintained at the address in **ADDRESSES** above.

*Supporting Materials Availability on the Internet.* Supporting materials are available on the Internet. To access the information electronically from the World Wide Web, type <http://www.epa.gov/epaoswer/hazwaste/combust>.

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**Part One—What Events Led Up to This Rule?**

*I. What Is the Background?*

A. What Is the Phase I Rule?

Today's notice finalizes specific changes to the NESHAP: Final Standards for Hazardous Air Pollutants for Hazardous Waste Combustors (Phase I) rule, published September 30, 1999

(64 FR 52828). In the Phase I final rule, we adopted National Emissions Standards for Hazardous Air Pollutants, pursuant to section 112(d) of the Clean Air Act (CAA) to control toxic emissions from the burning of hazardous waste in incinerators, cement kilns, and lightweight aggregate kilns. These emission standards created a technology-based national cap for hazardous air pollutant emissions from the combustion of hazardous waste in these devices. Additional risk-based conditions necessary to protect human health and the environment may be imposed presently (assuming a proper, site-specific justification) under section 3005(c)(3) of the Resource Conservation and Recovery Act (RCRA) (and may ultimately be imposed under section 112(f) of the Clean Air Act as well).

Section 112(d) of the CAA requires emissions standards for hazardous air pollutants to be based on the performance of the Maximum Achievable Control Technology (MACT). These standards apply to the three major categories of hazardous waste burners—incinerators, cement kilns, and lightweight aggregate kilns. For purposes of today's rule, we refer to these three categories collectively as hazardous waste combustors (HWC).

B. How Did the Court's Opinion To Vacate Challenged Portions of the Rule and the Parties' Joint Motion To Stay the Mandate Affect Phase I and Today's Rule?

A number of parties, representing interests of both industrial sources and of the environmental community, sought judicial review of the Phase I rule. On July 24, 2001, the United States Court of Appeals for the District of Columbia Circuit (the Court) granted the Sierra Club's petition for review and vacated the challenged portions of the rule. *Cement Kiln Recycling Coalition v. EPA*, 255 F. 3d 855 (D.C. Cir. 2001). The Court held that EPA had not demonstrated that the standards met the statutory requirement of being no less stringent than (1) the average emission limitation achieved by the best performing 12 percent of existing sources and (2) the emission control achieved in practice by the best controlled similar source for new sources. 255 F.3d at 861, 865–66. As a remedy, the Court, after declining to rule on most of the issues presented in the Industry petitions for review, vacated the “challenged regulations,” stating that: “[W]e have chosen not to reach the bulk of industry petitioners' claims, and leaving the regulations in place during remand would ignore petitioners' potentially meritorious

challenges.” *Id.* at 872. Examples of the specific challenges the Court indicated might have merit were provisions relating to compliance during start up/shut down and malfunction events, including emergency safety vent openings, the dioxin standard for lightweight aggregate kilns, and the semi-volatile metal standard for cement kilns. *Id.* However, the Court stated, “[b]ecause this decision leaves EPA without standards regulating [hazardous waste combustor] emissions, EPA (or any of the parties to this proceeding) may file a motion to delay issuance of the mandate to request either that the current standards remain in place or that EPA be allowed reasonable time to develop interim standards.” *Id.*

Acting on this invitation, all parties moved the Court jointly to stay the issuance of its mandate for four months to allow EPA time to develop interim standards. The interim standards will replace the vacated standards temporarily, until final standards are promulgated.

The motion indicates that EPA would issue final standards which fully comply with the Court's opinion by June 14, 2005, and it indicates that EPA and Petitioner Sierra Club intend to enter into a settlement agreement requiring us to promulgate final rules by that date, and that date be judicially enforceable. The joint motion also details other actions we agreed to take, including issuing a one-year extension to the September 30, 2002 compliance date (66 FR 63313, December 6, 2001), and promulgating by February 14, 2002 several of the compliance and implementation amendments to the rule which we proposed on July 3, 2001 (66 FR 35126). These final amendments will be published in tomorrow's **Federal Register**. The joint motion can be viewed and downloaded from EPA's Hazardous Waste Combustion Website: <http://www.epa.gov/epaoswer/hazwaste/combust/preamble.htm>.

We believe that implementation of today's interim standards will be beneficial to the regulated community, the state implementing programs, and the environment. Compliance with these interim standards will result in emissions reductions sooner than if the hazardous waste combustion standards were vacated. It also provides a more orderly transition to final standards than if the current rules were vacated without replacement standards being in place due to the operation of the so-called hammer provisions of section 112(j)(2) and 112(g)(2) of the CAA. These hammer provisions are discussed in the next section.

## II. Good Cause for Issuing the Rule

Section 553 of the Administrative Procedure Act, 5 U.S.C. 553(b)(B), provides that, when an agency for good cause finds that notice and public procedure are impracticable, unnecessary or contrary to the public interest, the agency may issue a rule without providing notice and an opportunity for public comment.<sup>1</sup> EPA so finds here.<sup>2</sup>

First, the regulated community and environmental community have had actual notice of the contents of this rule, and opportunity to comment upon it, due to the exhaustive negotiations leading to filing of the joint motion on October 19, 2001, which motion recited the projected contents of this Interim Standards Rule. It is well-settled that actual notice satisfies all obligations to provide notice and opportunity for comment as to those persons. *Small Refiner Lead Phase-Down Task Force v. EPA*, 705 F. 2d 506, 548 (D.C. Cir. 1983).

Second, with respect to entities that were not part of this negotiating process, EPA finds that there is good cause to issue the rule without prior proposal in order to avoid the consequences of not having a standard in place. The consequence of vacating the present rule before EPA promulgates a replacement rule is that the statutory "hammer" provisions would operate with respect to major sources, and that there would be no CAA standards for area sources.<sup>3</sup> Congress required that EPA promulgate national standards to control emissions of hazardous air pollutants by designated dates. Congress also added the hammer provisions to create a strong incentive to assure that those standards are adopted and go into force. Section

112(j)(2) of the Act thus provides that "[i]n the event that the Administrator fails to promulgate a standard for a category \* \* \* of major sources by the date established pursuant to subsection (e)(1) and (3) of this section," prescribed consequences occur. 42 U.S.C. 7412(j)(2). The first of these is that "18 months after such date, the owner or operator of any major source in such category \* \* \* shall submit a permit application." *Id.* Permit writers (either federal or state) must then establish emission limitations for each major source which they "determin[e], on a case-by-case basis, to be equivalent to the limitation that would apply to such source if an emission standard had been promulgated in a timely manner under subsection (d)." *Id.* 42 U.S.C. 7412(j)(5). These site-specific permit limitations can be superseded by subsequently promulgated national standards. Should such a standard be promulgated, the permitting authority "shall revise such permit upon the next renewal to reflect the standard \* \* \* providing such a reasonable time to comply, but no longer than 8 years after such standard is promulgated or 8 years after the date on which the source is first required to comply with the [site-specific emission standard], whichever is earlier." *Id.* § 7412(j)(6). Thus there could be considerable delay before sources are subject to a national CAA section 112(d) standard once a section 112(j)(5) permit is issued.

There are significant adverse consequences of vacating the existing rule and allowing the section 112(j) hammer to operate:

### A. Failure To Control Area Sources

The hammer requirement applies only to major sources of hazardous air pollutants. We determined, pursuant to CAA section 112(c)(3), however, that regulation of all hazardous waste combustor area sources (*i.e.*, sources below the major source threshold) is necessary because of the threat of potential adverse effects to human health or the environment posed by these sources. 64 FR at 52837-52838. If this Interim Standards Rule is not adopted now, before the mandate issues, these area sources would not be subject to any CAA standards for hazardous air pollutants until the compliance date for the projected 2005 rule.

### B. No National Standards for Major Sources for a Long Period

If this Interim Standards Rule is not issued now, major hazardous waste combustor sources would not be subject to national CAA MACT standards for a prolonged period. Even if the case-by-

case permitting process goes smoothly, permitting authorities have up to 18 months to issue such permits after a complete application is filed. See 40 CFR 70.4(b)(6). The permitting authority could then allow up to a 3-year compliance date (42 U.S.C. 7412(j)(5)), so that sources may not be subject to emission standards until 2006. Yet these sources were to have been subject to national standards no later than November 2003. CAA sections 112(e)(1) and (i)(3).

### C. Case-by-Case Permit Standards Delaying Compliance With More Stringent National Standards

Case-by-case permit limitations do not have to be modified to reflect more stringent subsequent national standards until the permit is renewed or until 8 years from the date the national standard is promulgated or 8 years from the time the permit is issued, whichever is earlier. CAA section 112(j)(6). A scenario thus could result where major sources receive case-by-case permits in 2004 before EPA issues a national rule, and then might not have to comply with a national standard until 2012. This result is again far later than the expected 2003 date for compliance with national section 112(d) standards.

### D. Inconsistent Permit Standards

The case-by-case permitting process, with its hundreds of separate determinations, necessarily raises the prospect of potentially inconsistent determinations. The general statutory scheme, however, is that sources in a category or subcategory will be subject to a common standard. Such inconsistency could also lessen the degree of emission reduction Congress contemplated in requiring that sources be subject to national technology-based standards developed pursuant to section 112(d).

### E. Adverse Consequences to Regulated Sources

The case-by-case permitting process also poses adverse consequences for regulated sources. The immediate burden is to submit permit applications to federal or state permit-writing authorities. Some industry sources may also face the possibility that individual permit limits could be so inconsistent with later national standards that the source will have to develop a new strategy for achieving emission reductions (with consequent loss of investment in the equipment needed to comply with the case-by-case permit), and the prospect of continuing to comply with Resource Conservation and

<sup>1</sup> Section 553 of the Administrative Procedure Act does apply here, even though issues of rulemaking procedure under the Clean Air Act are normally controlled by CAA section 307(d). See CAA section 307(d)(1) final sentence, indicating that the CAA provisions do not apply to rules covered by section 553(b)(B) of the Administrative Procedure Act.

<sup>2</sup> EPA notes as well that certain of the provisions adopted today (those dealing with the revised standards and compliance provisions) are the subject of prior notice and opportunity for comment, so that no good cause finding is required for such provisions. In addition, for all of the provisions of the rule which we are repromulgating in existing form, notice and opportunity for comment is unnecessary since these provisions have already been the subject of exhaustive notice and comment rulemaking.

<sup>3</sup> EPA's interpretation that the hammer provisions apply is based on the statutory language and evident Congressional purpose to create a default mechanism whenever there are no national Clean Air Act section 112(d) standards in place on or after the hammer date. See also *Steel Mfr's Ass'n v. EPA*, 27 F. 3d 642, 647-48 (D.C. Cir. 1994) holding that EPA reasonably construed analogous hammer provisions of the Resource Conservation and Recovery Act to apply if a rule is issued but vacated so as not to be in place on the hammer date.

Recovery Act (RCRA) permit conditions for air emissions.

#### F. Administrative Burdens

The administrative burdens on EPA and on States administering CAA permit programs likewise will be significant if a case-by-case permitting process is triggered if this rule is not promulgated by the mandate issuance date. Processing many permit applications from hazardous waste combustors, and trying to develop standards equivalent to maximum achievable control technology on a case-by-case basis, can only further complicate an already exceedingly difficult permit-issuance task.

EPA notes further that in the scarce time between the Court issuing an order staying its mandate and the present, we have used best efforts to provide notice of this projected Interim Standards Rule. We posted the joint motion and appendices on websites, and also solicited comment on these documents in the section 112(g) settlement notice published in the **Federal Register** on November 16, 2001. 66 FR 57715. We have responded to all of the comments received on that notice. However, it has proved impossible to provide further notice and opportunity for comment given the lack of time before issuance of the mandate, and the need for EPA to focus on development of the 2005 final standards, which will implement MACT for these sources.

Therefore, in light of the fact that Congress intended for national standards to already be in place for hazardous waste combustors, and that a case-by-case permitting regime for those combustors could have adverse consequences for regulated sources, state and federal permitting authorities, and for the environment, we believe that there is good cause for this rule to issue without additional notice and opportunity for comment. *Small Refiner Lead Phase-Down Task Force*, 705 F.2d at 545–46 (inviting EPA to issue an interim standards rule to avoid a regulatory gap and noting that there probably exists “good cause” under 5 U.S.C. 553(b)(B) to issue the rule without prior notice and opportunity for comment). EPA also finds that good cause exists under U.S.C. 553(d)(3) for making this rule effective less than 30 days after publication in the **Federal Register**.

#### III. What Is Included in This Rule?

In this rulemaking, we are retaining the existing Part 63, Subpart EEE, regulations, except for the following changes:

- We are revising certain emission standards as follows: (a) The semi-volatile metals standard for new incinerators; (b) the semi-volatile metals standard for existing cement kilns; (c) the mercury standard for new cement kilns; (d) the dioxin standard for new and existing lightweight aggregate kilns; (e) the mercury standard for new and existing lightweight aggregate kilns; (f) the hydrochloric acid/chlorine gas standard for new and existing lightweight aggregate kilns.

- We are providing an alternative means for lightweight aggregate kilns and cement kilns to comply with the mercury standard to allow sources to comply with a hazardous waste mercury feedrate limit in lieu of complying with an emission standard. Sources electing to comply with this option will be required to notify the RCRA permitting authority that they are complying with this option.

- We are revising the startup, shutdown and malfunction (“SSM”) provisions to provide that emission standards and operating requirements set forth in the rule apply at all times except during periods of startup, shutdown and malfunction. The revised rule subjects hazardous waste combustors to the same general MACT SSM provisions that apply to most sources, except that revised automatic waste feed cutoff requirements continue to apply during most SSM events, and sources must determine whether the SSM plan should be revised if excessive exceedances of operating requirements when hazardous waste is in the system occur during these events. Such exceedances will not constitute violations of the operating requirements. In addition, owners and operators of hazardous waste combustors must select either RCRA option or a CAA option to control emissions from startup, shutdown, and malfunctions. Under the RCRA options, operating conditions in the RCRA permit will minimize emissions during these events. Under the CAA option, the SSM plan must be proactive in minimizing emissions from these events, and must be submitted to the delegated CAA authority for review and approval. Finally, we are revising the emergency safety vent (“AESV”) opening provisions to provide that if there is hazardous waste in the combustion chamber, and there is an ESV opening that is not a malfunction, the source must document whether it remains in compliance with applicable standards, and file a report if there is noncompliance.

In addition, we are making the following regulatory revisions to compensate for the possibility that

sources may be required to comply with permanent replacement emission standards (i.e., the final standards that comply with the Court’s opinion and that must be promulgated by June 14, 2005) that are significantly different than the Interim Standards in today’s rulemaking. Such an outcome could result in loss of capital investment. As a result, we believe these provisions are appropriate since they could lessen this potentially negative financial impact.

- Amending the performance testing requirements of 40 CFR 63.1207 to allow previously collected data, regardless of age, to serve as documentation of compliance with the interim emission standards provided that these data meet quality assurance requirements and are sufficient to establish operating parameter limits;

- Amending the performance testing provisions such that all subsequent comprehensive performance tests (that is, those after the initial comprehensive performance test) for the interim standards are automatically waived; and,

- Amending the confirmatory performance testing provisions to eliminate the requirement to conduct confirmatory performance testing during the period that the interim standards are in effect.

#### Part Two—What Revisions Are We Making in This Rule?

##### I. What Are the Interim Standards?

In today’s rulemaking, we are replacing the vacated emission standards temporarily until final standards are promulgated by June 14, 2005.<sup>4</sup> EPA notes that this Interim Standards Rule does not respond to the Court’s mandate regarding the need to demonstrate that EPA’s methodology reasonably predicts the performance of the average of the best performing twelve percent of sources (or best-performing source). EPA intends to address those issues in a subsequent rule, which will necessarily require a longer time to develop, propose, and finalize. However, some type of Interim Standards Rule is needed now, for the reasons explained in Part One, Section II above. These standards, to some degree, represent negotiated interim levels agreed to by the parties to the Joint Motion (both industry and environmental, as well as EPA). In EPA’s view, these standards preserve critical parts of the September 30, 1999

<sup>4</sup> In a final rule published on December 6, 2001, we extended for one year the compliance date requirement of § 63.1206(a) for the interim emission standards until September 30, 2003. See 66 FR 63313.

rule unchanged, and achieve approximately 93 percent of the emissions reductions for existing sources which the original rule would have attained. Given the need to expeditiously adopt an Interim Standards Rule to avoid outright vacature (with the attendant adverse consequences described in the previous section), and the fact that the Court indicated that some of the industry challenges had potential merit (so that repromulgating all of the September 30, 1999 rule was not a realistic possibility), EPA believes that this rule represents a reasonable interim

measure. The numerical values of most existing emission standards are being retained except for the changes outlined above and discussed below. Given that the emission standards will be vacated when the Court issues an order called a mandate (expected on or after February 14, 2002), we are repromulgating the emissions standards of §§ 63.1203 through 63.1205, not just those standards that are being revised.

**A. New and Existing Incinerators**

The interim emission standards for new and existing hazardous waste incinerators are identical to the

standards promulgated on September 30, 1999, except that the semivolatile metals standard for new incinerators is revised to 120 µg/dscm. We are revising § 63.1203(b)(3) and repromulgating § 63.1203 accordingly.

We are also correcting two typographic errors in § 63.1203(c)(2). In the second sentence of this paragraph, we are replacing the word “tetra-” with the word “tetra-.” We are also inserting the word “to” before the word “calculate” in the third sentence of the paragraph.

The interim emission standards are summarized below.

**INTERIM STANDARDS FOR EXISTING AND NEW INCINERATORS**

Hazardous air pollutant or hazardous air pollutant surrogate	Interim emission standard <sup>1</sup>	
	Existing sources	New sources
Dioxin/Furan .....	0.20 ng TEQ <sup>2</sup> dscm; or 0.40 ng TEQ/dscm and temperature at inlet to the initial particulate matter control device ≤400° F.	0.20 ng TEQ/dscm.
Mercury .....	130 µg/dscm .....	45 µg/dscm.
Particulate Matter .....	34mg/dscm (0.015gr/dscf) .....	34mg/dscm (0.015gr/dscf).
Semivolatile Metals .....	240 µg/dscm .....	120 µg/dscm.
Low Volatile Metals .....	97 µg/dscm .....	97 µg/dscm.
Hydrochloric Acid/Chlorine Gas .....	77 ppmv .....	21 ppmv.
Hydrocarbons <sup>3,4</sup> .....	10 ppmv (or 100 ppmv carbon monoxide) .....	10 ppmv (or 100 ppmv carbon monoxide).
Destruction and Removal Efficiency .....	For existing and new sources, 99.99% for each principal organic hazardous constituent (POHC) designated. For sources burning hazardous wastes F020, F021, F022, F023, F026, or F027, 99.9999% for each POHC designated.	Same as for existing incinerators.

<sup>1</sup> All emission levels are corrected to 7 percent oxygen.

<sup>2</sup> Toxicity equivalent quotient, the international method of relating the toxicity of various dioxin/furan congeners to the toxicity of 2,3,7,8-TCDD.

<sup>3</sup> Hourly rolling average. Hydrocarbons are reported as propane.

<sup>4</sup> Incinerators that elect to continuously comply with the carbon monoxide standard must demonstrate compliance with the hydrocarbon standard of 10 ppmv during the comprehensive performance test.

**B. New and Existing Cement Kilns**

The interim emission standards for new and existing hazardous waste burning cement kilns are identical to the standards promulgated on September 30, 1999, with two exceptions. The semivolatile metals standard for existing cement kilns and the mercury standard for new cement kilns are revised to 330 µg/dscm and 120 µg/dscm, respectively. In today’s rule, we are revising §§ 63.1204(a)(3) and (b)(2) and repromulgating § 63.1204 accordingly.

We are also correcting two typographic errors in § 63.1204(c)(2). In the second sentence of this paragraph, we are replacing the word “tetra-” with the word “tetra-.” We are also inserting the word “to” before the word “calculate” in the third sentence of the paragraph.

Finally, we are providing an alternative means for new and existing cement kilns to comply with the interim

mercury standard. Under this alternative, new and existing cement kilns are allowed to comply with a hazardous waste maximum theoretical emissions concentration<sup>5</sup> of mercury of 120 µg/dscm. This new operating requirement for mercury from cement kilns is conceptually similar to the alternative mercury standard provisions that we promulgated in the September 30, 1999 rule. See § 63.1206(b)(10) (alternative standard where source demonstrates that it cannot meet emission standard as a result of mercury levels in raw material feedstocks). The feedrate operating requirement alternative ensures that the hazardous waste mercury contribution to emissions—MACT control for cement kilns as promulgated in the final rule—will always be below the mercury standard.

The alternative to the interim mercury standard is based on the combined hazardous waste feedstreams to the kiln

and may be expressed either as a maximum theoretical emissions concentration or as a restriction on maximum hazardous waste mercury mass feedrate and minimum gas flow rate. Sources must account for each hazardous waste feedstream when determining compliance with the maximum theoretical emissions concentration limit. In addition, sources are not required to monitor for mercury in their raw material for compliance purposes. Sources are also required to notify the RCRA permitting authority that they are electing to comply with this option. See § 63.1206(b)(15). The RCRA permitting authority may determine on a case-by-case basis under § 270.32(b)(2) that additional operating requirements may be needed to ensure protection of human health and the environment.

The interim emission standards are summarized below.

<sup>5</sup> Maximum theoretical emissions concentration or MTEC is a term to compare metals and chlorine

feedrates across sources of different sizes. MTEC is defined as the metals or chlorine feedrate divided

by the gas flow rate and is expressed in units of µg/dscm.

INTERIM STANDARDS FOR EXISTING AND NEW CEMENT KILNS

Hazardous air pollutant or hazardous air pollutant surrogate	Interim emission standard <sup>1</sup>	
	Existing sources	New sources
Dioxin and Furan .....	0.20 ng TEQ/dscm; or 0.40 ng TEQ/dscm and control of flue gas temperature not to exceed 400°F at the inlet to the particulate matter control device.	0.20 ng TEQ/dscm; or 0.40 ng TEQ/dscm and control of flue gas temperature not to exceed 400°F at the inlet to the particulate matter control device.
Mercury .....	120 µg/dscm .....	120 µg/dscm.
Particulate Matter <sup>2</sup> .....	0.15 kg/Mg dry feed and 20% opacity .....	0.15 kg/Mg dry feed and 20% opacity.
Semivolatile Metals .....	330 µg/dscm .....	180 µg/dscm.
Low Volatile Metals .....	56 µg/dscm .....	54 µg/dscm.
Hydrochloric Acid and Chlorine Gas .....	130 ppmv .....	86 ppmv.
Hydrocarbons: Kilns without By-pass <sup>3,6</sup> .....	20 ppmv (or 100 ppmv carbon monoxide) <sup>3</sup> .....	Greenfield kilns: 20 ppmv (or 100 ppmv carbon monoxide and 50 ppmv <sup>5</sup> hydrocarbons). All others: 20 ppmv (or 100 ppmv carbon monoxide) <sup>3</sup> . 50 ppmv <sup>5</sup> .
Hydrocarbons: Kilns with By-pass; Main Stack. <sup>4,6</sup>	No main stack standard .....	
Hydrocarbons: Kilns with By-pass; By-pass Duct and Stack. <sup>3,4,6</sup>	10 ppmv (or 100 ppmv carbon monoxide) .....	10 ppmv (or 100 ppmv carbon monoxide).
Destruction and Removal Efficiency .....	For existing and new sources, 99.99% for each principal organic hazardous constituent (POHC) designated. For sources burning hazardous wastes F020, F021, F022, F023, F026, or F027, 99.9999% for each POHC designated.	

<sup>1</sup> All emission levels are corrected to 7% O<sub>2</sub>, dry basis.

<sup>2</sup> If there is an alkali by-pass stack associated with the kiln or in-line kiln raw mill, the combined particulate matter emissions from the kiln or in-line kiln raw mill and the alkali by-pass must be less than the particulate matter emissions standard.

<sup>3</sup> Cement kilns that elect to comply with the carbon monoxide standard must demonstrate compliance with the hydrocarbon standard during the comprehensive performance test.

<sup>4</sup> Measurement made in the by-pass sampling system of any kiln (e.g., alkali by-pass of a preheater and/or precalciner kiln; midkiln sampling system of a long kiln).

<sup>5</sup> Applicable only to newly-constructed cement kilns at greenfield sites (see discussion in Part Four, Section VII.D.9). The 50 ppmv standard is a 30-day block average limit. Hydrocarbons are reported as propane.

<sup>6</sup> Hourly rolling average. Hydrocarbons are reported as propane.

C. New and Existing Lightweight Aggregate Kilns

The interim emission standards for new and existing hazardous waste burning lightweight aggregate kilns are identical to the standards promulgated on September 30, 1999, with the following exceptions. The dioxin and furan standard for both new and existing lightweight aggregate kilns is revised to 0.20 ng TEQ/dscm or rapid quench of the combustion gas temperature at the exit of the (last) combustion chamber (or exit of any waste heat recovery system) to 400°F or lower. This interim emission standard for dioxin and furans preserves the intent of the standard promulgated on September 30, 1999. That is, the

temperature limitation of 400°F ensures that each lightweight aggregate kiln will be operating, at a minimum, consistent with sound operational practices for controlling dioxin and furan emissions. Accordingly, we are revising §§ 63.1205(a)(1) and (b)(1). We are also revising the mercury standard for new and existing sources of §§ 63.1205(a)(2) and (b)(2) to 120 µg/dscm. Finally, we are revising the hydrochloric acid/chlorine gas standard for new and existing lightweight aggregate kilns to 600 ppmv. See revised §§ 63.1205(a)(6) and (b)(6).

We are also correcting two typographic errors in § 63.1205(c)(2). In the second sentence of this paragraph, we are replacing the word “tetra-” with

the word “tetra-.” We are also inserting the word “to” before the word “calculate” in the third sentence of the paragraph.

Finally, we are providing the same alternative means for new and existing lightweight aggregate kilns to comply with the interim mercury standard as finalized in today’s rule for cement kilns (discussed above). Under this alternative, new and existing lightweight aggregate kilns are allowed to comply with a hazardous waste maximum theoretical emissions concentration of mercury of 120 µg/dscm. See § 63.1206(b)(15).

We are today repromulgating § 63.1205 with these changes, as summarized below.

INTERIM STANDARDS FOR EXISTING AND NEW LIGHTWEIGHT AGGREGATE KILNS

Hazardous air pollutant or hazardous air pollutant surrogate	Interim emission standard <sup>1</sup>	
	Existing sources	New sources
Dioxin/Furan .....	0.20 ng TEQ/dscm; or rapid quench of the flue gas at the exit of the kiln to less than 400°F.	0.20 ng TEQ/dscm; or rapid quench of the flue gas at the exit of the kiln to less than 400°F.
Mercury .....	120 µg/dscm .....	120 µg/dscm.
Particulate Matter .....	57 mg/dscm (0.025 gr/dscf) .....	57 mg/dscm (0.025 gr/dscf).
Semivolatile Metals <sup>2</sup> .....	250 µg/dscm .....	43 µg/dscm.
Low Volatile Metals <sup>3</sup> .....	110 µg/dscm .....	110 µg/dscm.
Hydrochloric Acid/Chlorine Gas .....	600 ppmv .....	600 ppmv.
Hydrocarbons <sup>2,3</sup> .....	20 ppmv (or 100 ppmv carbon monoxide) .....	20 ppmv (or 100 ppmv carbon monoxide).

INTERIM STANDARDS FOR EXISTING AND NEW LIGHTWEIGHT AGGREGATE KILNS—Continued

Hazardous air pollutant or hazardous air pollutant surrogate	Interim emission standard <sup>1</sup>	
	Existing sources	New sources
Destruction and Removal Efficiency .....	For existing and new sources, 99.99% for each principal organic hazardous constituent (POHC) designated. For sources burning hazardous wastes F020, F021, F022, F023, F026, or F027, 99.9999% for each POHC designated.	

<sup>1</sup> All emission levels are corrected to 7% O<sub>2</sub>, dry basis.

<sup>2</sup> Hourly rolling average. Hydrocarbons are reported as propane.

<sup>3</sup> Lightweight aggregate kilns that elect to continuously comply with the carbon monoxide standard must demonstrate compliance with the hydrocarbon standard of 20 ppmv during the comprehensive performance test.

*II. What Are the Revisions to the Startup, Shutdown, and Malfunction Requirements?*

The September 1999 final rule requires compliance with the emission standards and operating requirements at all times that hazardous waste is in the combustion system (i.e., before the hazardous waste residence time has transpired), including during startup, shutdown, and malfunctions. See § 63.1206(b)(1)(i). This requirement was intended to create an incentive to minimize exceedances when burning hazardous waste during startup, shutdown, and malfunctions. For example, to minimize the frequency and severity of exceedances during malfunctions, you could take various measures including providing for spare parts and redundant systems.

Industry stakeholders note that requiring compliance with emission standards and operating requirements during startup, shutdown, and malfunctions is inconsistent with the General Provisions of Subpart A, Part 63, that apply to MACT sources.<sup>6</sup> Although requirements for particular source categories can be more or less stringent than the General Provisions (which provisions serve as a default), stakeholders state that requiring compliance with emission standards and operating requirements during malfunctions is not appropriate. The purpose of the startup, shutdown, and malfunction plan required under § 63.1206(c)(2), and by reference § 63.6(e)(3), is: (1) To ensure that the combustor, including emission control equipment, is operated and maintained in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by the standards; (2) to ensure that owners and operators are prepared to correct malfunctions as soon as practicable; and (3) to minimize the reporting burden associated with

excess emissions. Stakeholders conclude that it is inappropriate to penalize a source for exceeding emission standards and operating requirements during malfunctions because some exceedances are unavoidable and they are already required to take the corrective measures prescribed in the startup, shutdown, and malfunction plan to minimize emissions.

In response to stakeholder concerns, today's rule: (1) Exempts you from the Subpart EEE emission standards and operating requirements during startup, shutdown, and malfunctions; (2) continues to subject sources to RCRA requirements during malfunctions, unless they comply with alternative MACT requirements including expanding the startup, shutdown, and malfunction plan to minimize the frequency and severity of malfunctions, and submit the plan to the delegated CAA authority for review and approval; (3) continues to subject sources that burn hazardous waste during startup and shutdown to RCRA requirements for startup and shutdown, unless they comply with alternative MACT requirements, and requires them to include waste feed restrictions and operating conditions and limits in the startup, shutdown, and malfunction plan; (4) requires sources to include in the startup, shutdown, and malfunction plan a requirement to comply with the automatic hazardous waste feed cutoff system during startup, shutdown, and malfunctions; and (5) makes conforming revisions to the emergency safety vent opening requirements.

**A. What Are the Revised Requirements for Malfunctions?**

We agree with stakeholders that the startup, shutdown, and malfunction plan should minimize emissions during malfunctions and are revising the rule to conform with the General Provisions. The revised rule exempts you from the MACT emission standards and operating requirements during startup, shutdown, and malfunctions, even if hazardous waste is in the combustion

system during such events. See revised § 63.1206(b)(1)(i).

We are concerned, however, that even though following the corrective measures in response to malfunctions that you prescribe in the startup, shutdown, and malfunction plan should minimize emissions during these events, the plan may not minimize the frequency and severity<sup>7</sup> of exceedances, and thus may not minimize emissions from these events. In other words, the startup, shutdown, and malfunction plan is largely reactive to malfunctions rather than proactive. Thus, we are concerned that our RCRA mandate to ensure protection of human health and the environment may not be achieved without additional controls. In fact, existing RCRA regulations require compliance with emission standards and operating requirements at all times that hazardous waste is in the combustion chamber (see § 264.345(a) for incinerators and § 266.102(e)(1) for cement and lightweight aggregate kilns), and EPA has found that this provision is necessary to protect human health and the environment.<sup>8</sup> Thus, any replacement to the existing standards must (at a minimum) provide an equivalent degree of protection to satisfy RCRA requirements. Accordingly, today's rule gives you the option of complying with RCRA requirements or CAA requirements that achieve the equivalent objective of minimizing emissions during malfunctions.

We discuss below how these options work for various RCRA permitting situations.

**1. Facilities With Existing RCRA Permits**

When a source with a RCRA permit for the combustion unit documents

<sup>7</sup> The duration and magnitude of excess emissions from a particular type of malfunction can be minimized by proactive as well as reactive measures.

<sup>8</sup> Specific hazardous wastes under specific conditions may be exempt from the emission standards and operating requirements, however. See § 264.340(c) for incinerators, and §§ 266.108 and 266.109 for cement and lightweight aggregate kilns.

<sup>6</sup> Joint Brief of Industry Petitioners, US Court of Appeals for the District of Columbia Circuit, No. 99-1457 et al, *Cement Kiln Recycling Coalition, et al., v. USEPA*, Aug. 16, 2000, p. 86.

compliance with the MACT standards and requests that duplicative permit conditions be removed from the permit, the source must comply with one of the following options to minimize emissions during malfunctions: (1) The requirements of § 264.345(a) for incinerators and § 266.102(e)(1) for cement and lightweight aggregate kilns; or (2) revised RCRA permit conditions that minimize emissions from malfunctions; or (3) the procedures you prescribe in a startup, shutdown, and malfunction plan that is expanded to be proactive as well as reactive to minimize emissions from malfunctions,<sup>9</sup> and that is subject to review and approval by the delegated CAA authority. See new § 270.235(a)(1). We have also made conforming revisions to §§ 264.340(b)(1), 265.340(b)(1), 266.100(b)(2)(i), 270.19(e), 270.22 (introductory text), 270.62 (introductory text), and 270.66 (introductory text) to require compliance with §§ 264.345(a) and 266.102(e)(1) only during malfunctions and only if you elect the option that requires compliance with those provisions (i.e., § 270.235(a)(1)(i)).

Similarly, the rule requires sources that are being reissued a RCRA permit for the combustion unit (and that have documented compliance with the MACT standards) to comply with options that parallel those discussed above to minimize emissions during malfunctions. See new §§ 270.235(a)(2).

a. How Does the RCRA Option Work to Minimize Emissions during Malfunctions? Under the RCRA option to minimize emissions during malfunctions, a source with a RCRA permit (and that has documented compliance with the MACT standards) and that is requesting that duplicative RCRA permit conditions be removed from the permit must either: (1) Remain subject to the RCRA permit conditions implementing § 264.345(a) for incinerators and § 266.102(e)(1) for cement and lightweight aggregate kilns during malfunctions<sup>10</sup> while hazardous waste is in the combustion chamber; or (2) request that the current RCRA permit conditions be revised to provide alternative means of ensuring that emissions from malfunctions are minimized.<sup>11 12</sup> See new §§ 270.235(a)(1)(i) and (a)(1)(ii).

<sup>9</sup> That is, the plan must identify actions you are taking to minimize the frequency and severity of malfunctions as well as the corrective measures you will take during a malfunction.

<sup>10</sup> When using the term "malfunction" with respect to RCRA requirements, we mean the definition of malfunction provided by § 63.2.

<sup>11</sup> Please note a change to the design or operation of the combustor that could increase emissions of

The rule allows you to revise the current RCRA permit conditions to control emissions during malfunctions because, for example, you may want to request to comply with a subset of your existing permit conditions, or you may want to request to comply with a limit on the number of exceedances during malfunctions when hazardous waste is in the combustion chamber in lieu of complying with all of the RCRA emission standards and associated operating limits during malfunctions.

Under this option when you request to revise your RCRA permit conditions, the permit writer will consider information including whether your startup, shutdown, and malfunction plan is both proactive and reactive, and the source's design and operating history. Because the permit writer's decision to revise your permit conditions addressing emissions from malfunctions is based, in part, on review of the startup, shutdown, and malfunction plan and the design of the source, the rule also requires that you notify the delegated RCRA authority in writing within 5 days of making a change to the plan or design of the source that may significantly increase emissions of toxic compounds<sup>13</sup> from malfunctions. In addition, you must recommend revisions to permit conditions necessary as a result of the change to minimize emissions of toxic compounds from malfunctions. The delegated RCRA authority may revise the permit conditions as a result of these changes to ensure that emissions of toxic compounds are minimized from malfunctions upon permit renewal, or if warranted, by modifying the permit under §§ 270.41(a) or 270.42.

A source that is being reissued a permit for the combustor (and that has documented compliance with the MACT standards) must address RCRA permit conditions to control emissions during malfunctions under any of three

toxic compounds from burning hazardous waste during malfunctions must be approved through a permit modification under §§ 270.41(a) or 270.42. Under the permit modification, RCRA permit officials will determine whether the permit conditions relevant to controlling emissions from malfunction must be revised.

<sup>12</sup> When retaining or revising RCRA permit conditions to control emissions during malfunctions, the delegated RCRA authority will ensure that the permit contains only those conditions relevant to controlling emissions during malfunctions. For example, under the option where RCRA permit conditions are revised, the permit could retain a subset of the RCRA emission standards and operating limits necessary to comply with §§ 264.345(a) and 266.102(e)(1) during malfunctions. But, permit officials could also consider whether the RCRA monitoring, recordkeeping and reporting requirements should be revised to be more consistent with the MACT requirements.

options that parallel those discussed above for a permitted source that is requesting that duplicative RCRA permit conditions be removed from the permit. See new § 270.235(a)(2). Under "RCRA Option A," the delegated RCRA authority will include in the (reissued) permit conditions that ensure compliance with § 264.345(a) for incinerators and § 266.102(e)(1) for cement and lightweight aggregate kilns during malfunctions. See § 270.235(a)(2)(i). Under "RCRA Option B," the delegated RCRA authority will include in the permit conditions that ensure emissions of toxic compounds are minimized from malfunctions. These permit conditions could be a subset of the permit conditions that would be required to comply with §§ 264.345(a) or 266.102(e)(1). Because permit officials will consider information including the startup, shutdown, and malfunction plan, you must notify the delegated RCRA authority of changes to the plan that may significantly increase emissions of toxic compounds from malfunctions. The notification procedures and consideration of permit revisions as a result of changes to the plan are identical to those discussed above. See § 270.235(a)(2)(ii).

b. How Does the CAA Option Work to Minimize Emissions during Malfunctions? Under the CAA option, you must develop a proactive startup, shutdown, and malfunction plan and submit the plan to the delegated CAA authority for review and approval. Because the plan is both proactive and reactive, it is equivalent to the incentive provided by the RCRA options discussed above (i.e., exceedances of RCRA emission standards or associated operating limits while hazardous waste is in the combustion chamber is a violation) to minimize emissions of hazardous air pollutants from malfunctions when hazardous waste is in the combustion chamber.<sup>14</sup> Accordingly, for a source with a RCRA permit (and that has documented compliance with the MACT standards) that selects this option to address emissions during malfunctions, the delegated RCRA authority will remove relevant permit conditions addressing malfunctions when the source requests that duplicative RCRA permit conditions be removed from the permit. See § 270.235(a)(1)(iii). Similarly, for a source that is in a permit reissuance

<sup>14</sup> Please note RCRA permit writers also generally require owners and operators to take proactive measures to minimize emissions from malfunctions.

proceeding (and that has documented compliance with the MACT standards) and that selects this option to address emissions during malfunctions, the delegated RCRA authority will omit from the permit conditions addressing malfunctions upon permit reissuance. See § 270.235(a)(2)(iii).

To implement this option, you include in the startup, shutdown, and malfunction plan a description of potential causes of malfunctions and actions you are taking to minimize the frequency and severity of malfunctions. See revised § 63.1206(c)(2)(ii). You may develop a fault tree analysis, for example, to identify malfunctions and develop measures to minimize the frequency and severity of those malfunctions. Examples of measures would be providing spare parts and redundant systems.

In addition, you must submit the startup, shutdown, and malfunction plan to the delegated CAA authority for review and approval to ensure that it is complete and both proactive and reactive to minimize emissions of hazardous air pollutants from malfunctions. The delegated CAA authority also will ensure that the potential malfunctions identified in the plan are bona fide malfunctions. Malfunctions are events that are a sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused, in part, by poor maintenance or careless or improper operation (including improper or inadequate characterization of feedstreams) are not malfunctions.<sup>15</sup> See definition of malfunction in § 63.2.

The procedures for approving the startup, shutdown, and malfunction plan provide you the opportunity to revise the plan if the delegated CAA authority intends to disapprove the plan. The delegated CAA authority will notify you of approval or intention to deny approval within 90 calendar days after receipt of the approval request, and within 60 calendar days after receipt of any supplemental information that you submit. Before disapproving the plan, the delegated CAA authority will notify you of the intention to disapprove the plan together with the basis for intending to disapprove the plan and notice of opportunity for you to present

additional information before final action on disapproval of the plan.

Further, if you change the plan in a manner that may significantly increase emissions of hazardous air pollutants from malfunctions, you must request approval from the delegated CAA authority within 5 days after making the change, under the same procedures described above for initial approval of the plan.

## 2. Interim Status Facilities

Sources operating under the interim status standards of Part 265, Subpart O, or § 266.103 must comply with either of the following options to minimize emissions during malfunctions after they document compliance with the MACT standards by conducting a comprehensive performance test and submitting a Notification of Compliance: (1) A RCRA option where the source continues to comply with the interim status emission standards and operating requirements relevant to control of emissions from malfunctions and where those standards and requirements apply only during malfunctions; or (2) a CAA option where the owner or operator is exempt from the interim status standards relevant to control of emissions of toxic compounds during malfunctions upon submittal of written notification and documentation to the delegated RCRA authority that the startup, shutdown, and malfunction plan has been approved by the Administrator. See new § 270.235(b)(1). These options parallel the options discussed above and work as discussed above.

When a source operating under the interim status standards of Part 265, Subpart O, or § 266.103 (and that has documented compliance with the MACT standards) submits a RCRA permit application, the source must comply with one of the three options provided for sources that are being reissued a RCRA permit, as discussed above. See new § 270.235(b)(2). These situations are analogous because the source is being issued a new permit in both cases.

### B. Why Does the Revised Rule Require You To Include the Automatic Waste Feed Cutoff Requirements in the Startup, Shutdown, and Malfunction Plan?

We are revising the rule to require compliance with the automatic waste feed cutoff requirements during malfunctions. You must include the automatic waste feed cutoff requirements in the startup, shutdown, and malfunction plan by reference. This requirement applies irrespective of

whether you choose the RCRA or CAA approach under § 270.235 to minimize emissions from malfunctions, as discussed above.

We conclude that compliance with the automatic waste feed cutoff requirements is necessary to comply with § 63.6(e)(3)(i)(A) which requires you to operate in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards. Good operating practices during a malfunction includes cutting off the hazardous waste feed.

An exceedance of a Subpart EEE emission standard or operating requirement during a malfunction identified in your startup, shutdown, and malfunction plan would not be a violation, however, provided that you followed the corrective measures prescribed in a plan that meets the requirements of § 63.6(e)(3).

In addition, today's rule requires you to reevaluate your startup, shutdown, and malfunction plan if you experience 10 exceedances of a Subpart EEE emission standard or operating parameter limit during malfunctions in a 60-day block period while hazardous waste remains in the combustion chamber (i.e., when the hazardous waste residence time has not transpired). You must complete, within 45 days of the 10th exceedance, an investigation of the cause of each exceedance and evaluation of approaches to minimize the frequency, duration, and severity of each exceedance, and revise the startup, shutdown, and malfunction plan as warranted by the evaluation. Finally, you must record the results of the investigation and evaluation in the operating record and include a summary of the findings, and any changes to the startup, shutdown, and malfunction plan, in the excess emissions report required under § 63.10(e)(3).

### C. What Are the Revised Requirements for Burning Hazardous Waste During Startup and Shutdown?

As discussed above, the revised rule exempts you from the MACT emission standards and operating requirements during startup, shutdown and malfunctions. See revised § 63.1206(b)(1)(i). We are concerned, however, that burning hazardous waste during startup and shutdown can be problematic. During startup and shutdown, a combustor is not operating under steady-state conditions. For example, the combustion chamber temperature fluctuates during startup and shutdown and at times will be lower than required to achieve good combustion and minimize emissions of

<sup>15</sup> Operations during a failure that are not malfunctions are subject to the applicable emission standards and operating requirements of Subpart EEE. See § 63.1206(b)(1)(i). Thus, an exceedance of an applicable emission standard or operating limit as a result of a failure that is not a malfunction is a violation irrespective of whether hazardous waste is in the combustion chamber.

organic hazardous pollutants. Because hazardous waste combustors can burn fuels that are not hazardous wastes (e.g., fossil fuel) during startup and shutdown, it generally is not appropriate to burn hazardous waste at these times. Accordingly, RCRA regulations require compliance with the RCRA emission standards and operating limits during startup and shutdown (which, as a practical matter, prohibits burning hazardous waste at these times), except for only one or two narrow exemptions. See § 264.345(c) for incinerators and § 266.102(e)(2)(iii) for cement and lightweight aggregate kilns.

By exempting you from the MACT emission standards and operating requirements during startup and shutdown (and malfunctions), today's revised rule allows you to continue burning those specific hazardous wastes that are currently allowed under RCRA to be burned during startup and shutdown. This is reasonable because there may be situations where burning hazardous wastes containing low levels of toxic compounds during startup and shutdown may result in equivalent or lower emissions of hazardous air pollutants than burning fossil fuels. For example, hazardous spent solvents may combust more completely during startup and shutdown than coal or No. 6 fuel oil which is the alternative fuel for many combustors. In these situations, you may be able to burn hazardous waste during startup and shutdown while meeting the requirements of § 63.6(e)(3)(i)(A) (which requires you to operate at all times in a manner consistent with good air pollution control practices for minimizing emissions at least to levels required by all relevant standards).

Given that today's rule exempts you from the MACT emission standards and operating requirements during startup and shutdown, the rule provides the following alternative requirements for sources that burn hazardous waste during startup and shutdown. When a source with a RCRA permit for the combustion unit documents compliance with the MACT standards and requests that duplicative permit conditions be removed from the permit, the source must comply with one of the following options to minimize emissions during startup and shutdown: (1) the requirements of § 264.345(c) for incinerators and § 266.102(e)(2)(iii) for cement and lightweight aggregate kilns restricting the types of hazardous waste that can be burned during startup and shutdown; or (2) revised RCRA permit conditions that meet the objective of those provisions (i.e., to minimize emissions during startup and

shutdown); or (3) the waste feed restrictions (e.g., type and quantity) and other operating conditions and limits that you include in the startup, shutdown, and malfunction plan, which is subject to review and approval by the delegated CAA authority. See new § 270.235(a)(1).<sup>16</sup> We have made conforming revisions to §§ 264.340(b)(1), 265.340(b)(1), 266.100(b)(2)(i), 270.19(e), 270.22 (introductory text), 270.62 (introductory text), and 270.66 (introductory text) to require compliance with §§ 265.345(c) and 266.102(e)(1) only during startup and shutdown and only if you elect the option that requires compliance with those provisions (i.e., § 270.235(a)(1)(i)).

Thus, similar to the requirements for malfunctions, today's rule gives you the option of using either a RCRA or CAA approach to ensure that you minimize emissions from startup and shutdown. These options work as discussed above for malfunctions. You may retain or revise your RCRA permit requirements that control emissions during startup and shutdown, or, under the CAA option, you may request that the RCRA permit requirements be deleted.

The rule also requires you to comply with the automatic waste feed cutoff system to minimize emissions during startup and shutdown. See § 63.1206(c)(2)(v)(B). You must interlock operating limits you establish to minimize emissions during startup and shutdown with the automatic waste feed cutoff system. To implement this requirement, you must include the waste feed restrictions (e.g., type and quantity) and other operating conditions and limits that are necessary to minimize emissions while feeding waste during startup and shutdown. See § 63.1206(c)(2)(v)(B)(1).

Finally, the rule allows sources in other RCRA permitting situations to comply with RCRA options or a CAA option to minimize emissions during startup and shutdown after they document compliance with the MACT standards. These situations are: (1) Permit reissuance; (2) complying with MACT while operating under RCRA interim status; and (3) interim status sources submitting a RCRA permit application. The RCRA and CAA

<sup>16</sup>Please note § 63.1206(c)(2)(v)(B) requires sources that feed hazardous waste during startup or shutdown to include waste feed restrictions and other appropriate operating conditions and limits in the startup, shutdown, and malfunction plan irrespective of which option the source selects to minimize emissions during those events. Under the RCRA options for controlling emissions during startup and shutdown, however, you are not required to submit the startup, shutdown, and malfunction plan to the delegated CAA authority for review and approval.

options for these situations are identical to those discussed above to control emissions during malfunctions.

#### D. What Are the Conforming Revisions to the Emergency Safety Vent Opening Requirements?

Emergency safety vents are designed to allow combustion gases to bypass the emission control system during emergencies to preclude catastrophic consequences such as explosions or fires in the emission control equipment. We are revising the emergency safety vent opening requirements under § 63.1206(c)(4) to conform to the revisions to the startup, shutdown, and malfunction plan requirements. Under today's revision, the MACT emission standards and operating requirements do not apply to openings that occur as a result of a malfunction. See revised § 63.1206(b)(1)(i).

In addition, we are revising the rule to no longer presume that an emergency safety vent opening under operations other than a malfunction defined in the startup, shutdown, and malfunction plan (i.e., when the emission standards and operating requirements continue to apply) is evidence of failure to comply with an emission standard. See revised § 63.1206(c)(4)(i). For example, if feedrates of metals and chlorine were well below their limits when the safety vent opened under operations other than a malfunction, the metals and chlorine emission standards may not be exceeded. Rather, the revised rule places the burden on you to document in the operating record whether you remain in compliance with the emission standards when the emergency safety vent opens. In addition, as required by the current rule, you must submit to the delegated CAA authority a written report within 5 days of an ESV opening that results in failure to meet the emission standard documenting the result of the investigation of the cause of the opening and corrective measures taken. See §§ 62.1206(c)(4)(iii) and (iv).

#### III. What Changes Are We Making to the Performance Testing Requirements for the Interim Standards Rule?

We are amending three performance test provisions in today's rule. First, we are revising the "data in lieu of the initial comprehensive performance test" provision to allow you to submit test data irrespective of when the test was conducted. Second, we are amending the comprehensive performance testing frequency provisions such that you will only be required to conduct one comprehensive performance test for the interim standards. Third, we are not requiring you to conduct dioxin/furan

confirmatory tests for the interim standards. See revised § 63.1207(c) and (d).

#### A. Why Are We Revising the Data in Lieu Provisions?

The September 1999 final rule allows you to request that previous emissions test data serve as documentation of conformance with the emission standards provided that the previous testing was initiated after March 30, 1998 and provided the data is sufficient to establish appropriate operating parameter limits. This date was subsequently changed to March 30, 1999 as a result of extending the compliance date one year. See 66 FR 63313. Today we are amending this requirement to allow you to submit test data even though the testing was initiated prior to March 30, 1999, i.e., prior to four years and eight months before the compliance date.

Stakeholders indicated that some sources have emissions data that were collected before March 30, 1999 that could be used to demonstrate compliance with the MACT standards and establish appropriate operating limits. Stakeholders reason that the age restriction on data-in-lieu emissions tests should be waived for the initial test in order to counter the additional costs associated with having to comply with two potentially different sets of emission standards at different times. We agree, noting that these sources were in compliance with the MACT standards well before the compliance date. However, we emphasize that, consistent with the existing requirements, these data must: (1) meet the appropriate quality assurance objectives; (2) originate from testing conditions that satisfy the operating condition requirements of § 63.1207(g)(1); and (3) be sufficient to establish all appropriate operating parameter limits required pursuant to § 63.1209.

#### B. Why Are We Waiving Periodic Comprehensive Performance Testing Under the Interim Standards?

The September 1999 final rule requires you to begin subsequent comprehensive testing no later than 61 months after the date of commencing the initial comprehensive performance test. Today we are waiving the requirement to conduct periodic comprehensive performance testing for the interim standards. You are required to conduct only one comprehensive performance test for the duration of the interim standards. See new § 63.1207(d)(4)(i).

Pursuant to the settlement agreement with the Sierra Club (see 66 FR 57715, November 16, 2001), EPA must promulgate permanent standards that replace today's interim standards no later than June 14, 2005. Following this schedule, your new compliance date for the replacement standards could be approximately June of 2008, in which case you would have to conduct your test to demonstrate compliance with these replacement standards no later than June of 2009.<sup>17</sup> This would roughly coincide with the deadline for conducting your second comprehensive performance test under today's interim standards, absent today's revision.

We conclude that a second interim standards comprehensive test would not be needed given that, by that time, the interim standards will have already been replaced with the permanent replacement standards. It would not be appropriate to require you to prepare (e.g., submit a performance test plan a year in advance of the scheduled test date) to conduct a second compliance test under today's interim standards that no longer apply while also requiring you to prepare to conduct the initial compliance test for the replacement standards shortly thereafter. We conclude this amendment is necessary to assure a smooth transition between the interim standards and the permanent replacement standards.

#### C. Why Are We Waiving the Dioxin/Furan Confirmatory Test Under the Interim Standards?

The September 1999 final rule requires you to begin your initial dioxin/furan confirmatory test no later than 31 months after the date of commencing your initial comprehensive performance test. Today we are waiving the dioxin/furan confirmatory performance testing requirement under the interim standards. See new § 63.1207(d)(4)(ii). You are not required to conduct a confirmatory compliance test while the interim standards are in effect.

Absent this amendment, you would have to commence your first confirmatory compliance test under the interim standards no later than October of 2006. As discussed above, we project that the compliance date for the standards that will replace today's interim standards could be about June of 2008. Some sources may be in process of upgrading their facility in October of 2006 to comply with the permanent

replacement standards. We conclude that it would be problematic to require sources to simultaneously upgrade their facility and conduct a dioxin/furan confirmatory compliance test under the interim standards. Thus, to conclude that exempting sources from the confirmatory compliance test requirements while the interim standards are in effect is reasonable and appropriate.

#### IV. Why Are We Deleting the Minimum Power Requirement for Ionizing Wet Scrubbers?

Today's rule deletes the limit on minimum total power to an ionizing wet scrubber. See § 63.1209(m)(1)(i)(D). Until we promulgate compliance assurance procedures for ionizing wet scrubbers, sources and permitting officials should use the alternative monitoring provisions of § 63.1209(g) to identify appropriate controls on a site-specific basis.

On May 14, 2001, we issued a final rule implementing, among other things, a court order to vacate operating parameter limits for electrostatic precipitators and baghouses. 66 FR at 24272. The Agency voluntarily requested that the Court vacate the operating parameter limits at §§ 63.1209(m)(1)(ii) and (m)(1)(iii) because the Agency inadvertently did not provide opportunity for public comment on revisions to the proposed operating parameter limits.

One of the vacated operating parameter limits was a limit on minimum secondary power to each field of an electrostatic precipitator. We had proposed a minimum limit on only total secondary power to the precipitator in May 1996. But, we determined after review of comments and further investigation that a limit on minimum total power will not ensure that collection efficiency of a multistage electrostatic precipitator is maintained. Rather, we concluded that a limit on minimum secondary power to each field of the precipitator is needed. Consequently, we declined to replace the vacated minimum limit on power to each field of the precipitator with a limit on total power to the precipitator, as originally proposed. Subsequently, in July 2001, we proposed to reinstate the limit on minimum secondary power to each field of the precipitator, but also discussed other compliance assurance alternatives that may provide equivalent or better compliance assurance, and requested comment on those alternatives. 66 FR at 35143–35144.

In the July 3, 2001 proposal regarding compliance assurance approaches for electrostatic precipitators, we

<sup>17</sup> This assumes sources will be allowed to conduct the comprehensive performance test not later than one year after the compliance date for the permanent replacement standards.

inadvertently neglected to propose to delete the minimum total power operating parameter limit for ionizing wet scrubbers at § 63.1209(m)(1)(i)(D) and propose those same compliance assurance alternatives for ionizing wet scrubbers. An ionizing wet scrubber is essentially an electrostatic precipitator integrated with a packed bed scrubber where particulate matter is collected on both the plates of the precipitator and the bed packing material.

Today's final rule simply deletes the requirement to establish an operating limit on minimum total power to an ionizing wet scrubber at § 63.1209(m)(1)(i)(D). We are not replacing the total power limit with a limit on minimum power to each field of the ionizing wet scrubber, as we proposed on July 3, 2001 for electrostatic precipitators, because we need additional time to review and evaluate comments received on the compliance assurance alternatives we discussed in that proposal. Until we promulgate compliance assurance requirements for ionizing wet scrubbers and electrostatic precipitators, sources and regulatory officials should use the alternative monitoring provisions under § 63.1209(g) to establish appropriate compliance requirements on a site-specific basis.

#### *V. What Are the Monitoring Requirements for Carbon Beds?*

We are deleting the requirement to establish a limit on the useful life of a carbon bed or bed segment and associated requirements to verify compliance with the dioxin/furan (and mercury) emission standard prior to the end of the life of the bed. See (deleted) § 63.1209(k)(7)(i). In lieu of that requirement, the revised rule requires you to monitor performance of the bed according to manufacturer's specifications to ensure that the bed has not reached the end of its useful life.

The existing rule allowed you to use the manufacturer's specification to establish the limit on carbon bed age rather than the actual age of the bed during the performance test when demonstrating compliance with the dioxin/furan (and mercury) emission standard during the initial comprehensive performance test. If you used the manufacturer's specification for bed age, you were required to recommend in the initial comprehensive performance test plan a schedule for subsequent dioxin/furan emissions testing to demonstrate that the initial limit on maximum bed age ensures compliance with the dioxin/furan (and mercury) emission standard.

In response to stakeholders' concerns with the existing rule, we proposed amendments to these provisions to clarify our intent regarding confirmatory testing to verify compliance with the dioxin/furan emission standard prior to the end of the bed's life. See 66 FR at 35141–35142 (July 3, 2001).

Several commenters state that the proposed requirement to perform confirmatory testing to verify that the source is in compliance with emission standards at the manufacturer's recommended bed age may be burdensome and unnecessary. Emissions testing to confirm bed age may either require testing in addition to periodic comprehensive performance testing and dioxin/furan confirmatory testing or that a source replace the bed on the anniversary of the comprehensive performance test or the dioxin/furan confirmatory test, even though the manufacturer may recommend a longer bed life.

In addition, one commenter is concerned that infrequent (e.g., once every several years) emissions testing to confirm compliance with the dioxin/furan and mercury emissions standards does not ensure the carbon bed is operated and maintained "in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards," as required by § 63.6(e)(3)(i)(A). The commenter recommends use of manufacturer's specifications and recommendations for periodic, frequent monitoring to ensure the bed is performing as designed.

We agree with commenters and are deleting the requirement to establish a limit on maximum bed life and the associated requirement to conduct emissions testing to confirm compliance with the dioxin/furan and mercury standards.<sup>18</sup> Instead, we are substituting the following requirements consistent with the comments we received. You must: (1) Monitor performance of the carbon bed consistent with manufacturer's specifications to ensure the carbon bed (or bed segment for beds with multiple segments) has not reached the end of its useful life to minimize dioxin/furan and mercury emissions at least to the levels required by the

<sup>18</sup>Note that this amendment does not alter the requirement to demonstrate compliance with all emission standards every five years (i.e., comprehensive performance testing), and the requirement to confirm compliance with the dioxin/furan emission standard midway between comprehensive performance tests (i.e., confirmatory performance testing). The amendment simply deletes the potentially additional dioxin/furan (and mercury) emission test prior to the end of the manufacturer's recommended life of the carbon bed to verify compliance with those emission standards.

emission standards; (2) document the monitoring procedures in the operation and maintenance plan; (3) record results of the performance monitoring in the operating record; and (4) replace the bed or bed segment before it has reached the end of its useful life. See revised § 63.1209(k)(7)(i) and conforming revisions to § 63.1209(l)(4).

#### *VI. Can a Source Be Granted an Extension of Compliance for the Interim Standards?*

As a result of the uncertainty created by the Court's opinion, we previously determined that it was not appropriate to require sources to comply with the regulatory schedule promulgated in the September 30, 1999 rule. Accordingly, we recently extended the compliance date requirement of § 63.1206(a) for one year until September 30, 2003. See 66 FR 63313 (December 6, 2001). We are clarifying today that the recent change to the compliance date requirements of § 63.1206(a) do not preclude a source from requesting an extension of compliance with the emission standards as provided in §§ 63.6(i) and 63.1213. See § 63.1206(b)(4). Sections 63.6(i) and 63.1213 allow the Administrator or State with an approved title V program to grant an extension of compliance of up to one year for a source that cannot complete system retrofits or pollution prevention and waste minimization measures by the compliance date despite a good faith effort to do so.

#### *VII. Why Are We Repromulgating the Hourly Rolling Average Temperature Limit at a Dry Particulate Matter Control Device To Control Dioxin/Furan Emissions?*

The provision finalized in the September 1999 rule that requires you to maintain compliance with the dioxin/furan emission standard by operating under a maximum temperature limit at the inlet to the dry particulate matter control device based on a one-hour rolling average was challenged and briefed by Industry in the *Cement Kiln Recycling Coalition* litigation.<sup>19</sup> Given that the challenged provisions will be vacated when the Court issues its mandate, we are repromulgating this compliance provision, consistent with our approach of repromulgating the challenged emissions standards that were not revised. See § 63.1209(k)(1) and preamble discussion in Part Two, Section I.

As we explained in detail in the record to the September 1999 rule, this

<sup>19</sup>Joint Brief of Industry Petitioners, US Court of Appeals for the District of Columbia Circuit, No. 99–1457 et al, *Cement Kiln Recycling Coalition*, et al., v. USEPA, Aug. 16, 2000.

monitoring requirement is needed to assure that the emission standard is not exceeded. It is well-established that the relationship between dioxin/furan formation and temperature at the inlet to a dry particulate matter control device (e.g., fabric filter, electrostatic precipitator) is non-linear and exponential; that is, dioxin formation increases at a faster rate than temperature. Thus, an increase in temperature above the site-specific limit will increase formation of dioxin more than an equal reduction below the limit will reduce dioxin formation (and consequently emissions at lowered temperature will not balance out those emitted at the higher temperature). See generally Technical Support Document Vol. 4 chapters 2 and 3.<sup>20</sup> We consequently view the monitoring requirement as a form of enhanced monitoring required by section 114 (a)(3) of the Act to “provide a reasonable assurance of compliance with emission standards.” *NRDC v. EPA*, 194 F. 3d 130, 136 (D.C. Cir. 1999).

We noted in the July 3, 2001 proposed rule that we do not view the temperature monitoring requirement as being an amendment to the standard. See 66 FR at 35138 n. 20. One commenter, however, reiterated claims briefed in the *Cement Kiln Recycling Coalition* litigation maintaining that requiring sources to establish a limit on maximum temperature at the inlet to a dry particulate matter control device to control dioxin/furan emissions on an hourly rolling average effectively amends the standard. We disagree.

Compliance with dioxin/furan emission standard is demonstrated by stack emissions testing. Neither the standard nor the stack test method prescribes any particular averaging time, or other monitoring regime, for achieving a temperature level. Therefore, using a one-hour averaging time does not amend the standard.

However, even if (against our view) the requirement to monitor temperature on an hourly rolling average is considered a change to the emission standard, it can be justified as a beyond the floor standard under CAA section 112 (d) (2). First, the standard is readily achievable technically. Spray quenching, the means of control, merely requires turning of a control valve to

allow quenching. 4 TSD at 2–16. Operators can readily determine when quenching is needed, since thermocouples report instantaneous temperature changes, allowing immediate reaction to temperature changes. 4 TSD at 2–10. Second, we have already considered this cost (i.e., the cost of spray quenching) in determining the standards for HWCs. We do not believe that there would be any incremental cost associated with the one-hour averaging requirement, because it is based on the same spray quenching technology which is the basis for the standards already adopted. We also included the cost of controlling spray quenching to meet the one-hour monitoring requirement in assessing costs of the September 1999 rule, and regard these costs as reasonable. See generally Technical Support Document Volumes III, IV, and V. See also 64 FR at 52892 (finding that the cost of spray quenching technology for lightweight aggregate kilns is reasonable, in adopting the beyond-the-floor standard for dioxin). In addition, as explained above, the one-hour averaging requirement is needed to prevent exceedances of the emission standard itself, see 4 TSD at 2–8 to 2–9 and 3–8 to 3–9. Given dioxin/furan’s extreme toxicity, costs are justified to assure that the emission limit is not exceeded. Finally, we do not believe there are any adverse non-air or energy impacts associated with the averaging requirement (and again, we have already assessed energy impacts and waste generation impacts of the standard when promulgating the standard in the first place). See generally Technical Support Document Vol. 5, “Emissions Estimates and Engineering Costs” (RC2F–S0011) chapter 10.

### Part Three—What Are the Analytical and Regulatory Requirements?

#### I. Executive Order 12866: Regulatory Planning and Review

Under Executive Order 12866, EPA must determine whether a regulatory action is significant and, therefore, subject to comprehensive review by the Office of Management and Budget (OMB), and the other provisions of the Executive Order. A significant regulatory action is defined by the Order as one that may:

—Have an annual effect on the economy of \$100 million or more, or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;

—Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

—Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or rights and obligations or recipients thereof; or

—Raise novel legal or policy issues arising out of legal mandates, the President’s priorities, or the principles set forth in Executive Order 12866.

Pursuant to the terms of Executive Order 12866, it has been determined that this rule is a “significant regulatory action” because it raises novel legal or policy issues. As such, this action was submitted to OMB for review. Changes made in response to OMB suggestions or recommendations will be documented in the public record.

The aggregate annualized social costs for this final rule are less than \$100 million. Furthermore, this rule is not expected to adversely effect, in a material way, the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities. The benefits to human health and the environment resulting from today’s final action have not been fully monetized but are believed to be less than \$100 million per year. Overall, the costs and benefits associated with this final Interim Standards Rule are essentially the same as those estimated for the September 30, 1999 rule. These impacts are discussed below in more detail.

#### II. What Are the Potential Costs and Benefits of Today’s Final Rule?

The value of any regulatory action is traditionally measured by the net change in social welfare that it generates. This assumes full monetization of all relevant components. All other factors being equal, a rule that generates positive net welfare would be advantageous to society and should be promulgated, while a rule that results in negative net welfare to society should be avoided. In this Part we discuss the estimated costs and benefits of the interim standards.

Today’s rule revises some emission standards and various other requirements promulgated in the September 30, 1999 rule. As discussed in Part Two, Section I of this action, while some of the emission standards are revised; most are retained as promulgated in that rule. In addition to modification of some standards, this rule provides cement and lightweight aggregate kiln sources the alternative to comply with the mercury standard by limiting the mercury content in the

<sup>20</sup> In light of this documented non-linear increase in CDD emissions, RCRA permit writers are cautioned to take this phenomenon into account in making risk determinations pursuant to the RCRA omnibus permitting provision. Cf. 64 FR at 52839–843 (description of the site specific risk assessment policy which implements the RCRA omnibus permitting provision, and its relationship to sources subject to the Hazardous Waste Combustor NESHAP).

hazardous waste to a certain level. Today's rule also includes revisions intended to reduce the potential for forfeited capital investments. This could occur if the future standards (i.e., the standards that will replace the interim standards) are substantially different (more stringent) than those established by this Interim Standards Rule. These changes include eliminating the requirement for confirmatory testing for dioxin and furans during the period that the interim standards are in effect; allowing the use of previously collected data to serve as documentation of compliance with the interim standards; and waiving all subsequent comprehensive performance tests (i.e., those after the initial comprehensive performance test) for the period that the interim standards are in effect. Finally, we are revising the startup, shutdown, and malfunction (SSM) provisions and emergency safety vent opening provisions.

In support of today's final rule we have developed preliminary cost and benefit estimates for the interim standards. These estimates, as presented below, are generalized quantified projections based on our findings as presented in the July 1999 *Assessment*<sup>21</sup>, and the July 23 1999 *Addendum*<sup>22</sup>. We have not quantified impacts potentially associated with the other aspects of today's rule. Impacts associated with today's final rule will be fully characterized, modeled in detail, and incorporated as the baseline scenario in our analysis for the upcoming rule that will establish final standards.

Cost impacts (savings and increases) of the emission standards vary by source category. The interim standards for existing incinerators are identical to the standards promulgated in the September 30, 1999 rule. As a result, estimated impacts to existing incinerators are equivalent to the impacts presented in the *Addendum* to the September 30, 1999 rule. The interim emission standards for existing cement kilns are equivalent to the September 30, 1999 rule standards, except for semivolatile metals. The semivolatile metals emission standard in this Interim Standards Rule is increased from 240 µg/dscm to 330 µg/dscm. This change is estimated to result in a 5 percent

decrease in total annual compliance costs for this source, as compared to costs presented in the *Addendum*. The interim emission standards for existing hazardous waste burning lightweight aggregate kilns are modified from the final rule standards for dioxin and furan, mercury, and hydrochloric acid/chlorine gas. Projected from the 1999 final rule baseline, these changes are estimated to reduce per system and aggregate annual compliance costs by about one-third for this source category.

The aggregate annualized social cost impacts associated with the interim standards reflect only a marginal reduction from the impacts associated with the September 30, 1999 rule. The total annualized social costs resulting from today's interim standards are estimated to range from \$47 million to \$60 million, with a high-end estimate of \$74 million. The annualized social cost impacts of the September 30, 1999 rule were estimated to range from \$50 to \$61 million, with a high-end estimate of \$75 million (See *Addendum* tables ADD-6, ADD-7, and ADD-8). All benefits associated with today's final rule have not been monetized. The *Addendum* estimated average monetized human health benefits of approximately \$20 million per year<sup>23</sup> for selected primary pollutants. Approximately 90 percent of this total was derived from reductions in particulate matter emission levels. Since the particulate matter emission standard for each source category for the interim standards is unchanged, these estimated average monetized human health benefits are retained. Although not monetized, reduced lead exposure to children was another projected benefit. Ecological and waste minimization benefits were also anticipated as a result of the September 30, 1999 final rule<sup>24</sup>. While full monetization of all benefits (human health, ecological, waste minimization) is not feasible, we believe that these benefits justify the aggregate social costs. Overall, when projected from the September 30, 1999 baseline, aggregate annualized social costs for all sources are projected to decline by no more than 6 percent, while annual monetized plus non-monetized benefits may be only marginally reduced<sup>25</sup>.

<sup>23</sup> Undiscounted estimate for future cases avoided.

<sup>24</sup> See the July 1999 "Assessment" for a full discussion of these benefits.

<sup>25</sup> The majority of the cancer risk reductions were linked to the consumption of dioxin-contaminated agricultural products. The dioxin and furan standards in the Interim Standards Rule remain the same for incinerators and cement kilns and are modified slightly for lightweight aggregate kilns. Because baseline emissions of dioxin and furans from incinerators and cement kilns represent

These findings are presented in more detail in the economic support document: *Preliminary Impacts Assessment—Interim Standards for Hazardous Air Pollutants for Hazardous Waste Combustors*. This document is available in the docket established for today's action.

### III. What Consideration Was Given to Small Entities Under the Regulatory Flexibility Act (RFA), as Amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), 5 USC 601 et. seq.?

The RFA generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure 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 governmental jurisdictions. For purposes of assessing the impacts of today's final rule on small entities, a small entity is defined either by the number of employees or by the annual dollar amount of sales/revenues. The level at which an entity is considered small is determined for each NAICS code by the Small Business Administration (SBA).

The Agency has examined the potential effects today's final rule may have on small entities, as required by the RFA/SBREFA. We have determined that this action will not have a significant economic impact on a substantial number of small entities. This is evidenced by the fact that the small entity analysis conducted in support of the September 30, 1999 final rule<sup>26</sup> concluded that significant impacts would not occur on a substantial number of potentially impacted small entities. Today's action results in marginally reduced cost

approximately 95 percent of the emissions from the three source categories combined, we estimate that most benefits discussed in the 1999 Assessment are retained.

Semivolatile metals are comprised of lead and cadmium. Lead exposure above certain levels has been linked to childhood IQ reductions and high blood pressure in adults. Potential benefits from reduced lead exposure were discussed but not monetized in the *Addendum*. Because approximately 70 percent of total semivolatile metals reductions (from all three source categories) were from incinerators, we estimate the semivolatile standard in today's Interim Standards Rule may correlate to marginally reduced lead benefits for children and/or adults.

<sup>26</sup> U.S. EPA, Office of Solid Waste, *Assessment of the Potential Costs, Benefits, & Other Impacts of the Hazardous Waste Combustion MACT Standards: Final Rule*, July 1999. Appendix G.

<sup>21</sup> U.S. EPA, Office of Solid Waste, "Assessment of the Potential Costs, Benefits, & Other Impacts of the Hazardous Waste Combustion MACT Standards: Final Rule", July 1999.

<sup>22</sup> U.S. EPA, Office of Solid Waste, "Addendum to the Assessment of the Potential Costs, Benefits, & Other Impacts of the Hazardous Waste Combustion MACT Standards: Final Rule," July 23, 1999.

impacts, as measured from the September 30, 1999 findings. As such, it is logical to presume that impacts to small entities subject to rule requirements may be equivalent to the final rule impacts, or marginally reduced. After considering the economic impacts of today's final rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities.

#### *IV. Was the Unfunded Mandates Reform Act Considered in This Final Rule?*

Executive Order 12875, "Enhancing the Intergovernmental Partnership" (October 26, 1993), calls on federal agencies to provide a statement supporting the need to issue any regulation containing an unfunded federal mandate and describing prior consultation with representatives of affected state, local, and tribal governments. Signed into law on March 22, 1995, the Unfunded Mandates Reform Act (UMRA) supersedes Executive Order 12875, reiterating the previously established directives while also imposing additional requirements for federal agencies issuing any regulation containing an unfunded mandate.

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), 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 to State, local, and tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any single 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 publishes 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.

Today's final action is not subject to the relevant requirements of UMRA. This rule will not result in \$100 million or more in expenditures. Applying the pre final rule baseline, total social costs for today's final action are estimated to range from \$47 million to \$60 million per year. Furthermore, today's rule is not subject to the requirements of section 203 of UMRA. Section 203 requires agencies to develop a small government Agency plan before establishing any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments. We have determined that this rule will not significantly or uniquely affect small governments.

#### *V. Were Equity Issues and Children's Health Considered in This Final Rule?*

By applicable executive order, we are required to consider the impacts of today's rule with regard to environmental justice and children's health.

(1) Executive Order 13045: "Protection of Children From Environmental Health Risks and Safety Risks"

"Protection of Children from Environmental Health Risks and Safety Risks" (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. Today's final rule is not subject to the Executive Order (EO) because it is not economically significant, as defined by EO 12866.

(2) Executive Order 12898: Environmental Justice

Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Population" (February 11, 1994), is designed to address the environmental and human health conditions of minority and low-income populations. EPA is committed to addressing environmental justice concerns and has assumed a leadership role in environmental justice initiatives to enhance environmental quality for all citizens of the United States. The Agency's goals are to ensure that no segment of the population, regardless of race, color, national origin, income, or net worth bears disproportionately high and adverse human health and environmental impacts as a result of EPA's policies, programs, and activities. In response to Executive Order 12898, and to concerns voiced by many groups outside the Agency, EPA's Office of Solid Waste and Emergency Response (OSWER) formed an Environmental Justice Task Force to analyze the array of environmental justice issues specific to waste programs and to develop an overall strategy to identify and address these issues (OSWER Directive No. 9200.3-17). We have no data indicating that today's final action would result in disproportionately negative impacts on minority or low income communities.

#### *VI. What Consideration Was Given to Tribal Governments in This Final Rule?*

Executive Order 13175, entitled "Consultation and Coordination with Indian Tribal Governments" (65 FR 67249, November 6, 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." "Policies that have tribal implications" is defined in the Executive Order to include regulations that have "substantial direct effects on one or more Indian tribes, on the relationship between the Federal government and the Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes."

Today's final rule does not have tribal implications. It 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 the Order. Today's rule will not significantly or uniquely affect the communities of Indian tribal

governments, nor impose substantial direct compliance costs on them.

#### *VII. Were Federalism Implications Considered in Today's Final Rule?*

Executive Order 13132, entitled "Federalism" (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" are 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."

Today's final rule does not have federalism implications. It will 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 the Order. Thus, Executive Order 13132 does not apply to this rule.

#### *VIII. Were Energy Impacts Considered?*

Executive Order 13211, "Actions Concerning Regulations That Affect Energy Supply, Distribution, or Use" (May 18, 2001), addresses the need for regulatory actions to more fully consider the potential energy impacts of the proposed rule and resulting actions. Under the Order, agencies are required to prepare a Statement of Energy Effects when a regulatory action may have significant adverse effects on energy supply, distribution, or use, including impacts on price and foreign supplies. Additionally, the requirements obligate agencies to consider reasonable alternatives to regulatory actions with adverse effects and the impacts the alternatives might have upon energy supply, distribution, or use.

Today's final rule is not likely to have any significant adverse impact on factors affecting the national energy supply. We believe that Executive Order 13211 is not relevant to this action.

#### *IX. Paperwork Reduction Act*

We have prepared an Information Collection Request (ICR) document (ICR No. 1773.06) listing the information collection requirements of this final rule, and have submitted it for approval to the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* OMB has assigned a control number 2050-0171 for this ICR. A copy

of this ICR may be obtained from Sandy Farmer, OPIA Regulatory Information Division, U.S. Environmental Protection Agency (2137), 1200 Pennsylvania Avenue, NW., Washington DC 20460, or by calling (202) 260-2740.

The public burden associated with this final rule (which is under the Clean Air Act) is projected to affect approximately 171 HWC units and is estimated to average 4.3 hours per respondent annually. The reporting and recordkeeping cost burden is estimated to average \$252 per respondent annually. Burden means total time, effort, or financial resources expended by persons to generate, maintain, retain, disclose, or provide information to or for a Federal agency. That 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.

#### *X. National Technology Transfer and Advancement Act of 1995*

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 ("NTTAA"), Public Law No. 104-113, section 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. The NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards.

This final rule does not require the implementation of new technical standards; thus, the requirements of section 12 (d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply.

#### *XI. Is Today's Rule Subject to Congressional Review?*

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement

Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. Section 808 allows the issuing agency to make a rule effective sooner than otherwise provided by the CRA if the agency makes a good cause finding that notice and public procedure is impracticable, unnecessary or contrary to the public interest. This determination must be supported by a brief statement. 5 U.S.C. 808(2). As stated previously, EPA has made such a good cause finding, including the reasons therefore, and established an effective date of February 13, 2002. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. This action is not a "major rule" as defined by 5 U.S.C. 804(2).

#### **Part Four—What Are the State Authorization and Delegation Implications?**

##### *I. What Is the Authority for the Interim Standards Rule?*

This rule revises the promulgated standards located at 40 CFR part 63, subpart EEE. As in the September 30, 1999 Final HWC NESHAP, we encourage State, Local, and Tribal (S/L/T) agencies to apply for delegation under CAA section 112. Additionally, this rule adds a new section (40 CFR 270.235) to the RCRA regulations to provide options for minimizing hazardous waste combustion emissions during startup, shutdown, and malfunction events.

##### *II. How Is This Rule Delegated Under the CAA?*

Section 112(l) of the CAA allows us to delegate authority to S/L/T programs to implement and enforce emission standards for pollutants subject to section 112 regulations. Thus, a S/L/T agency that receives 112(l) delegation can implement and enforce the revised emission standards and other revisions being made today. A S/L/T agency also can implement the revisions for Title V major sources (40 CFR 70.2) via their Title V authority because it is independent of their delegation status. By having an approved Title V program, the S/L/T agency has demonstrated that it has the legal authority, resources, and expertise to implement and enforce standards for section 112 pollutants.

As before, we encourage S/L/T agencies to apply for and receive 112(l) delegation for this rule. The key advantages afforded to S/L/T agencies who receive delegation are that they become the primary enforcement authority and can exercise delegable provision authorities. Additionally, it ensures clear and consistent requirements for affected sources and regulators. For example, a source need only report compliance assurance monitoring to its primary enforcement authority.

State, Local, and Tribal agencies still have the ability to choose which delegation options to use when applying for delegation of Federal authorities for this rule. The 112(l) delegation process begins when the S/L/T agency applies for delegation of a section 112 rule without changes (straight delegation), by rule adjustment, substitution of requirements, state program approval (SPA), or equivalency by permit (EBP).<sup>27</sup> Also, the partial approval option is available for any S/L/T who cannot or chooses not to take full delegation of an entire standard. The drawback to this option is that it can create inconsistent requirements since the S/L/T agency will enforce portions of the standard, while we will enforce the remaining portions.

This rule will be effective upon promulgation. As with the Phase I NESHAP, a S/L/T agency will need to incorporate the Federal standards and provisions of this rule into a major source's new, renewed, or revised Title V permit regardless of whether it has received delegation. However, by receiving delegation of 112(l), a S/L/T agency can approve minor changes to a Federal NESHAP. For instance, it can substitute an emission limitation that is more stringent than a Federal standard.

In light of the benefits afforded to a S/L/T agency if it receives 112(l) delegation, we recognize that the process of applying for and receiving delegation can be a lengthy one. This may be especially true for those agencies that do not have established agreements in place to receive automatic delegation of unchanged standards. There are agencies who choose to utilize the delegation options provided under 112(l), which are not as straightforward as the unchanged standards. In these cases, the review period required when applying for one of the delegation

options combined with a state's legislative proceedings, are factors that can prolong the delegation process. Therefore, we encourage the S/L/T agency to do what makes sense given circumstances relevant to timing issues and resource needs.

### *III. How Would States Become Authorized Under RCRA?*

Under section 3006 of RCRA, we may authorize qualified States to administer the RCRA hazardous waste program within the State. A State may receive authorization by following the approval process described under part 271. See 40 CFR part 271 for the overall standards and requirements for authorization. Following authorization, the State requirements authorized by us apply in lieu of equivalent Federal requirements and become Federally enforceable as requirements of RCRA. We maintain independent authority to bring enforcement actions under RCRA sections 3007, 3008, 3013, and 7003. Authorized States also have independent authority to bring enforcement actions under State law.

Authorized States are required to modify their programs when we promulgate Federal requirements that are more stringent or broader in scope than existing Federal requirements. RCRA section 3009 allows States to impose standards more stringent than those in the Federal program. See also § 271.1(i). Therefore, authorized States are not required to adopt Federal regulations, both HSWA<sup>28</sup> and non-HSWA, that are considered less stringent than the existing requirements. The requirements in today's amendment are considered to be neither more nor less stringent than the current emission regulations because they provide equivalent protection. Thus, States are not required to adopt today's amendments to maintain an equivalent program, although we strongly encourage them to do so.

Today's amendment in 40 CFR 270.235 is promulgated under both HSWA and non-HSWA statutory authority, depending on the waste management unit to which the standards apply. The authority to apply the provisions of 40 CFR 270.235 to cement and lightweight aggregate kilns is under RCRA 3004(q), which is a provision added by HSWA. Therefore, the Agency is adding this rule to Table 1 in § 271.1(j), which identifies the Federal program requirements that are promulgated pursuant to HSWA. If a State is not authorized to implement the

RCRA program for these units, EPA will implement today's amendments. If a State has such authorization, today's amendments will not become effective under RCRA until States adopt and become authorized for the revisions. The authority to apply the provisions of 40 CFR 270.235 to incinerators is under section 3004(a) of RCRA, a non-HSWA provision. Therefore, today's amendments as they apply to incinerators will not become effective under RCRA until States adopt and become authorized for the revisions.

### **List of Subjects**

#### *40 CFR Part 63*

Environmental protection, Air pollution control, Hazardous substances, Incorporation by reference, Reporting and recordkeeping requirements.

#### *40 CFR Part 264*

Environmental protection, Air pollution control, Hazardous waste, Insurance, Packaging and containers, Reporting and recordkeeping requirements, Security measures, Surety bonds.

#### *40 CFR Part 265*

Environmental protection, Air pollution control, Hazardous waste, Insurance, Packaging and containers, Reporting and recordkeeping requirements.

#### *40 CFR Part 266*

Environmental protection, Energy, Hazardous waste, Recycling, Reporting and recordkeeping requirements.

#### *40 CFR Part 270*

Environmental protection, Administrative practice and procedure, Confidential business information, Hazardous materials transportation, Hazardous waste, Reporting and recordkeeping requirements.

#### *40 CFR Part 271*

Administrative practice and procedure, Hazardous materials transportation, Hazardous waste, Intergovernmental relations, Reporting and recordkeeping requirements.

Dated: February 7, 2002.

**Christine Todd Whitman,**  
*Administrator.*

For the reasons set out in the preamble, title 40, chapter I, of the Code of Federal Regulations is amended as follows:

<sup>27</sup> Refer to Hazardous Air Pollutants: Amendments to the Approval of State Programs and Delegation of Federal Authorities; Final Rule at 65 FR 55810 or the CAA Delegation for the HWC NESHAP fact sheet at [www.epa.gov/epaoswer/hazwaste/combust/toolkit/coverpage.htm](http://www.epa.gov/epaoswer/hazwaste/combust/toolkit/coverpage.htm) for further information on delegation procedures.

<sup>28</sup> HSWA refers to the Hazardous and Solid Waste Amendments of 1984.

**PART 63—NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES**

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

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

2. Section 63.1203 is revised to read as follows:

**§ 63.1203 What are the standards for hazardous waste incinerators?**

(a) *Emission limits for existing sources.* You must not discharge or cause combustion gases to be emitted into the atmosphere that contain:

(1) For dioxins and furans:

(i) Emissions in excess of 0.20 ng TEQ/dscm corrected to 7 percent oxygen; or

(ii) Emissions in excess of 0.40 ng TEQ/dscm corrected to 7 percent oxygen provided that the combustion gas temperature at the inlet to the initial particulate matter control device is 400°F or lower based on the average of the test run average temperatures. (For purposes of compliance, operation of a wet particulate control device is presumed to meet the 400 °F or lower requirement);

(2) Mercury in excess of 130 µg/dscm corrected to 7 percent oxygen;

(3) Lead and cadmium in excess of 240 µg/dscm, combined emissions, corrected to 7 percent oxygen;

(4) Arsenic, beryllium, and chromium in excess of 97 µg/dscm, combined emissions, corrected to 7 percent oxygen;

(5) For carbon monoxide and hydrocarbons, either:

(i) Carbon monoxide in excess of 100 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis and corrected to 7 percent oxygen. If you elect to comply with this carbon monoxide standard rather than the hydrocarbon standard under paragraph (a)(5)(ii) of this section, you must also document that, during the destruction and removal efficiency (DRE) test runs or their equivalent as provided by § 63.1206(b)(7), hydrocarbons do not exceed 10 parts per million by volume during those runs, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen, and reported as propane; or

(ii) Hydrocarbons in excess of 10 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7

percent oxygen, and reported as propane;

(6) Hydrochloric acid and chlorine gas in excess of 77 parts per million by volume, combined emissions, expressed as hydrochloric acid equivalents, dry basis and corrected to 7 percent oxygen; and

(7) Particulate matter in excess of 34 mg/dscm corrected to 7 percent oxygen.

(b) *Emission limits for new sources.*

You must not discharge or cause combustion gases to be emitted into the atmosphere that contain:

(1) Dioxins and furans in excess of 0.20 ng TEQ/dscm, corrected to 7 percent oxygen;

(2) Mercury in excess of 45 µg/dscm corrected to 7 percent oxygen;

(3) Lead and cadmium in excess of 120 µg/dscm, combined emissions, corrected to 7 percent oxygen;

(4) Arsenic, beryllium, and chromium in excess of 97 µg/dscm, combined emissions, corrected to 7 percent oxygen;

(5) For carbon monoxide and hydrocarbons, either:

(i) Carbon monoxide in excess of 100 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis and corrected to 7 percent oxygen. If you elect to comply with this carbon monoxide standard rather than the hydrocarbon standard under paragraph (b)(5)(ii) of this section, you must also document that, during the destruction and removal efficiency (DRE) test runs or their equivalent as provided by § 63.1206(b)(7), hydrocarbons do not exceed 10 parts per million by volume during those runs, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen, and reported as propane; or

(ii) Hydrocarbons in excess of 10 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen, and reported as propane;

(6) Hydrochloric acid and chlorine gas in excess of 21 parts per million by volume, combined emissions, expressed as hydrochloric acid equivalents, dry basis and corrected to 7 percent oxygen; and

(7) Particulate matter in excess of 34 mg/dscm corrected to 7 percent oxygen.

(c) *Destruction and removal efficiency (DRE) standard.* (1) 99.99% DRE. Except as provided in paragraph (c)(2) of this section, you must achieve a destruction and removal efficiency (DRE) of 99.99%

for each principle organic hazardous constituent (POHC) designated under paragraph (c)(3) of this section. You must calculate DRE for each POHC from the following equation:

$$DRE = [1 - (W_{out} / W_{in})] \times 100\%$$

Where:

$W_{in}$  = mass feedrate of one principal organic hazardous constituent (POHC) in a waste feedstream; and  
 $W_{out}$  = mass emission rate of the same POHC present in exhaust emissions prior to release to the atmosphere.

(2) 99.9999% DRE. If you burn the dioxin-listed hazardous wastes F020, F021, F022, F023, F026, or F027 (see § 261.31 of this chapter), you must achieve a destruction and removal efficiency (DRE) of 99.9999% for each principle organic hazardous constituent (POHC) that you designate under paragraph (c)(3) of this section. You must demonstrate this DRE performance on POHCs that are more difficult to incinerate than tetra-, penta-, and hexachlorodibenzo-*p*-dioxins and dibenzofurans. You must use the equation in paragraph (c)(1) of this section to calculate DRE for each POHC. In addition, you must notify the Administrator of your intent to incinerate hazardous wastes F020, F021, F022, F023, F026, or F027.

(3) *Principal organic hazardous constituents (POHCs).* (i) You must treat the Principal Organic Hazardous Constituents (POHCs) in the waste feed that you specify under paragraph (c)(3)(ii) of this section to the extent required by paragraphs (c)(1) and (c)(2) of this section.

(ii) You must specify one or more POHCs from the list of hazardous air pollutants established by 42 U.S.C. 7412(b)(1), excluding caprolactam (CAS number 105602) as provided by § 63.60, for each waste to be burned. You must base this specification on the degree of difficulty of incineration of the organic constituents in the waste and on their concentration or mass in the waste feed, considering the results of waste analyses or other data and information.

(d) *Significant figures.* The emission limits provided by paragraphs (a) and (b) of this section are presented with two significant figures. Although you must perform intermediate calculations using at least three significant figures, you may round the resultant emission levels to two significant figures to document compliance.

3. Section 63.1204 is revised to read as follows:

**§ 63.1204 What are the standards for hazardous waste burning cement kilns?**

(a) *Emission limits for existing sources.* You must not discharge or

cause combustion gases to be emitted into the atmosphere that contain:

(1) For dioxins and furans:

(i) Emissions in excess of 0.20 ng TEQ/dscm corrected to 7 percent oxygen; or

(ii) Emissions in excess of 0.40 ng TEQ/dscm corrected to 7 percent oxygen provided that the combustion gas temperature at the inlet to the initial dry particulate matter control device is 400°F or lower based on the average of the test run average temperatures;

(2) Mercury in excess of 120 µg/dscm corrected to 7 percent oxygen;

(3) Lead and cadmium in excess of 330 µg/dscm, combined emissions, corrected to 7 percent oxygen;

(4) Arsenic, beryllium, and chromium in excess of 56 µg/dscm, combined emissions, corrected to 7 percent oxygen;

(5) *Carbon monoxide and hydrocarbons.* (i) For kilns equipped with a by-pass duct or midkiln gas sampling system, either:

(A) Carbon monoxide in the by-pass duct or mid-kiln gas sampling system in excess of 100 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis and corrected to 7 percent oxygen. If you elect to comply with this carbon monoxide standard rather than the hydrocarbon standard under paragraph (a)(5)(i)(B) of this section, you must also document that, during the destruction and removal efficiency (DRE) test runs or their equivalent as provided by § 63.1206(b)(7), hydrocarbons in the by-pass duct or mid-kiln gas sampling system do not exceed 10 parts per million by volume during those runs, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen, and reported as propane; or

(B) Hydrocarbons in the by-pass duct or midkiln gas sampling system in excess of 10 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen, and reported as propane;

(ii) For kilns not equipped with a by-pass duct or midkiln gas sampling system, either:

(A) Hydrocarbons in the main stack in excess of 20 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7

percent oxygen, and reported as propane; or

(B) Carbon monoxide in the main stack in excess of 100 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis and corrected to 7 percent oxygen. If you elect to comply with this carbon monoxide standard rather than the hydrocarbon standard under paragraph (a)(5)(ii)(A) of this section, you also must document that, during the destruction and removal efficiency (DRE) test runs or their equivalent as provided by § 63.1206(b)(7), hydrocarbons in the main stack do not exceed 20 parts per million by volume during those runs, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen, and reported as propane.

(6) Hydrochloric acid and chlorine gas in excess of 130 parts per million by volume, combined emissions, expressed as hydrochloric acid equivalents, dry basis, corrected to 7 percent oxygen; and

(7) Particulate matter in excess of 0.15 kg/Mg dry feed and opacity greater than 20 percent.

(i) You must use suitable methods to determine the kiln raw material feedrate.

(ii) Except as provided in paragraph (a)(7)(iii) of this section, you must compute the particulate matter emission rate,  $E$ , from the following equation:

$$E = (C_s \times Q_{sd}) / P$$

Where:

$E$  = emission rate of particulate matter, kg/Mg of kiln raw material feed;

$C_s$  = concentration of particulate matter, kg/dscm;

$Q_{sd}$  = volumetric flowrate of effluent gas, dscm/hr; and

$P$  = total kiln raw material feed (dry basis), Mg/hr.

(iii) If you operate a preheater or preheater/precalciner kiln with dual stacks, you must test simultaneously and compute the combined particulate matter emission rate,  $E_c$ , from the following equation:

$$E_c = (C_{sk} \times Q_{sdk} + C_{sb} \times Q_{sdb}) / P$$

Where:

$E_c$  = the combined emission rate of particulate matter from the kiln and bypass stack, kg/Mg of kiln raw material feed;

$C_{sk}$  = concentration of particulate matter in the kiln effluent, kg/dscm;

$Q_{sdk}$  = volumetric flowrate of kiln effluent gas, dscm/hr;

$C_{sb}$  = concentration of particulate matter in the bypass stack effluent, kg/dscm;

$Q_{sdb}$  = volumetric flowrate of bypass stack effluent gas, dscm/hr; and

$P$  = total kiln raw material feed (dry basis), Mg/hr.

(b) *Emission limits for new sources.* You must not discharge or cause combustion gases to be emitted into the atmosphere that contain:

(1) For dioxins and furans:

(i) Emissions in excess of 0.20 ng TEQ/dscm corrected to 7 percent oxygen; or

(ii) Emissions in excess of 0.40 ng TEQ/dscm corrected to 7 percent oxygen provided that the combustion gas temperature at the inlet to the initial dry particulate matter control device is 400 °F or lower based on the average of the test run average temperatures;

(2) Mercury in excess of 120 µg/dscm corrected to 7 percent oxygen;

(3) Lead and cadmium in excess of 180 µg/dscm, combined emissions, corrected to 7 percent oxygen;

(4) Arsenic, beryllium, and chromium in excess of 54 µg/dscm, combined emissions, corrected to 7 percent oxygen;

(5) *Carbon monoxide and hydrocarbons.* (i) For kilns equipped with a by-pass duct or midkiln gas sampling system, carbon monoxide and hydrocarbons emissions are limited in both the bypass duct or midkiln gas sampling system and the main stack as follows:

(A) Emissions in the by-pass or midkiln gas sampling system are limited to either:

(1) Carbon monoxide in excess of 100 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis and corrected to 7 percent oxygen. If you elect to comply with this carbon monoxide standard rather than the hydrocarbon standard under paragraph (b)(5)(i)(A)(2) of this section, you also must document that, during the destruction and removal efficiency (DRE) test runs or their equivalent as provided by § 63.1206(b)(7), hydrocarbons do not exceed 10 parts per million by volume during those runs, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen, and reported as propane; or

(2) Hydrocarbons in the by-pass duct or midkiln gas sampling system in excess of 10 parts per million by volume, over an hourly rolling average

(monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen, and reported as propane; and

(B) Hydrocarbons in the main stack are limited, if construction of the kiln commenced after April 19, 1996 at a plant site where a cement kiln (whether burning hazardous waste or not) did not previously exist, to 50 parts per million by volume, over a 30-day block average (monitored continuously with a continuous monitoring system), dry basis, corrected to 7 percent oxygen, and reported as propane.

(ii) For kilns not equipped with a by-pass duct or midkiln gas sampling system, hydrocarbons and carbon monoxide are limited in the main stack to either:

(A) Hydrocarbons not exceeding 20 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen, and reported as propane; or

(B)(1) Carbon monoxide not exceeding 100 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen; and

(2) Hydrocarbons not exceeding 20 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous monitoring system), dry basis, corrected to 7 percent oxygen, and reported as propane at any time during the destruction and removal efficiency (DRE) test runs or their equivalent as provided by § 63.1206(b)(7); and

(3) If construction of the kiln commenced after April 19, 1996 at a plant site where a cement kiln (whether burning hazardous waste or not) did not previously exist, hydrocarbons are limited to 50 parts per million by volume, over a 30-day block average (monitored continuously with a continuous monitoring system), dry basis, corrected to 7 percent oxygen, and reported as propane.

(6) Hydrochloric acid and chlorine gas in excess of 86 parts per million, combined emissions, expressed as hydrochloric acid equivalents, dry basis and corrected to 7 percent oxygen; and

(7) Particulate matter in excess of 0.15 kg/Mg dry feed and opacity greater than 20 percent.

(i) You must use suitable methods to determine the kiln raw material feedrate.

(ii) Except as provided in paragraph (a)(7)(iii) of this section, you must compute the particulate matter emission

rate, E, from the equation specified in paragraph (a)(7)(ii) of this section.

(iii) If you operate a preheater or preheater/precalciner kiln with dual stacks, you must test simultaneously and compute the combined particulate matter emission rate, E<sub>c</sub>, from the equation specified in paragraph (a)(7)(iii) of this section.

(c) *Destruction and removal efficiency (DRE) standard.* (1) *99.99% DRE.* Except as provided in paragraph (c)(2) of this section, you must achieve a destruction and removal efficiency (DRE) of 99.99% for each principle organic hazardous constituent (POHC) designated under paragraph (c)(3) of this section. You must calculate DRE for each POHC from the following equation:

$$DRE = [1 - (W_{out} / W_{in})] \times 100\%$$

Where:

W<sub>in</sub> = mass feedrate of one principal organic hazardous constituent (POHC) in a waste feedstream; and

W<sub>out</sub> = mass emission rate of the same POHC present in exhaust emissions prior to release to the atmosphere.

(2) *99.9999% DRE.* If you burn the dioxin-listed hazardous wastes F020, F021, F022, F023, F026, or F027 (see § 261.31 of this chapter), you must achieve a destruction and removal efficiency (DRE) of 99.9999% for each principle organic hazardous constituent (POHC) that you designate under paragraph (c)(3) of this section. You must demonstrate this DRE performance on POHCs that are more difficult to incinerate than tetra-, penta-, and hexachlorodibenzo-*p*-dioxins and dibenzofurans. You must use the equation in paragraph (c)(1) of this section to calculate DRE for each POHC. In addition, you must notify the Administrator of your intent to incinerate hazardous wastes F020, F021, F022, F023, F026, or F027.

(3) *Principal organic hazardous constituents (POHCs).* (i) You must treat the Principal Organic Hazardous Constituents (POHCs) in the waste feed that you specify under paragraph (c)(3)(ii) of this section to the extent required by paragraphs (c)(1) and (c)(2) of this section.

(ii) You must specify one or more POHCs from the list of hazardous air pollutants established by 42 U.S.C. 7412(b)(1), excluding caprolactam (CAS number 105602) as provided by § 63.60, for each waste to be burned. You must base this specification on the degree of difficulty of incineration of the organic constituents in the waste and on their concentration or mass in the waste feed, considering the results of waste analyses or other data and information.

(d) *Cement kilns with in-line kiln raw mills.* (1) *General.* (i) You must conduct performance testing when the raw mill is on-line and when the mill is off-line to demonstrate compliance with the emission standards, and you must establish separate operating parameter limits under § 63.1209 for each mode of operation, except as provided by paragraph (d)(1)(iv) of this section.

(ii) You must document in the operating record each time you change from one mode of operation to the alternate mode and begin complying with the operating parameter limits for that alternate mode of operation.

(iii) You must establish rolling averages for the operating parameter limits anew (*i.e.*, without considering previous recordings) when you begin complying with the operating limits for the alternate mode of operation.

(iv) If your in-line kiln raw mill has dual stacks, you may assume that the dioxin/furan emission levels in the by-pass stack and the operating parameter limits determined during performance testing of the by-pass stack when the raw mill is off-line are the same as when the mill is on-line.

(2) *Emissions averaging.* You may comply with the mercury, semivolatile metal, low volatile metal, and hydrochloric acid/chlorine gas emission standards on a time-weighted average basis under the following procedures:

(i) *Averaging methodology.* You must calculate the time-weighted average emission concentration with the following equation:

$$C_{total} = \{C_{mill-off} \times (T_{mill-off} / (T_{mill-off} + T_{mill-on}))\} + \{C_{mill-on} \times (T_{mill-on} / (T_{mill-off} + T_{mill-on}))\}$$

Where:

C<sub>total</sub> = time-weighted average concentration of a regulated constituent considering both raw mill on time and off time;

C<sub>mill-off</sub> = average performance test concentration of regulated constituent with the raw mill off-line;

C<sub>mill-on</sub> = average performance test concentration of regulated constituent with the raw mill on-line;

T<sub>mill-off</sub> = time when kiln gases are not routed through the raw mill; and

T<sub>mill-on</sub> = time when kiln gases are routed through the raw mill.

(ii) *Compliance.* (A) If you use this emission averaging provision, you must document in the operating record compliance with the emission standards on an annual basis by using the equation provided by paragraph (d)(2) of this section.

(B) Compliance is based on one-year block averages beginning on the day you

submit the initial notification of compliance.

(iii) *Notification.* (A) If you elect to document compliance with one or more emission standards using this emission averaging provision, you must notify the Administrator in the initial comprehensive performance test plan submitted under § 63.1207(e).

(B) You must include historical raw mill operation data in the performance test plan to estimate future raw mill down-time and document in the performance test plan that estimated emissions and estimated raw mill down-time will not result in an exceedance of an emission standard on an annual basis.

(C) You must document in the notification of compliance submitted under § 63.1207(j) that an emission standard will not be exceeded based on the documented emissions from the performance test and predicted raw mill down-time.

(e) *Preheater or preheater/precalciner kilns with dual stacks.* (1) *General.* You must conduct performance testing on each stack to demonstrate compliance with the emission standards, and you must establish operating parameter limits under § 63.1209 for each stack, except as provided by paragraph (d)(1)(iv) of this section for dioxin/furan emissions testing and operating parameter limits for the by-pass stack of in-line raw mills.

(2) *Emissions averaging.* You may comply with the mercury, semivolatile metal, low volatile metal, and hydrochloric acid/chlorine gas emission standards specified in this section on a gas flowrate-weighted average basis under the following procedures:

(i) *Averaging methodology.* You must calculate the gas flowrate-weighted average emission concentration using the following equation:

$$C_{\text{tot}} = \{C_{\text{main}} \times (Q_{\text{main}} / (Q_{\text{main}} + Q_{\text{bypass}}))\} + \{C_{\text{bypass}} \times (Q_{\text{bypass}} / (Q_{\text{main}} + Q_{\text{bypass}}))\}$$

Where:

$C_{\text{tot}}$  = gas flowrate-weighted average concentration of the regulated constituent;

$C_{\text{main}}$  = average performance test concentration demonstrated in the main stack;

$C_{\text{bypass}}$  = average performance test concentration demonstrated in the bypass stack;

$Q_{\text{main}}$  = volumetric flowrate of main stack effluent gas; and

$Q_{\text{bypass}}$  = volumetric flowrate of bypass effluent gas.

(ii) *Compliance.* (A) You must demonstrate compliance with the emission standard(s) using the emission

concentrations determined from the performance tests and the equation provided by paragraph (e)(1) of this section; and

(B) You must develop operating parameter limits for bypass stack and main stack flowrates that ensure the emission concentrations calculated with the equation in paragraph (e)(1) of this section do not exceed the emission standards on a 12-hour rolling average basis. You must include these flowrate limits in the Notification of Compliance.

(iii) *Notification.* If you elect to document compliance under this emissions averaging provision, you must:

(A) Notify the Administrator in the initial comprehensive performance test plan submitted under § 63.1207(e). The performance test plan must include, at a minimum, information describing the flowrate limits established under paragraph (e)(2)(ii)(B) of this section; and

(B) Document in the Notification of Compliance submitted under § 63.1207(j) the demonstrated gas flowrate-weighted average emissions that you calculate with the equation provided by paragraph (e)(2) of this section.

(f) *Significant figures.* The emission limits provided by paragraphs (a) and (b) of this section are presented with two significant figures. Although you must perform intermediate calculations using at least three significant figures, you may round the resultant emission levels to two significant figures to document compliance.

(g) [Reserved].

(h) When you comply with the particulate matter requirements of paragraphs (a)(7) or (b)(7) of this section, you are exempt from the New Source Performance Standard for particulate matter and opacity under § 60.60 of this chapter.

4. Section 63.1205 is revised to read as follows:

**§ 63.1205 What are the standards for hazardous waste burning lightweight aggregate kilns?**

(a) *Emission limits for existing sources.* You must not discharge or cause combustion gases to be emitted into the atmosphere that contain:

(1) For dioxins and furans:

(i) Emissions in excess of 0.20 ng TEQ/dscm corrected to 7 percent oxygen; or

(ii) Rapid quench of the combustion gas temperature at the exit of the (last) combustion chamber (or exit of any waste heat recovery system) to 400°F or lower based on the average of the test run average temperatures. You must

also notify in writing the RCRA authority that you are complying with this option;

(2) Mercury in excess of 120 µg/dscm corrected to 7 percent oxygen;

(3) Lead and cadmium in excess of 250 µg/dscm, combined emissions, corrected to 7 percent oxygen;

(4) Arsenic, beryllium, and chromium in excess of 110 µg/dscm, combined emissions, corrected to 7 percent oxygen;

(5) *Carbon monoxide and hydrocarbons.* (i) Carbon monoxide in excess of 100 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis and corrected to 7 percent oxygen. If you elect to comply with this carbon monoxide standard rather than the hydrocarbon standard under paragraph (a)(5)(ii) of this section, you also must document that, during the destruction and removal efficiency (DRE) test runs or their equivalent as provided by § 63.1206(b)(7), hydrocarbons do not exceed 20 parts per million by volume during those runs, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen, and reported as propane; or

(ii) Hydrocarbons in excess of 20 parts per million by volume, over an hourly rolling average, dry basis, corrected to 7 percent oxygen, and reported as propane;

(6) Hydrochloric acid and chlorine gas in excess of 600 parts per million by volume, combined emissions, expressed as hydrochloric acid equivalents, dry basis and corrected to 7 percent oxygen; and

(7) Particulate matter in excess of 57 mg/dscm corrected to 7 percent oxygen.

(b) *Emission limits for new sources.* You must not discharge or cause combustion gases to be emitted into the atmosphere that contain:

(1) For dioxins and furans:

(i) Emissions in excess of 0.20 ng TEQ/dscm corrected to 7 percent oxygen; or

(ii) Rapid quench of the combustion gas temperature at the exit of the (last) combustion chamber (or exit of any waste heat recovery system) to 400°F or lower based on the average of the test run average temperatures. You must also notify in writing the RCRA authority that you are complying with this option;

(2) Mercury in excess of 120 µg/dscm corrected to 7 percent oxygen;

(3) Lead and cadmium in excess of 43 µg/dscm, combined emissions, corrected to 7 percent oxygen;

(4) Arsenic, beryllium, and chromium in excess of 110 µg/dscm, combined emissions, corrected to 7 percent oxygen;

(5) *Carbon monoxide and hydrocarbons.* (i) Carbon monoxide in excess of 100 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis and corrected to 7 percent oxygen. If you elect to comply with this carbon monoxide standard rather than the hydrocarbon standard under paragraph (b)(5)(ii) of this section, you also must document that, during the destruction and removal efficiency (DRE) test runs or their equivalent as provided by § 63.1206(b)(7), hydrocarbons do not exceed 20 parts per million by volume during those runs, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen, and reported as propane; or

(ii) Hydrocarbons in excess of 20 parts per million by volume, over an hourly rolling average, dry basis, corrected to 7 percent oxygen, and reported as propane;

(6) Hydrochloric acid and chlorine gas in excess of 41 parts per million by volume, combined emissions, expressed as hydrochloric acid equivalents, dry basis and corrected to 7 percent oxygen; and

(7) Particulate matter in excess of 57 mg/dscm corrected to 7 percent oxygen.

(c) *Destruction and removal efficiency (DRE) standard.* (1) *99.99% DRE.* Except as provided in paragraph (c)(2) of this section, you must achieve a destruction and removal efficiency (DRE) of 99.99% for each principal organic hazardous constituent (POHC) designated under paragraph (c)(3) of this section. You must calculate DRE for each POHC from the following equation:

$$DRE = [1 - (W_{out} / W_{in})] \times 100\%$$

Where:

$W_{in}$  = mass feedrate of one principal organic hazardous constituent (POHC) in a waste feedstream; and  
 $W_{out}$  = mass emission rate of the same POHC present in exhaust emissions prior to release to the atmosphere.

(2) *99.9999% DRE.* If you burn the dioxin-listed hazardous wastes F020, F021, F022, F023, F026, or F027 (see § 261.31 of this chapter), you must achieve a destruction and removal efficiency (DRE) of 99.9999% for each principal organic hazardous constituent

(POHC) that you designate under paragraph (c)(3) of this section. You must demonstrate this DRE performance on POHCs that are more difficult to incinerate than tetra-, penta-, and hexachlorodibenzo-dioxins and dibenzofurans. You must use the equation in paragraph (c)(1) of this section to calculate DRE for each POHC. In addition, you must notify the Administrator of your intent to burn hazardous wastes F020, F021, F022, F023, F026, or F027.

(3) *Principal organic hazardous constituents (POHCs).* (i) You must treat the Principal Organic Hazardous Constituents (POHCs) in the waste feed that you specify under paragraph (c)(3)(ii) of this section to the extent required by paragraphs (c)(1) and (c)(2) of this section.

(ii) You must specify one or more POHCs from the list of hazardous air pollutants established by 42 U.S.C. 7412(b)(1), excluding caprolactam (CAS number 105602) as provided by § 63.60, for each waste to be burned. You must base this specification on the degree of difficulty of incineration of the organic constituents in the waste and on their concentration or mass in the waste feed, considering the results of waste analyses or other data and information.

(d) *Significant figures.* The emission limits provided by paragraphs (a) and (b) of this section are presented with two significant figures. Although you must perform intermediate calculations using at least three significant figures, you may round the resultant emission levels to two significant figures to document compliance.

5. Section 63.1206 is amended by:

- a. Revising paragraph (b)(1)(i).
- b. Adding paragraph (b)(15).
- c. Revising paragraphs (c)(2)(i), (c)(2)(ii), (c)(4)(i), and (c)(4)(iv).
- d. Adding paragraph (c)(2)(v).

The revisions and additions read as follows:

**§ 63.1206 When and how must you comply with the standards and operating requirements?**

\* \* \* \* \*

(b) \* \* \*

(1) \* \* \*

(i) During periods of startup, shutdown, and malfunction; and

\* \* \* \* \*

(15) *Alternative to the interim standards for mercury for cement and lightweight aggregate kilns.* (i) *General.* In lieu of complying with the applicable mercury standards of §§ 63.1204(a)(2) and (b)(2) for existing and new cement kilns and §§ 63.1205(a)(2) and (b)(2) for existing and new lightweight aggregate kilns, you may instead elect to comply

with the alternative mercury standard described in paragraphs (b)(15)(ii) through (b)(15)(v) of this section.

(ii) *Operating requirement.* You must not exceed a hazardous waste feedrate corresponding to a maximum theoretical emission concentration (MTEC) of 120 µg/dscm on a twelve-hour rolling average.

(iii) To document compliance with the operating requirement of paragraph (b)(15)(ii) of this section, you must:

(A) Monitor and record the feedrate of mercury for each hazardous waste feedstream according to § 63.1209(c);

(B) Monitor with a CMS and record in the operating record the gas flowrate (either directly or by monitoring a surrogate parameter that you have correlated to gas flowrate);

(C) Continuously calculate and record in the operating record a MTEC assuming mercury from all hazardous waste feedstreams is emitted;

(D) Interlock the MTEC calculated in paragraph (b)(15)(iii)(C) of this section to the AWFCO system to stop hazardous waste burning when the MTEC exceeds the operating requirement of paragraph (b)(15)(ii) of this section.

(iv) In lieu of the requirement in paragraph (b)(15)(iii) of this section, you may:

(A) Identify in the Notification of Compliance a minimum gas flowrate limit and a maximum feedrate limit of mercury from all hazardous waste feedstreams that ensures the MTEC calculated in paragraph (b)(15)(iii)(C) of this section is below the operating requirement of paragraph (b)(15)(ii) of this section; and

(B) Interlock the minimum gas flowrate limit and maximum feedrate limits in paragraph (b)(15)(iv)(A) of this section to the AWFCO system to stop hazardous waste burning when the gas flowrate or mercury feedrate exceeds the limits in paragraph (b)(15)(iv)(A) of this section.

(v) *Notification requirement.* You must notify in writing the RCRA authority that you intend to comply with the alternative standard.

(c) \* \* \*

(2) *Startup, shutdown, and malfunction plan.* (i) You are subject to the startup, shutdown, and malfunction plan requirements of § 63.6(e)(3).

(ii) If you elect to comply with §§ 270.235(a)(1)(iii), 270.235(a)(2)(iii), or 270.235(b)(1)(ii) of this chapter to address RCRA concerns that you minimize emissions of toxic compounds from startup, shutdown, and malfunction events (including releases from emergency safety vents):

(A) The startup, shutdown, and malfunction plan must include a

description of potential causes of malfunctions, including releases from emergency safety vents, that may result in significant releases of hazardous air pollutants, and actions the source is taking to minimize the frequency and severity of those malfunctions.

(B) You must submit the startup, shutdown, and malfunction plan to the Administrator for review and approval.

(1) *Approval procedure.* The Administrator will notify you of approval or intention to deny approval of the startup, shutdown, and malfunction plan within 90 calendar days after receipt of the original request and within 60 calendar days after receipt of any supplemental information that you submit. Before disapproving the plan, the Administrator will notify you of the Administrator's intention to disapprove the plan together with:

(i) Notice of the information and findings on which intended disapproval is based; and

(ii) Notice of opportunity for you to present additional information to the Administrator before final action on disapproval of the plan. At the time the Administrator notifies you of intention to disapprove the plan, the Administrator will specify how much time you will have after being notified on the intended disapproval to submit additional information.

(2) *Responsibility of owners and operators.* You are responsible for ensuring that you submit any supplementary and additional information supporting your plan in a timely manner to enable the Administrator to consider whether to approve the plan. Neither your submittal of the plan, nor the Administrator's failure to approve or disapprove the plan, relieves you of the responsibility to comply with the provisions of this subpart.

(C) *Changes to the plan that may significantly increase emissions.* (1) You must request approval in writing from the Administrator within 5 days after making a change to the startup, shutdown, and malfunction plan that may significantly increase emissions of hazardous air pollutants.

(2) To request approval of such changes to the startup, shutdown, and malfunction plan, you must follow the procedures provided by paragraph (c)(2)(ii)(B) of this section for initial approval of the plan.

\* \* \* \* \*

(v) *Operating under the startup, shutdown, and malfunction plan.* (A) *Compliance with AWFCO requirements during malfunctions.* (1) During malfunctions, the automatic waste feed

cutoff requirements of § 63.1206(c)(3) continue to apply, except for paragraphs (c)(3)(v) and (c)(3)(vi) of this section. If you exceed a part 63, Subpart EEE, of this chapter emission standard monitored by a CEMS or COMs or operating limit specified under § 63.1209, the automatic waste feed cutoff system must immediately and automatically cutoff the hazardous waste feed, except as provided by paragraph (c)(3)(viii) of this section. If the malfunction itself prevents immediate and automatic cutoff of the hazardous waste feed, however, you must cease feeding hazardous waste as quickly as possible.

(2) Although the automatic waste feed cutoff requirements continue to apply during a malfunction, an exceedance of an emission standard monitored by a CEMS or COMS or operating limit specified under § 63.1209 is not a violation of this subpart if you take the corrective measures prescribed in the startup, shutdown, and malfunction plan.

(3) *Excessive exceedances during malfunctions.* For each set of 10 exceedances of an emission standard or operating requirement while hazardous waste remains in the combustion chamber (i.e., when the hazardous waste residence time has not transpired since the hazardous waste feed was cutoff) during a 60-day block period, you must:

(i) Within 45 days of the 10th exceedance, complete an investigation of the cause of each exceedance and evaluation of approaches to minimize the frequency, duration, and severity of each exceedance, and revise the startup, shutdown, and malfunction plan as warranted by the evaluation to minimize the frequency, duration, and severity of each exceedance; and

(ii) Record the results of the investigation and evaluation in the operating record, and include a summary of the investigation and evaluation, and any changes to the startup, shutdown, and malfunction plan, in the excess emissions report required under § 63.10(e)(3).

(B) *Compliance with AWFCO requirements when burning hazardous waste during startup and shutdown.* (1) If you feed hazardous waste during startup or shutdown, you must include waste feed restrictions (e.g., type and quantity), and other appropriate operating conditions and limits in the startup, shutdown, and malfunction plan.

(2) You must interlock the operating limits you establish under paragraph (c)(2)(v)(B)(1) of this section with the automatic waste feed cutoff system required under § 63.1206(c)(3), except

for paragraphs (c)(3)(v) and (c)(3)(vi) of this section.

(3) When feeding hazardous waste during startup or shutdown, the automatic waste feed cutoff system must immediately and automatically cutoff the hazardous waste feed if you exceed the operating limits you establish under paragraph (c)(2)(v)(B)(1) of this section, except as provided by paragraph (c)(3)(viii) of this section.

(4) Although the automatic waste feed cutoff requirements of this paragraph apply during startup and shutdown, an exceedance of an emission standard or operating limit is not a violation of this subpart if you comply with the operating procedures prescribed in the startup, shutdown, and malfunction plan.

\* \* \* \* \*

(4) \* \* \* (i) *Failure to meet standards.* If an emergency safety vent (ESV) opens when hazardous waste remains in the combustion chamber (i.e., when the hazardous waste residence time has not expired) during an event other than a malfunction as defined in the startup, shutdown, and malfunction plan such that combustion gases are not treated as during the most recent comprehensive performance test (e.g., if the combustion gas by-passes any emission control device that was operating during the performance test), you must document in the operating record whether you remain in compliance with the emission standards of this subpart considering emissions during the ESV opening event.

\* \* \* \* \*

(iv) *Reporting requirements.* You must submit to the Administrator a written report within 5 days of an ESV opening that results in failure to meet the emission standards of this subpart (as determined in paragraph (c)(4)(i) of this section) documenting the result of the investigation and corrective measures taken.

\* \* \* \* \*

- 6. Section 63.1207 is amended by:
  - a. Revising paragraph (c)(2)(i)(A).
  - b. Adding paragraph (c)(2)(iii).
  - c. Revising paragraphs (d) introductory text, (d)(1), and (d)(2).
  - d. Adding paragraph (d)(4).

The revisions and additions read as follows:

**§ 63.1207 What are the performance testing requirements?**

\* \* \* \* \*

- (c) \* \* \*
- (2) \* \* \*
- (i) \* \* \*

(A) Initiated after 54 months prior to the compliance date, except as provided by paragraph (c)(2)(iii) of this section;

\* \* \* \* \*

(iii) The data in lieu of test age restriction provided in paragraph (c)(2)(i)(A) of this section does not apply for the duration of the interim standards (*i.e.*, the standards published in the **Federal Register** on February 13, 2002. Paragraph (c)(2)(i)(A) of this section does not apply until EPA promulgates permanent replacement standards pursuant to the Settlement Agreement noticed in the **Federal Register** on November 16, 2001.

\* \* \* \* \*

(d) *Frequency of testing.* Except as otherwise specified in paragraph (d)(4) of this section, you must conduct testing periodically as prescribed in paragraphs (d)(1) through (d)(3) of this section. The date of commencement of the initial comprehensive performance test is the basis for establishing the deadline to commence the initial confirmatory performance test and the next comprehensive performance test. You may conduct performance testing at any time prior to the required date. The deadline for commencing subsequent confirmatory and comprehensive performance testing is based on the date of commencement of the previous comprehensive performance test. Unless the Administrator grants a time extension under paragraph (i) of this section, you must conduct testing as follows:

(1) *Comprehensive performance testing.* Except as otherwise specified in paragraph (d)(4) of this section, you must commence testing no later than 61 months after the date of commencing the previous comprehensive performance test. If you submit data in lieu of the initial performance test, you must commence the subsequent comprehensive performance test within 61 months of commencing the test used to provide the data in lieu of the initial performance test.

(2) *Confirmatory performance testing.* Except as otherwise specified in paragraph (d)(4) of this section, you must commence confirmatory performance testing no later than 31 months after the date of commencing the previous comprehensive performance test. If you submit data in lieu of the initial performance test, you must commence the initial confirmatory performance test within 31 months of the date six months after the compliance date. To ensure that the confirmatory test is conducted approximately midway between comprehensive performance tests, the Administrator

will not approve a test plan that schedules testing within 18 months of commencing the previous comprehensive performance test.

\* \* \* \* \*

(4) *Applicable testing requirements under the interim standards.* (i) Waiver of periodic comprehensive performance tests. Except as provided by paragraph (c)(2) of this section, you must conduct only an initial comprehensive performance test under the interim standards (*i.e.*, the standards published in the **Federal Register** on February 13, 2002; all subsequent comprehensive performance testing requirements are waived under the interim standards. The provisions in the introductory text to paragraph (d) and in paragraph (d)(1) of this section do not apply until EPA promulgates permanent replacement standards pursuant to the Settlement Agreement noticed in the **Federal Register** on November 16, 2001.

(ii) *Waiver of confirmatory performance tests.* You are not required to conduct a confirmatory test under the interim standards (*i.e.*, the standards published in the **Federal Register** on February 13, 2002. The confirmatory testing requirements in the introductory text to paragraph (d) and in paragraph (d)(2) of this section are waived until EPA promulgates permanent replacement standards pursuant to the Settlement Agreement noticed in the **Federal Register** on November 16, 2001.

\* \* \* \* \*

7. Section 63.1209 is amended by:

- a. Revising paragraphs (k) introductory text, (k)(1), and (k)(7)(i).
- b. Removing paragraph (m)(1)(i)(D).

The revisions read as follows:

**§ 63.1209 What are the monitoring requirements?**

\* \* \* \* \*

(k) *Dioxins and furans.* You must comply with the dioxin and furans emission standard by establishing and complying with the following operating parameter limits. You must base the limits on operations during the comprehensive performance test, unless the limits are based on manufacturer specifications.

(1) *Gas temperature at the inlet to a dry particulate matter control device.* (i) For hazardous waste burning incinerators and cement kilns, if the combustor is equipped with an electrostatic precipitator, baghouse (fabric filter), or other dry emissions control device where particulate matter is suspended in contact with combustion gas, you must establish a limit on the maximum temperature of the gas at the inlet to the device on an hourly rolling average. You must

establish the hourly rolling average limit as the average of the test run averages.

(ii) For hazardous waste burning lightweight aggregate kilns, you must establish a limit on the maximum temperature of the gas at the exit of the (last) combustion chamber (or exit of any waste heat recovery system) on an hourly rolling average. The limit must be established as the average of the test run averages;

\* \* \* \* \*

(7) \* \* \*

(i) *Monitoring bed life.* You must:

(A) Monitor performance of the carbon bed consistent with manufacturer's specifications and recommendations to ensure the carbon bed (or bed segment for sources with multiple segments) has not reached the end of its useful life to minimize dioxin/furan and mercury emissions at least to the levels required by the emission standards;

(B) Document the monitoring procedures in the operation and maintenance plan;

(C) Record results of the performance monitoring in the operating record; and

(D) Replace the bed or bed segment before it has reached the end of its useful life to minimize dioxin/furan and mercury emissions at least to the levels required by the emission standards.

\* \* \* \* \*

**PART 264—STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES**

1. The authority citation for part 264 continues to read as follows:

**Authority:** 42 U.S.C. 6905, 6912(a), 6924, and 6925.

2. Section 264.340 is amended by revising paragraph (b)(1) and adding paragraph (b)(4) to read as follows:

**§ 264.340 Applicability.**

\* \* \* \* \*

(b) \* \* \* (1) Except as provided by paragraphs (b)(2), (b)(3), and (b)(4) of this section, the standards of this part no longer apply when an owner or operator demonstrates compliance with the maximum achievable control technology (MACT) requirements of part 63, subpart EEE, of this chapter by conducting a comprehensive performance test and submitting to the Administrator a Notification of Compliance under §§ 63.1207(j) and 63.1210(b) of this chapter documenting compliance with the requirements of part 63, subpart EEE, of this chapter. Nevertheless, even after this

demonstration of compliance with the MACT standards, RCRA permit conditions that were based on the standards of this part will continue to be in effect until they are removed from the permit or the permit is terminated or revoked, unless the permit expressly provides otherwise.

\* \* \* \* \*

(4) The following requirements remain in effect for startup, shutdown, and malfunction events if you elect to comply with § 270.235(a)(1)(i) of this chapter to minimize emissions of toxic compounds from these events:

(i) Section 264.345(a) requiring that an incinerator operate in accordance with operating requirements specified in the permit; and

(ii) Section 264.345(c) requiring compliance with the emission standards and operating requirements during startup and shutdown if hazardous waste is in the combustion chamber, except for particular hazardous wastes.

\* \* \* \* \*

**PART 265—INTERIM STATUS STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES**

1. The authority citation for part 265 continues to read as follows:

**Authority:** 42 U.S.C. 6905, 6906, 6912, 6922, 6923, 6924, 6925, 6935, 6936, and 6937, unless otherwise noted.

2. Section 265.340 is amended by revising paragraph (b)(1) and adding paragraph (b)(3) to read as follows:

**§ 265.340 Applicability.**

\* \* \* \* \*

(b) \* \* \* (1) Except as provided by paragraphs (b)(2) and (b)(3) of this section, the standards of this part no longer apply when an owner or operator demonstrates compliance with the maximum achievable control technology (MACT) requirements of part 63, subpart EEE, of this chapter by conducting a comprehensive performance test and submitting to the Administrator a Notification of Compliance under §§ 63.1207(j) and 63.1210(b) of this chapter documenting compliance with the requirements of part 63, subpart EEE, of this chapter.

\* \* \* \* \*

(3) Section 265.345 generally prohibiting burning of hazardous waste during startup and shutdown remains in effect if you elect to comply with § 270.235(b)(1)(i) of this chapter to minimize emissions of toxic compounds from startup and shutdown.

\* \* \* \* \*

**PART 266—STANDARDS FOR THE MANAGEMENT OF SPECIFIC HAZARDOUS WASTES AND SPECIFIC TYPES OF HAZARDOUS WASTE MANAGEMENT FACILITIES**

1. The authority citation for part 266 continues to read as follows:

**Authority:** 42 U.S.C. 1006, 2002(a), 3004, and 3014, 6905, 6906, 6912, 6922, 6924, 6925, and 6937.

2. Section 266.100 is amended by redesignating paragraphs (b)(2)(i), (b)(2)(ii), (b)(2)(iii), and (b)(2)(iv) as paragraphs (b)(2)(ii), (b)(2)(iii), (b)(2)(iv), and (b)(2)(v), respectively, and adding new paragraph (b)(2)(i) to read as follows:

**§ 266.100 Applicability.**

\* \* \* \* \*

(b) \* \* \*

(2) \* \* \*

(i) If you elect to comply with § 270.235(a)(1)(i) of this chapter to minimize emissions of toxic compounds from startup, shutdown, and malfunction events, § 266.102(e)(1) requiring operations in accordance with the operating requirements specified in the permit at all times that hazardous waste is in the unit, and § 266.102(e)(2)(iii) requiring compliance with the emission standards and operating requirements during startup and shutdown if hazardous waste is in the combustion chamber, except for particular hazardous wastes. These provisions apply only during startup, shutdown, and malfunction events;

\* \* \* \* \*

**PART 270—EPA ADMINISTERED PERMIT PROGRAMS: THE HAZARDOUS WASTE PERMIT PROGRAM**

1. The authority citation for part 270 continues to read as follows:

**Authority:** 42 U.S.C. 6905, 6912, 6924, 6925, 6927, 6939, and 6974.

2. Section 270.19 is amended by revising paragraph (e) to read as follows:

**§ 270.19 Specific part B information requirements for incinerators.**

\* \* \* \* \*

(e) When an owner or operator demonstrates compliance with the air emission standards and limitations in part 63, subpart EEE, of this chapter (*i.e.*, by conducting a comprehensive performance test and submitting a Notification of Compliance), the requirements of this section do not apply, except those provisions the Director determines are necessary to ensure compliance with §§ 264.345(a) and 264.345(c) of this chapter if you

elect to comply with § 270.235(a)(1)(i) to minimize emissions of toxic compounds from startup, shutdown, and malfunction events. Nevertheless, the Director may apply the provisions of this section, on a case-by-case basis, for purposes of information collection in accordance with §§ 270.10(k) and 270.32(b)(2).

3. Section 270.22 is amended by revising introductory text to read as follows:

**§ 270.22 Specific part B information requirements for boilers and industrial furnaces burning hazardous waste.**

When an owner or operator of a cement or lightweight aggregate kiln demonstrates compliance with the air emission standards and limitations in part 63, subpart EEE, of this chapter (*i.e.*, by conducting a comprehensive performance test and submitting a Notification of Compliance), the requirements of this section do not apply, except those provisions the Director determines are necessary to ensure compliance with §§ 266.102(e)(1) and 266.102(e)(2)(iii) of this chapter if you elect to comply with § 270.235(a)(1)(i) to minimize emissions of toxic compounds from startup, shutdown, and malfunction events. Nevertheless, the Director may apply the provisions of this section, on a case-by-case basis, for purposes of information collection in accordance with §§ 270.10(k) and 270.32(b)(2).

\* \* \* \* \*

4. Section 270.62 is amended by revising introductory text to read as follows:

**§ 270.62 Hazardous waste incinerator permits.**

When an owner or operator demonstrates compliance with the air emission standards and limitations in part 63, subpart EEE, of this chapter (*i.e.*, by conducting a comprehensive performance test and submitting a Notification of Compliance), the requirements of this section do not apply, except those provisions the Director determines are necessary to ensure compliance with §§ 264.345(a) and 264.345(c) of this chapter if you elect to comply with § 270.235(a)(1)(i) to minimize emissions of toxic compounds from startup, shutdown, and malfunction events. Nevertheless, the Director may apply the provisions of this section, on a case-by-case basis, for purposes of information collection in accordance with §§ 270.10(k) and 270.32(b)(2).

\* \* \* \* \*

5. Section 270.66 is amended by revising introductory text to read as follows:

**§ 270.66 Permits for boilers and industrial furnaces burning hazardous waste.**

When an owner or operator of a cement or lightweight aggregate kiln demonstrates compliance with the air emission standards and limitations in part 63, subpart EEE, of this chapter (*i.e.*, by conducting a comprehensive performance test and submitting a Notification of Compliance), the requirements of this section do not apply, except those provisions the Director determines are necessary to ensure compliance with §§ 266.102(e)(1) and 266.102(e)(2)(iii) of this chapter if you elect to comply with § 270.235(a)(1)(i) to minimize emissions of toxic compounds from startup, shutdown, and malfunction events. Nevertheless, the Director may apply the provisions of this section, on a case-by-case basis, for purposes of information collection in accordance with §§ 270.10(k) and 270.32(b)(2).

\* \* \* \* \*

6. Part 270 is amended by adding Subpart I to read as follows:

**Subpart I—Integration with Maximum Achievable Control Technology (MACT) Standards**

**§ 270.235 Options for incinerators and cement and lightweight aggregate kilns to minimize emissions from startup, shutdown, and malfunction events.**

(a) *Facilities with existing permits.* (1) *Revisions to permit conditions after documenting compliance with MACT.* The owner or operator of a RCRA-permitted incinerator, cement kiln, or lightweight aggregate kiln may request that the Director address permit conditions that minimize emissions from startup, shutdown, and malfunction events under any of the following options when requesting removal of permit conditions that are no longer applicable according to §§ 264.340(b) and 266.100(b) of this chapter:

(i) *Retain relevant permit conditions.* Under this option, the Director will: (A) Retain permit conditions that address releases during startup, shutdown, and malfunction events, including releases from emergency safety vents, as these events are defined in the facility's startup, shutdown, and malfunction plan required under § 63.1206(c)(2) of this chapter; and

(B) Limit applicability of those permit conditions only to when the facility is operating under its startup, shutdown, and malfunction plan.

(ii) *Revise relevant permit conditions.* (A) Under this option, the Director will:

(1) Identify a subset of relevant existing permit requirements, or develop alternative permit requirements, that ensure emissions of toxic compounds are minimized from startup, shutdown, and malfunction events, including releases from emergency safety vents, based on review of information including the source's startup, shutdown, and malfunction plan, design, and operating history.

(2) Retain or add these permit requirements to the permit to apply only when the facility is operating under its startup, shutdown, and malfunction plan.

(B) *Changes that may significantly increase emissions.* (1) You must notify the Director in writing of changes to the startup, shutdown, and malfunction plan or changes to the design of the source that may significantly increase emissions of toxic compounds from startup, shutdown, or malfunction events, including releases from emergency safety vents. You must notify the Director of such changes within five days of making such changes. You must identify in the notification recommended revisions to permit conditions necessary as a result of the changes to ensure that emissions of toxic compounds are minimized during these events.

(2) The Director may revise permit conditions as a result of these changes to ensure that emissions of toxic compounds are minimized during startup, shutdown, or malfunction events, including releases from emergency safety vents either:

(i) Upon permit renewal, or, if warranted;

(ii) By modifying the permit under §§ 270.41(a) or 270.42.

(iii) *Remove permit conditions.* Under this option:

(A) The owner or operator must document that the startup, shutdown, and malfunction plan required under § 63.1206(c)(2) of this chapter has been approved by the Administrator under § 63.1206(c)(2)(ii)(B) of this chapter; and

(B) The Director will remove permit conditions that are no longer applicable according to §§ 264.340(b) and 266.100(b) of this chapter.

(2) *Addressing permit conditions upon permit reissuance.* The owner or operator of an incinerator, cement kiln, or lightweight aggregate kiln that has conducted a comprehensive performance test and submitted to the Administrator a Notification of Compliance documenting compliance with the standards of part 63, subpart EEE, of this chapter may request in the

application to reissue the permit for the combustion unit that the Director control emissions from startup, shutdown, and malfunction events under any of the following options:

(i) *RCRA option A.* (A) Under this option, the Director will:

(1) Include, in the permit, conditions that ensure compliance with §§ 264.345(a) and 264.345(c) or §§ 266.102(e)(1) and 266.102(e)(2)(iii) of this chapter to minimize emissions of toxic compounds from startup, shutdown, and malfunction events, including releases from emergency safety vents; and

(2) Specify that these permit requirements apply only when the facility is operating under its startup, shutdown, and malfunction plan.; or

(ii) *RCRA option B.* (A) Under this option, the Director will:

(1) Include, in the permit conditions, that ensure emissions of toxic compounds are minimized from startup, shutdown, and malfunction events, including releases from emergency safety vents, based on review of information including the source's startup, shutdown, and malfunction plan, design, and operating history; and

(2) Specify that these permit requirements apply only when the facility is operating under its startup, shutdown, and malfunction plan.

(B) *Changes that may significantly increase emissions.* (1) You must notify the Director in writing of changes to the startup, shutdown, and malfunction plan or changes to the design of the source that may significantly increase emissions of toxic compounds from startup, shutdown, or malfunction events, including releases from emergency safety vents. You must notify the Director of such changes within five days of making such changes. You must identify in the notification recommended revisions to permit conditions necessary as a result of the changes to ensure that emissions of toxic compounds are minimized during these events.

(2) The Director may revise permit conditions as a result of these changes to ensure that emissions of toxic compounds are minimized during startup, shutdown, or malfunction events, including releases from emergency safety vents either:

(i) Upon permit renewal, or, if warranted;

(ii) By modifying the permit under §§ 270.41(a) or 270.42; or

(iii) *CAA option.* Under this option:

(A) The owner or operator must document that the startup, shutdown, and malfunction plan required under § 63.1206(c)(2) of this chapter has been

approved by the Administrator under § 63.1206(c)(2)(ii)(B) of this chapter; and (B) The Director will omit from the permit conditions that are not applicable under §§ 264.340(b) and 266.100(b) of this chapter.

(b) *Interim status facilities.* (1) *Interim status operations.* In compliance with §§ 265.340 and 266.100(b), the owner or operator of an incinerator, cement kiln, or lightweight aggregate kiln that is operating under the interim status standards of part 265 or 266 of this chapter may control emissions of toxic compounds during startup, shutdown, and malfunction events under either of the following options after conducting a comprehensive performance test and submitting to the Administrator a Notification of Compliance documenting compliance with the standards of part 63, subpart EEE, of this chapter:

(i) *RCRA option.* Under this option, the owner or operator continues to comply with the interim status emission

standards and operating requirements of part 265 or 266 of this chapter relevant to control of emissions from startup, shutdown, and malfunction events. Those standards and requirements apply only during startup, shutdown, and malfunction events; or

(ii) *CAA option.* Under this option, the owner or operator is exempt from the interim status standards of part 265 or 266 of this chapter relevant to control of emissions of toxic compounds during startup, shutdown, and malfunction events upon submission of written notification and documentation to the Director that the startup, shutdown, and malfunction plan required under § 63.1206(c)(2) of this chapter has been approved by the Administrator under § 63.1206(c)(2)(ii)(B) of this chapter.

(2) *Operations under a subsequent RCRA permit.* When an owner or operator of an incinerator, cement kiln, or lightweight aggregate kiln that is operating under the interim status

standards of parts 265 or 266 of this chapter submits a RCRA permit application, the owner or operator may request that the Director control emissions from startup, shutdown, and malfunction events under any of the options provided by paragraphs (a)(2)(i), (a)(2)(ii), or (a)(2)(iii) of this section.

**PART 271—REQUIREMENTS FOR AUTHORIZATION OF STATE HAZARDOUS WASTE PROGRAMS**

7. The authority citation for part 271 continues to read as follows:

**Authority:** 42 U.S.C. 9605, 6912(2), and 6926.

8. Section 271.1(j) is amended by adding the following entry to Table 1 in chronological order by date of publication (“Promulgation date”) in the **Federal Register**, to read as follows:

**§ 271.1 Purpose and scope.**

\* \* \* \* \*  
(j) \* \* \*

TABLE 1.—REGULATIONS IMPLEMENTING THE HAZARDOUS AND SOLID WASTE AMENDMENTS OF 1984

Promulgation date	Title of regulation	Federal Register reference	Effective date
* * * * *	* * * * *	* * * * *	* * * * *
February 13, 2002 .....	Interim Standards for Hazardous Air Pollutants for Hazardous Waste Combustors.	[Insert page No.] .....	February 13, 2002.
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