

ORAL ARGUMENT NOT YET SCHEDULED

**IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT**

No. 11-1131 (and consolidated cases)

NATIONAL ASSOCIATION OF CLEAN WATER AGENCIES,
Petitioner,

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, *et al.*
Respondents.

Petition for Review of Final Administrative Actions of the
United States Environmental Protection Agency

PROOF BRIEF FOR PETITIONER SIERRA CLUB

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Dated: July 24, 2012

**IN THE UNITED STATES COURT OF APPEALS FOR
THE DISTRICT OF COLUMBIA CIRCUIT**

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| NATIONAL ASSOCIATION OF |) | |
| CLEAN WATER AGENCIES, |) | |
| |) | |
| <i>Petitioner,</i> |) | |
| |) | |
| v. |) | No. 11-1131 (and |
| |) | consolidated cases) |
| UNITED STATES ENVIRONMENTAL |) | |
| PROTECTION AGENCY, and |) | |
| LISA P. JACKSON, Administrator, |) | |
| United States Environmental |) | |
| Protection Agency, |) | |
| |) | |
| <i>Respondents.</i> |) | |
| |) | |

**PETITIONER SIERRA CLUB'S CERTIFICATE AS TO PARTIES,
RULINGS, AND RELATED CASES**

In accordance with Circuit Rules 27(a)(4) and 28(a)(1), petitioner Sierra Club hereby certifies as follows:

(A) Parties and Amici

(i) Parties, Intervenors, and Amici Who Appeared in the District Court

This case is a petition for review of final agency action, not an appeal from the ruling of a district court.

(ii) Parties to This Case

Petitioners:

Petitioner in cases nos. 11-1131 and 12-1236 is National Association of Clean Water Agencies.

Petitioner in case no. 11-1167 is Hatfield Township Municipal Authority.

Petitioner in cases nos. 11-1185 and 12-1237 is Sierra Club.

Respondents:

The respondents are the United States Environmental Protection Agency and Lisa P. Jackson, Administrator (collectively, “EPA”).

Intervenors:

On the side of respondents in case no. 11-1131 is Sierra Club.

On the side of petitioners in cases nos. 11-1131 and 11-1167 is MaxWest Environmental Systems, Inc.

On the side of respondents in case no. 11-1185 are National Association of Clean Water Agencies and Hatfield Township Municipal Authority.

(iii) *Amici* in This Case

As yet, there are no *amici curiae*.

(iv) Circuit Rule 26.1 Disclosures for Petitioners

See the attached Rule 26.1 Disclosure Statement.

(B) Rulings Under Review

Petitioners seek review of the final actions taken by EPA at 76 Fed. Reg. 15,372 (March 21, 2011), entitled "Standards of Performance for New Stationary

Sources and Emission Guidelines for Existing Sources: Sewage Sludge Incineration Units; Final Rule," and 77 Fed. Reg. 25,087 (April 27, 2012) and titled "Denial of Reconsideration Petitions on Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Sewage Sludge Incineration Units."

(C) Related Cases

This case has not previously been before this Court or any other court. Petitioners are unaware of any related cases within the meaning of Circuit Rule 28(a)(1)(C).

DATED: July 24, 2012.

Respectfully submitted,

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| <i>Respondents.</i> |) | |
| |) | |

RULE 26.1 DISCLOSURE STATEMENT

Pursuant to Fed. R. App. P. 26.1 and D.C. Circuit Rule 26.1, petitioner
Sierra Club makes the following disclosures:

The following are parent companies, subsidiaries, or affiliates of Sierra Club
that have issued shares or debt securities to the public: None.

Sierra Club, a corporation organized and existing under the laws of the State
of California, is a national nonprofit organization dedicated to the protection and
enjoyment of the environment.

DATED: July 24, 2012

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GLOSSARY OF ACRONYMS AND ABBREVIATIONS

Pursuant to Circuit Rule 28(a)(3), the following is a glossary of acronyms and abbreviations used in this brief:

| | |
|-----------------------------|--------------------------------------|
| Baseline Emissions Memo | EPA-HQ-OAR-2009-0559-0154 |
| BTF Memo | EPA-HQ-OAR-2009-0559-0172 |
| EPA or the agency | U.S. Environmental Protection Agency |
| Floors | Statutory minimum stringencies |
| Floor Memo | EPA-HQ-OAR-2009-0559-0157 |
| Palo Alto Comments | EPA-HQ-OAR-2009-0559-0085 |
| Reconsideration Denial | EPA-HQ-OAR-2009-0559-0181 |
| Response to Comments | EPA-HQ-OAR-2009-0559-0171 |
| RIA | EPA-HQ-OAR-2009-0559-0042 |
| SC Comments | EPA-HQ-OAR-2009-0559-0084 |
| SC Reconsideration Petition | EPA-HQ-OAR-2009-0559-0173 |
| SSI Database | EPA-HQ-OAR-2009-0559-0003 |
| SSIs | Sewage Sludge Incinerators |
| UPL | Upper prediction limit |

JURISDICTIONAL STATEMENT

(A) Agency. Respondents U.S. Environmental Protection Agency, *et al.* (collectively “EPA” or “the agency”) have jurisdiction over the promulgation of emission standards and other requirements for sewage sludge incinerators under Clean Air Act § 129, 42 U.S.C. § 7429.

(B) Court of Appeals. Pursuant to Clean Air Act § 307(b), 42 U.S.C. § 7607(b), this Court has jurisdiction to review the final actions, including the promulgation of regulations, taken by EPA at 76 Fed. Reg. 15,372 *et seq.* (Mar. 21, 2011), JA____, and 77 Fed. Reg. 25,087 *et seq.* (Apr. 27, 2012), JA____.

(C) Timeliness. Sierra Club filed timely petitions for review of these actions on May 20, 2011 and June 1, 2012 respectively.

STATUTE AND REGULATIONS

Pertinent statutes and regulations are in an addendum at the end of this brief.

ISSUES PRESENTED FOR REVIEW

1. Whether EPA contravened Clean Air Act § 129, 42 U.S.C. § 7429, or acted arbitrarily by setting the statutory minimum stringencies (“floors”) for its emission standards at levels that do not reflect the emission levels achieved by the relevant best-performing incinerators.

2. Whether EPA contravened Clean Air Act § 129 or acted arbitrarily by setting final emission standards that do not require the maximum achievable degree of reduction in emissions.

3. Whether EPA contravened Clean Air Act § 129 or acted arbitrarily by refusing to require operators to monitor their incinerators' emissions, even though § 129(c) expressly requires emissions monitoring and EPA admits that emissions monitoring devices are available.

4. Whether EPA violated Clean Air Act § 307(d)(7)(B), 42 U.S.C. § 7607(d)(7)(B), by refusing to grant rehearing on issues that are of central importance to the challenged rulemaking and that could not be raised during the public comment period.

STATEMENT OF THE CASE

In Case No. 11-1185, Sierra Club seeks review of EPA's final action (including the promulgation of regulations) establishing emission standards and other requirements for sewage sludge incinerators under § 129 of the Clean Air Act, 42 U.S.C. § 7429. 76 Fed. Reg. 15,372, JA____. In consolidated case No. 12-1237, Sierra Club challenges EPA's decision denying Sierra Club's petition for administrative reconsideration of that same final action. 77 Fed. Reg. 25,087, JA____.

STATEMENT OF FACTS

I. FACTUAL BACKGROUND

According to EPA, 204 sewage sludge incinerators (“SSIs”) currently operate in the United States. 76 Fed. Reg. at 15,387, JA____. Because the sludge these units burn contains toxic metals, they emit nearly a ton of mercury, more than two tons of lead, and nearly a ton of cadmium each year. EPA-HQ-OAR-2009-0559-0154 (“Baseline Emissions Memo”) at 1, JA____. They also emit dioxins, hydrogen chloride, particulate matter, sulfur dioxide, oxides of nitrogen, and carbon monoxide. *Id.* The health effects from these pollutants include premature death, cancer, heart attacks, kidney disease, weakened immune systems, developmental delays, and any manner of respiratory problems. EPA-HQ-OAR-2009-0559-0042 (“RIA”), Section 5, JA____-____. Mercury, in particular, is highly neurotoxic, especially to unborn babies and young children. *Id.* at 5–23, JA____. In people of all ages, it can impair neurological, cardiac, kidney, and immune system function, cause kidney failure, and lead to breathing problems. *Id.*

II. STATUTORY BACKGROUND

Clean Air Act § 129(a)(4) requires EPA to set numerical emission standards for nine of the pollutants that sewage sludge incinerators emit: dioxins and furans (“dioxins”), mercury, lead, cadmium, hydrogen chloride, particulate matter, sulfur dioxide, nitrogen oxides, and carbon monoxide. 42 U.S.C. § 7429(a)(4). Each of

these standards must require “the maximum degree of reduction in emissions ... that the Administrator, taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements, determines is achievable for new or existing units in the category.” *Id.* § 7429(a)(2).

Regardless of cost or the other statutory factors, standards for new units “shall not be less stringent than the emissions control that is achieved in practice by the best controlled similar unit,” and standards for existing units “shall not be less stringent than the average emissions limitation achieved by the best performing 12 percent of units in the category.” *Id.* On several prior occasions, this Court has addressed these floor requirements and the virtually identical ones in § 112(d)(3), 42 U.S.C. § 7412(d)(3). It has consistently made clear that for both new and existing units the Clean Air Act “requires floors based on the emission level actually achieved by the best performers (those with the lowest emission levels).” *Sierra Club v. EPA*, 479 F.3d 875, 880 (D.C. Cir. 2007). *See also* *Northeast Maryland Waste Disposal Authority v. EPA*, 358 F.3d 936, 954-955 (D.C. Cir. 2004); *Mossville Environmental Action Now v. EPA*, 320 F.3d 1232, 1240 (D.C. Cir. 2004); *Cement Kiln Recycling Coalition v. EPA*, 255 F.3d 855, 865 (D.C. Cir. 2001) (“CKRC”); *National Lime Ass’n v. EPA*, 233 F.3d 625, 633 (D.C. Cir. 2000); *Sierra Club v. EPA*, 167 F.3d 658, 662-663 (D.C. Cir. 1999).

Section 129 differs from § 112 in two ways that are relevant to the present case. First, whereas § 112(d)(3) requires EPA to set floors reflecting the average emission level achieved by the best-performing 12 percent of existing sources “for which the Administrator has emissions information,” 42 U.S.C. § 7412(d)(3)(A), § 129 requires floors to reflect the average emission level achieved by the best-performing 12 percent of sources “in the category,” 42 U.S.C. § 7429(a)(2). Second, whereas § 112 contains no monitoring requirements, § 129(c) expressly directs EPA to require operators to monitor their incinerators’ “emissions” as well as “such other parameters relating to the operation of the unit and its pollution control technology as the Administrator determines are appropriate.” 42 U.S.C. § 7429(c)(2).

Clean Air Act § 307(d)(7)(B) requires EPA to grant petitions for administrative reconsideration where they raise an objection that was impracticable to raise during the public comment period and is of central relevance to the rulemaking. 42 U.S.C. § 7607(d)(7)(B).

III. REGULATORY BACKGROUND.¹

A. EPA's Data Collection Decisions.

Although § 129's floor language requires floors for new and existing incinerators to be based, respectively, on the single best-performing unit and the best-performing 12 percent of units in the category, EPA chose to request emissions information from just "9 municipalities" operating just 17 units. 76 Fed. Reg. at 15,387, JA____. EPA later obtained data for 9 additional units from State databases. In sum, EPA obtained emissions information for a total of 22 out of 154 multiple hearth units and 6 out of 60 fluidized bed units, and, even for that group, the agency has incomplete data with respect to several of the pollutants enumerated in § 129(a)(4). *Id.* EPA admits that it "does not have actual emissions test data for the population of units that represent the best-performing 12 percent." 75 Fed. Reg. 63,260, 63,270 (Oct. 14, 2010), JA____, ____; 76 Fed. Reg. 63,260, JA____.²

¹ The joint appendix contains documents from the litigation background leading up to EPA's promulgation of the challenged standards. JA____-____.

² EPA asserts that it chose to request emissions data from just nine municipalities because "it was not possible to undertake the time-consuming process of sending an ICR [information collection request] to all the affected SSI units consistent with the requirements of the PRA [Paperwork Reduction Act]." 76 Fed. Reg. at 15,386/3, JA____. Notably, EPA does not claim that it sought either an extension of the court-ordered deadline to obtain more information or expedited consideration of its information collection request. *See Sierra Club v. Jackson*, 2011 WL 181097 (D.D.C. Jan. 20, 2011) at *1, *4 (EPA repeatedly sought extensions of same court-ordered deadline for other purposes); *id.* at *9 ("EPA

B. EPA's Approach To Setting Floors.**1. EPA's Selection Of Units On Which To Base Floors.**

EPA claims that because the municipalities from which it requested emissions data operate incinerators “with the most efficient controls,” “the sources identified for testing and the resulting emission information received from the surveyed SSI units represent the best performing SSI units.” EPA-HQ-OAR-2009-0559-0157 (“Floor Memo”) at 7, JA____; 76 Fed. Reg. at 15,387/1, JA____.

Although EPA did not select the units for which it obtained data from States based on the controls they use, the agency asserts that emissions from these units were “lower than those from the nine ICR sources.” 76 Fed. Reg. at 15,387/1, JA____. Thus, EPA asserts that the only units for which it has data are all among the best-performing 12 percent. To set new unit floors, EPA selected the unit within this group with the lowest three-run emission test result. Floor Memo at 10, JA____.³

could have requested expedited OMB authorization for its information collection request”).

³ EPA deviated from this approach with respect to the hydrogen chloride UPL for new multiple hearths by selecting the incinerator operated by Columbia (S.C.) Metropolitan Wastewater Plant as the top-performer, despite the fact that it only had two test runs. *See* Floor Memo, Attach.D, Table D-3.

2. EPA's Approach To Estimating The "Best" Units' Performance.

EPA used three different approaches for setting floors based on the units it selected as "best." In most instances, EPA used a 99-percent "upper prediction limit" ("UPL"). For existing units, that is the number which EPA expects any future three-run test conducted at any unit in the top 12 percent "to fall below." Floor Memo at 12, JA____; 76 Fed. Reg. at 15,389, JA____. For new units, it is the number EPA expects any future test by the single unit EPA designated as "best" to fall below. Floor Memo at 10, JA____. EPA states that it used a "99 percent" UPL so that it could make these predictions "with 99 percent confidence." *Id.* at 12, JA____.

For purposes of setting new unit floors, EPA selected top performers for each pollutant based on their single lowest three-run test result. Floor Memo at 10, JA____. But when it actually measured the performance of these purported top-performers, it based the floors on the upper prediction limit, using every test run from that unit. By picking the "best unit one way (by lowest test) and representing its performance another (UPL), EPA set floors that were worse than they would have been if the agency used either approach consistently. For example, EPA designated one of Upper Blackstone Water Pollution Abatement District's incinerators as the top-performing multiple hearth for particulate matter. Floor Memo, Attach.D, Tbl. D-7, JA____. Although this unit had a test result of 1.2

milligrams per dry standard cubic meter (mg/dscm), variation between its three test runs together with an extremely small data set yielded a floor of 59.94 mg/dscm.

Id., JA____. By comparison, applying the same calculations to an incinerator operated by the City of Indianapolis with more consistent test yields a lower floor, 34.42 mg/dscm. *See* Floor Memo, Attach.B, Tbl. B-7, JA____.

In some instances, EPA set floors even higher than the upper prediction limit. In processing raw emissions test results, different laboratories used different detection limits. Floor Memo at 15, JA____. Some emission test results fell below detection limits and, where this happened, EPA used the detection levels themselves to represent the unit's performance in its floor analysis. *Id.* at 9, JA____. Although pretending that emission test results that were below detection levels are at detection levels inflates individual units' actual emission levels, EPA also inflated the resulting floors. The agency established as a "representative detection level" "the highest test-specific method detection level ... that is also equal to or less than the average emission calculated for the data set." *Id.* at 15, JA____. Whenever EPA's floor calculations yielded a number that was less than "the value equal to three times representative method detection level," EPA simply set floors at a level equal to three times the representative method detection level. *Id.* at 15, 19, JA____, ____.

In two instances, EPA's approach yielded floors for new units that were worse than those EPA calculated for existing units. In these circumstances, EPA simply set the new unit floor at the same level as the existing unit floor, explaining that it made the change because new unit floors "cannot be less stringent than" existing unit floors. *Id.* at 19, Table 5-2 & n3, JA____.

E. EPA's Refusal To Set Final Standards Reflecting The Maximum Achievable Degree Of Reduction In Emissions.

As noted above, EPA's floors merely reflect the minimum stringency that § 129 allows; the agency's final standards must require the "maximum" degree of reduction in emissions that is "achievable." 42 U.S.C. § 7429(a)(2). EPA acknowledges that the use of control technologies such as fabric filters, wet scrubbers, afterburners, and activated carbon injection could yield significant reductions beyond those required by its minimum stringency standards. EPA-HQ-OAR-2009-0559-0172 ("BTF Memo") at 3-5, JA____-____. Where EPA considered beyond-the-floor standards at all, however, it rejected them based on the argument that the resulting reductions would not be "cost-effective" as measured on a dollars-per-ton basis.

For existing units, EPA considered a beyond-the-floor standard based on the use of an afterburner, fabric filter, and activated carbon injection, but only for mercury emissions. 76 Fed. Reg. at 15,394/1, JA____; BTF Memo at 3-4, JA____.

Although this combination of technologies would reduce almost all of the pollutants that sewage sludge incinerators emit, the agency did not consider what the cost-effectiveness of this technology combination would be if its cost were applied to all the § 129(a)(4) pollutants, rather than just mercury.

For new multiple hearth units, EPA did not even consider whether its standards reflect the maximum achievable degree of reduction. EPA proposed setting the floors for both fluidized bed and multiple hearth incinerators at the emission levels achieved by the best-performing fluidized bed unit. Concluding that the technologies necessary to achieve this standard were “generally the most effective controls available,” EPA did not consider any more stringent standards in its proposed rule. 75 Fed. Reg. at 63,277/2-3, JA____. In its final rule, EPA established separate and far weaker floors for new multiple hearth units but did not revisit its conclusion that no further reductions are achievable. 76 Fed. Reg. at 15,380-15,381, JA____-____; BTF Memo, JA____-____ (considering beyond-the-floor standards only for “existing” units). *See* EPA-HQ-OAR-2009-0559-0173, (“SC Reconsideration Petition”) at 5, JA____ (showing extent to which EPA weakened standards).

F. EPA’s Refusal To Require Emissions Monitoring.

EPA’s rule requires “emissions” monitoring only for new units’ carbon monoxide emissions, and otherwise requires only “parameter” monitoring. 75 Fed.

Reg. at 63,265, JA____. Although it does not require their use, EPA concedes that emissions monitoring systems are available for oxides of nitrogen, sulfur dioxide, particulate matter, hydrogen chloride, mercury, and multi-metals, and its rule allows operators to choose these systems as an “option” for meeting the rule’s monitoring requirements. 75 Fed. Reg. at 63,278/2-3, JA____. *See also* 76 Fed. Reg. at 15,413/3, JA__.

G. The Practical Effect Of EPA’s Standard-Setting Approach.

After collecting data on less than 12 percent of units, inflating the emission levels achieved by these units in several ways, and declining to set beyond-the-floor standards, EPA ultimately arrived at standards that will reduce emissions of many of the § 129 pollutants by less than one percent. BTF Memo at 2, JA____. For example, EPA predicts the standards will reduce the nearly one ton of mercury emitted by sewage sludge incinerators each year by only four to five pounds, a reduction of 0.2 percent. *Id.*, JA____; 76 Fed. Reg. at 15398, Table 12, JA____. EPA asserts that every single existing incinerator already meets the standards for mercury, dioxins, and carbon monoxide. BTF Memo at 3, JA ____ (“All FB and MH units were determined to meet the floor level of control for Hg, PCDD/PCDF, and CO, and no additional control was necessary.”).

SUMMARY OF THE ARGUMENT

The floor language in Clean Air Act § 129 unambiguously requires floors to reflect the emission levels actually achieved by the relevant best-performing sources, and this Court has so held repeatedly. The challenged rule marks EPA's latest attempt to circumvent this requirement, and rests on a rulemaking approach and arguments that differ little from those advanced in the agency's previous attempts.

Using Technology As A Proxy For Performance. This Court has held four times already that EPA may not use technology as a proxy for the best units' emission levels unless technology is the only factor affecting their emissions. Although it is undisputed that factors other than technology affect sewage sludge incinerators' emissions, EPA based floors on units that it selected based solely on the technology they use. EPA makes no effort to demonstrate that the units it selected are actually the best performers or to reconcile its floor approach with this Court's binding precedent.

Setting Floors At "Upper Prediction Limit." Clean Air Act § 129 requires existing unit floors to reflect the "average" emission level achieved by the best-performing 12 percent of incinerators. EPA instead set floors at the "upper prediction limit," a level the agency expects all future tests by the relevant units to "fall below." Because the worst predicted emission level for the relevant

incinerators is not the “average” level they actually achieved, EPA’s approach is unlawful and arbitrary. For similar reasons, EPA’s upper prediction limits for new units are unlawful and arbitrary as well.

Setting Floors Unrelated To Relevant Sources’ Performance. In some instances EPA set floors (and final standards) at a number equal to three times a representative method detection level. In others, the agency set floors for new incinerators at the same level as its floors for existing incinerators. Because such floors do not purport to reflect the emission levels achieved by the relevant best sources, they are unlawful and arbitrary.

Refusing To Set Beyond-The-Floor Standards For New Units. Although § 129 mandates final standards that require the maximum achievable degree of reduction in emissions, EPA did not even consider whether its standards for new multiple hearth units satisfy this requirement. In its letter denying reconsideration, EPA claims that its proposed rule contains a rationale for its decision: that its proposed floors for new units were so strong that no further reductions were achievable. That rationale is inapplicable to the final standards, which EPA weakened by between 188 and 15,000 percent.

Refusing To Set Beyond-The-Floor Standards For Existing Units. Having set standards that require sewage sludge incinerators to reduce their emissions of many of the § 129 pollutants by less than one percent, EPA does not

dispute that further reductions are achievable. Nonetheless, EPA rejects more stringent standards, claiming they would not be cost-effective. Because § 129 requires the maximum degree of reduction that is achievable considering cost, not the degree EPA views as cost-effective, the agency's refusal to set beyond-the-floor standards for existing units is unlawful. In any event, EPA's cost-effectiveness analysis arbitrarily counts all the costs of technology but only some of the reductions it would yield.

Refusing To Require Emissions Monitoring. Although it is undisputed that emissions monitoring systems are available and effective for most of the pollutants that sewage sludge incinerators emit, EPA's rule requires only parameter monitoring. Because § 129 expressly requires both emissions monitoring and parameter monitoring and distinguishes clearly between the two, EPA's failure to require emissions monitoring is unlawful and arbitrary.

STANDING

As shown in the attached declarations, Sierra Club members and their families live, work and recreate in close proximity to sewage sludge incinerators, and are exposed to sewage sludge incinerator pollution while engaged in everyday activities like gardening, riding their bicycles, walking their dogs, going to the beach, and even eating. E.g. Decl. of Angel Gober, ¶¶ 10, 13; Decl. of Rob Lang, ¶¶ 11-16, 18; Decl. of Richard Quiggle, ¶¶ 11-12. Because the pollutants emitted

by sewage sludge incinerators can cause serious adverse health effects including cancer, such exposure harms Sierra Club members and their families. Decl. of Richard Quiggle, ¶¶ 7–9; Decl. of Angel Gober, ¶ 13; Decl. of Laura Calwell, ¶¶ 8, 13; Decl. of Rob Lang, ¶ 20.

Pollution from sewage sludge incinerators also greatly diminishes the ability of Sierra Club members and their families to enjoy recreational and everyday activities in their own communities. The smell and sight of this pollution as well as their awareness of its toxicity cause members and their families to refrain from engaging in activities that they would otherwise enjoy, including spending time outdoors and eating local produce and fish. E.g. Decl. of Angel Gober, ¶¶ 12, 15–17; Decl. of Laura Calwell ¶ 10; Decl. of Richard Quiggle ¶ 13. When members do engage in these activities, pollution decreases their enjoyment. Decl. of Richard Quiggle ¶¶ 11–12; Decl. of Rob Lang, ¶¶ 15–17, 18; Decl. of Angel Gober, ¶¶ 11–12; Decl. of Laura Calwell, ¶¶ 8–9, 12–13.

EPA's failure to set the emission standards that the Clean Air Act requires for sewage sludge incinerators prolongs and increases these injuries, and they can be redressed by an order from this Court directing EPA to bring the Rule into compliance with the Act.

STANDARD OF REVIEW

This Court reviews final actions EPA takes under § 112 of the Act to determine if the action is “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” 42 U.S.C. § 7607(d)(9). EPA’s construction of the Clean Air Act’s statutory provisions are reviewed pursuant to *Chevron U.S.A. Inc. v. NRDC*, 467 U.S. 837 (1984). Under *Chevron*, “[i]f the intent of Congress is clear, that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress.” 467 U.S. at 842-43. If the statute is ambiguous, under *Chevron* step two, the agency’s interpretation must be rejected if, among other things, “the agency has [not] offered a reasoned explanation for why it chose that interpretation.” *Village of Barrington, Ill. v. Surface Transp. Bd.*, 636 F.3d 650, 660 (D.C. Cir. 2011). The agency’s action is arbitrary and capricious if, for example, the agency “entirely failed to consider an important aspect of the problem,” *Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983), or failed to “identif[y] and explain[] the reasoned basis for its decision,” *Transactive Corp. v. United States*, 91 F.3d 232, 236 (D.C. Cir. 1996).

ARGUMENT

I. EPA'S FLOORS ARE UNLAWFUL AND ARBITRARY.

A. EPA's Selection Of The "Best" Units Was Unlawful And Arbitrary.

1. Selecting Units As "Best" Based Solely On The Control Technology They Use Is Unlawful.

As this Court has held repeatedly, the Clean Air Act's mandate to base floors on the "best performing" 12 percent of units in the category unambiguously "requires floors based on the emission level actually achieved by the best performers." *Sierra Club*, 479 F.3d at 880 (emphasis in original). Using sources' control technology as a proxy for their emission levels violates the Act unless it is "the only factor determining emission levels," *CKRC*, 255 F.3d at 863 (emphasis in original) (*quoting National Lime Ass'n*, 233 F.3d at 633); *Sierra Club*, 479 F.3d at 882-883; *Northeast Maryland*, 358 F.3d at 954-955.

Far from claiming that technology is the "only" factor affecting sewage sludge incinerators' emissions, EPA concedes that individual units' emissions are affected by the content of the "unique sludge" they burn. 76 Fed. Reg. at 15,391/2, JA____. *See* 75 Fed. Reg. at 63,268/3, JA____ ("EPA understands that the metal emissions from SSI units are influenced by the metals content in the sludge burned."). EPA does not dispute that incinerators' emissions are further affected by "the fuels they use, the age and design of the individual unit, the specific quality and age of the control devices at individual units, the training and skill of the

operators, and the care with which they run individual units.” EPA-HQ-OAR-2009-0559-0084 (“SC Comments”) at 3, JA____. Because it is undisputed that factors other than technology affect incinerators’ emissions, EPA’s decision to select units as “best” based exclusively on the technology they use contravenes the Clean Air Act. *Sierra Club*, 479 F.3d at 882-83; *Northeast Maryland*, 358 F.3d at 954-55; *CKRC*, 255 F.3d at 863; *National Lime Ass’n*, 233 F.3d at 633.

EPA argues that because it selected units from different parts of the country, its approach accounts for the effect of sludge content on emissions. 76 Fed. Reg. at 15,391/2-3, JA____. The agency also argues that because sources must meet water quality standards, they “are already applying non-technology measures to reduce emissions,” *id.* at 15392/1, JA____, and that the content of waste burned at sewage sludge incinerators varies less than the content of waste burned in other types of incinerator. Floor Memo at 6-7, JA____-____. Even if correct, these arguments merely show that the units EPA selected as best performers have varying sludge inputs and that these inputs affect sewage sludge incinerators’ emissions less than they affect emissions from other categories of incinerators, such as medical waste incinerators or municipal waste combustors. They do not purport to show that technology is the “only” factor affecting sewage sludge incinerators’ emissions. *CKRC*, 255 F.3d at 863. *See also Sierra Club*, 479 F.3d at 882-83; *Northeast Maryland*, 358 F.3d at 954-55; *National Lime Ass’n*, 233 F.3d at 633.

2. EPA's Selection Of The "Best" Units Was Unreasonable And Arbitrary.

"EPA must 'demonstrate with substantial evidence – not mere assertions' that the chosen floors 'represent 'a reasonable estimate of the performance of the [best performing] units.'"" *Northeast Maryland*, 358 F.3d at 954 (*quoting CKRC*, 255 F.3d at 866 (*quoting Sierra Club*, 167 F.3d at 662)) (alteration in original). Here, although EPA asserts that it identified "the units with the lowest emissions," 76 Fed. Reg. at 15,387/1, JA____, it has not "demonstrated" that claim with substantial evidence. Because EPA collected emissions data for less than 12 percent of the units in either subcategory, EPA does not and cannot claim to know that these units are achieving emission levels that are better than or even equivalent to the units it did not select and for which it does not have emissions information.

Moreover, the record provides strong reason to believe that units EPA did not select are achieving emission levels that are just as good as, or better than, the emission levels achieved by the units EPA did select. First, EPA admits individual units' emissions are affected by the "unique sludge" they burn. 76 Fed. Reg. at 15,391/2, JA____. A unit that burns sludge with little or no mercury content, for example, will have little or no mercury emissions regardless of whether it is using controls to reduce those emissions. *See Sierra Club*, 167 F.3d at 666 ("The less mercury in, the less mercury out"). Indeed, the City of Palo Alto pointed out that its program of reducing mercury inputs has substantially reduced mercury

emissions from its multiple hearth unit to .051 mg/dscm, a level that is far better than EPA's standard for multiple hearth units, .28 mg/dscm. *Compare* EPA-HQ-OAR-2009-0559-0085 ("Palo Alto Comments") at 6, JA____, *with* 76 Fed. Reg. at 15,376, JA____, Tbl. 1 (showing mercury limits for existing MH units). EPA did not include the Palo Alto unit among the best performers. Floor Memo, Att. G, JA____.⁴

Second, the record shows that units EPA did not select are using control technologies that are just as good as, or better than, the technologies in use at the units EPA selected. For example, the Palo Alto incinerator controls emissions of particulate matter and hydrogen chloride with a "venturi pak or ring jet scrubber," which EPA states is "more efficient than" the combination of regular "venturi scrubbers" and "impingement tray scrubbers" used by the units the agency picked as best performers. Floor Memo, Att. G, JA____ (emphasis added). Further, many incinerators that EPA did not include in the top 12 percent or even consider as potential best performers are equipped with the same technology used by the units EPA chose as "best." *Compare* EPA-HQ-OAR-2009-0559-0003, Attach.B ("SSI Database"), JA____ (showing, for example, that Hatfield Township's incinerators

⁴ That the Palo Alto incinerator is achieving a mercury emission level of .051 mg/dscm is, in itself, reason to conclude that EPA's new unit mercury standard of .28 mg/dscm is unlawful and arbitrary. *See, e.g., Northeast Maryland*, 358 F.3d at 955 (new unit standards must reflect emission levels achieved by the single best-performing unit).

have same controls as those belonging to the Township of Wayne, and that Cobb County Water System uses same controls as does City of Indianapolis) *with* Floor Memo, Attachs.A-B (using data from Township of Wayne and City of Indianapolis but not Hatfield Township or Cobb County Water System). And incinerators using control technologies comparable to those used by the units EPA selected as “best” may also be burning relatively cleaner sludge – as the Palo Alto incinerator is – and achieving lower emission levels through the combined effect of these and other measures.

Third, even EPA does not seriously believe its assertion that the information collection request it sent to “9 municipalities” operating 17 incinerators captured the best-performing units among all 204 sewage sludge incinerators. Explaining its decision to also use data that it collected from State databases, EPA asserts that the emissions from these units “were lower than those from the nine ICR sources.” 76 Fed. Reg. at 15,387/1, JA____ (emphasis added). EPA makes no effort to reconcile its claim that using technology as a proxy for performance allowed it to base floors on the best-performing units with its finding that randomly selected units perform better. *Am. Fed’n of Gov’t Employees v. Fed. Labor Relations Auth.*, 470 F.3d 375, 380 (D.C. Cir 2006). (“Certainly, if the result reached is ‘illogical on its own terms,’ the Authority’s order is arbitrary and capricious.”) (quoting *IRS v. FLRA*, 963 F.2d 429, 439 (D.C. Cir. 1992))

Given this Court's repeated holdings on the subject, EPA's decision to use technology as a proxy for performance – even though it admits that technology is not the only factor affecting emissions and without even attempting to reconcile its decision with binding precedent – is both unreasonable under *Chevron* step two and arbitrary. *Village of Barrington v. Surface Transp. Bd.*, 636 F.3d 650, 660 (D.C. Cir. 2011) (court defers to agency interpretation under *Chevron* “only if the agency has offered a reasoned explanation for why it chose that interpretation”); *Mountain Comms., Inc. v. FCC*, 355 F.3d 644, 648-49 (D.C. Cir. 2004) (action arbitrary where “[t]he Commission has not even tried to explain how its position can be reconciled with the statutory provision”); *Transactive Corp.*, 91 F.3d at 236 (action arbitrary where agency fails to “identif[y] and explain[] the reasoned basis for its decision”).

B. EPA's Use Of The Upper Prediction Limit To Set Floors Was Unlawful And Arbitrary.

1. EPA's Claim That It Can Set Floors Reflecting Its “Upper Prediction Limit” Is Unlawful.

Although EPA may account for variability in setting floors (and may be able to use statistics to do so), Clean Air Act § 129 unambiguously requires existing unit floors to reflect the “average” emission level actually achieved by the best-performing 12 percent of units, 42 U.S.C. § 7429(a)(2). *See Sierra Club*, 479 F.3d at 880-881. The upper prediction limit EPA used here is not the “average”

emission level achieved but, rather, an emission level EPA expects none of these units to ever exceed. 76 Fed. Reg. at 15,389, JA____. Specifically, it reflects the number EPA expects any future test by any unit within the top 12 percent to “fall below.” *Id.*; Floor Memo at 12, JA____. By insisting that it can set floors at this level, EPA deprives the word “average” of meaning and substitutes its own policy preferences for Congress’s plainly expressed intent. *See New York v. EPA*, 443 F.3d 880, 885 (D.C. Cir. 2006) (“courts must give effect to each word of a statute”); *New Jersey v. EPA*, 517 F.3d 574, 582 (D.C. Cir. 2008) (rejecting statutory reading that “substitutes EPA’s desires for the plain text” of the statute”)

With respect to existing units, EPA argues that its upper prediction limit is “designed to estimate” floors “based on the average of the best performing sources using the expected distribution of future compliance tests.” 76 Fed. Reg. at 15,389, JA____ (emphasis added). EPA’s use of ambiguous language does not obscure what it has actually done. Whatever EPA’s “design[.]” may have been or what the agency claims its floors are “based on,” the agency’s own words make plain that the upper prediction limit is not an “average” of the best units’ emission levels but a number that it can expect all “future compliance tests” by these units to “fall below.” *Id.* Far from demonstrating compliance with § 129, EPA’s upper prediction limit approach demonstrates (with 99-percent confidence) that its standards are “less stringent than” the “average” emission level achieved by the

top-performing 12 percent of units, which is precisely what § 129 prohibits. 42 U.S.C. § 7429(a)(2); *Sierra Club*, 479 F.3d at 880.⁵

Also unlawful is EPA's use of the upper prediction limit to set new unit floors. Although it may be permissible to set new unit floors "at a level that reasonably estimates the performance of the 'best controlled similar unit' under the worst reasonably foreseeable circumstances," *CKRC*, 255 F.3d at 863 (*quoting Sierra Club*, 167 F.3d at 665) (set of internal quotation marks omitted), the upper prediction limit is not an estimate of what the single best unit actually "achieved in practice" under any circumstances. By definition, it is a "prediction" of the level EPA expects all future tests by that unit to fall below. 42 U.S.C. § 7429(a)(2); *Sierra Club*, 479 F.3d at 880.

2. EPA's Decision To Set Floors At The Upper Prediction Limit Was Unreasonable And Arbitrary.

Although it is EPA's burden to "demonstrate with substantial evidence" that its floors reflect the emission levels actually achieved by the relevant best-

⁵ EPA claims "[b]ecause the UPL represents the value which we can expect the mean (*i.e.* average) of three future observations (3-run average) to fall below, based upon the results of the independent sample size from the same population, the UPL reflects average emissions." 76 Fed. Reg. at 15,389/3, JA _____. That the upper prediction limit is a number that the future average of any three-run test will "fall below" does not make it the "average emission limitation" achieved by the best-performing 12 percent of units, 42 U.S.C. § 7429(a)(2). Rather it is just a hypothetical "3-run average" that EPA can expect all future 3-run averages to "fall below." 76 Fed. Reg. at 15,389/3, JA _____.

performing units, *Northeast Maryland*, 358 F.3d at 954, EPA does not even attempt to demonstrate that the upper prediction limit reflects the “average” emission level actually achieved by the top 12 percent of incinerators. Instead, it proffers only a conclusory assertion that its floors are (in some unexplained sense) “based on the average.” 76 Fed. Reg. at 15,389, JA____. *See Northeast Maryland*, 358 F.3d at 954 (failure to demonstrate that floors reflect emission levels actually achieved by best units is arbitrary); *Village of Barrington*, 636 F.3d at 660; *Massachusetts v. EPA*, 549 U.S. 497, 532-533 (2007) (agency action is arbitrary where it “rests on reasoning divorced from the statutory text”).

Similarly, EPA provides no support for the notion that the upper prediction limit for the single best-performing unit reflects that unit’s actual performance, even under the “worst reasonably foreseeable” circumstances. Indeed, EPA makes no effort to link its upper prediction limit to “circumstances” at all. Rather, the agency merely picks a number it expects the unit’s emissions to always fall below, and the irrationality of assuming this number reflects the emission level actually “achieved in practice” by the single best unit is demonstrated by the assumption’s absurd results. By EPA’s calculations, the individual multiple hearth units with the lowest emissions of hydrogen chloride and sulfur dioxide are achieving worse emission levels than the average emission level achieved by the top 12 percent. Floor Memo at 15, 19 (Table 5-2 & n3), JA____, _____. That is like saying that the

tallest building in the world is shorter than the average height of the tallest 12 percent of buildings – mathematically impossible. Forging ahead with an approach when it yields demonstrably absurd results is arbitrary. *Am. Fed’n of Gov’t Employees v. Fed. Labor Relations Auth.*, 470 F.3d 375, 380 (D.C. Cir. 2006). (“Certainly, if the result reached is illogical on its own terms, the Authority’s order is arbitrary and capricious.”) (quotation omitted); *see also Appalachian Power Co. v. EPA*, 251 F.3d 1026, 1035 (D.C. Cir. 2001) (“[T]his Court cannot excuse the EPA’s reliance upon a methodology that generates apparently arbitrary results particularly where, as here, the agency has failed to justify its choice”).

EPA’s inconsistent use of the upper prediction limit – employing it to represent the performance of the “best” incinerators’ emissions but not to identify these units in the first place -- provides further evidence that EPA itself does not believe upper prediction limits reflect the emission levels actually achieved by the best sources. Further, using the upper prediction limit selectively for one purpose but not the other – and doing so without any explanation – independently arbitrary and capricious. *Am. Fed’n of Gov’t Employees v. Fed. Labor Relations Auth.*, 470 F.3d 375, 380 (D.C. Cir. 2006).

Given the glaring flaws in any claim that the upper prediction limit is either the “average” emission level achieved by the best-performing 12 percent of sources or the emission level achieved in practice by the single best unit, the need

for a reasoned explanation is especially great. EPA's failure to provide one is further reason for remand. *Village of Barrington*, 636 F.3d at 660; *Mountain Communications*, 355 F.3d at 648-649; *Transactive Corp.*, 91 F.3d at 236. See also *Massachusetts v. Dep't of Transp.*, 93 F.3d 890, 893 (D.C. Cir. 1996) ("reading that diverges from any realistic meaning of the statute" must be rejected under *Chevron* step two).

3. EPA's Decision To Base Existing Unit Floors On An Upper Prediction Limit For Units Comprising Less Than 12 Percent Of The Category Is Arbitrary And Capricious.

Because EPA did not have emissions data for even 12 percent of the incinerators in either subcategory, the agency's upper prediction limit approach necessarily assumes that it can use emissions data for one set of units to predict the future performance of another set of units. For example, EPA used dioxin emissions data for five multiple hearth units to calculate an upper prediction limit for the performance of 18 units comprising 12 percent of the relevant population – even though EPA has no dioxin emissions data for the other 13 units. Floor Memo at 7, JA__.

This Court has made clear that although EPA may estimate the best sources' emission levels, the agency "must demonstrate with substantial evidence – not mere assertions that the chosen floors represent a reasonable estimate." *Northeast Maryland*, 358 F.3d at 954 (internal quotation marks and citations omitted). Just

as it was arbitrary in previous rulemakings for EPA to base floors on the performance of technology without demonstrating that technology was the only factor affecting emissions – *see id.* at 954-955; *Sierra Club*, 479 F.3d at 882-883 (same); *CKRC*, 255 F.3d at 863 (same) – it is arbitrary here for EPA to base estimates of the performance of one group of units on the performance of a different group without demonstrating that this approach yields accurate estimates.

Far from providing such a demonstration, EPA does not even claim emissions from the units for which it has data are representative of emissions from the ones for which it lacks data. And the record provides reason to believe they are not. EPA does not dispute that sources for which it lacks data may be achieving lower emission levels than those for which it has data by burning cleaner sludge or cleaner fuel, having newer or better combustion or control equipment, or operating with greater care by better trained operators. *See* SC Comments at 3-4, JA____-____. Moreover, the record shows that the ostensibly top-performing units for which EPA lacks data use a variety of different control measures – including pollution prevention measures and superior control technology – that the units from which the agency claims it can predict their performance are not using. For example, EPA selected as top-performers three multiple hearth incinerators at the “CTHartford” facility and two at “NJMountainView.” SSI Database, JA _____. CTHartford’s incinerators feature afterburners, and NJMountainView’s use

thermal oxidizers. *Id.* Both are effective for controlling carbon monoxide, but EPA did not use any carbon monoxide data from these facilities to set its floors. BTF Memo, p. 4. JA ____ . By contrast, it did use data from an incinerator at “VABoatHarbor,” which lacks any carbon monoxide control at all. *Id.*

C. EPA’s Decision To Set Floors At Three Times The Method Detection Level Was Unlawful And Arbitrary.

EPA does not claim that setting floors at three times the “representative method detection level” yields any estimate of the emission level actually achieved by the relevant best-performing units. Instead, EPA offers only a policy argument, that using this approach “has the advantage of relying on the data collected to develop the floor” while also “account[ing] for measurement variability and imprecision.” Floor Memo at 15, JA _____. Because § 129(a)(2) unambiguously requires floors to reflect the “emission level actually *achieved*” by the relevant best-performing units, setting floors that do not even purport to reflect these levels is flatly unlawful. *Sierra Club*, 479 F.3d at 880 (emphasis in original). Even if § 129(a)(2)’s floor language were ambiguous, EPA’s contention that it can set such floors exceeds the scope of any possible ambiguity. *See Massachusetts*, 93 F.3d at 893.

If EPA did claim that a number equal to three times the representative method detection level is an estimate of the emission level achieved by the relevant

best units, its claim would be unreasonable under *Chevron* step two and arbitrary. The record contains no support for such a claim, let alone the “demonstrat[ion] with substantial evidence” that this Court’s precedent requires. *Northeast Maryland*, 358 F.3d at 954.

D. EPA’s Decision To Set New Unit Floors At The Existing Source Floor Levels Was Unlawful And Arbitrary.

EPA also makes no claim that new unit floors set at the existing source level reflect the emission level achieved by the relevant best units. Indeed, the record contains no rationale for these floors at all, just EPA’s cursory statement that new unit standards “cannot be less stringent than” existing unit floors. *Id.* at 19, Table 5-2 & n3, JA____. Because new unit floors must reflect the emission level actually achieved by the single best-performing unit, setting new unit floors at the existing unit floor level is flatly unlawful. Further, EPA’s failure to explain how such floors reflect the relevant best unit’s performance (and to show why with “substantial evidence”) is unreasonable under *Chevron* step two and arbitrary. *Northeast Maryland*, 358 F.3d at 954. *Village of Barrington*, 636 F.3d at 660; *Massachusetts*, 93 F.3d at 893.

In addition, it appears that the hydrogen chloride floor reason the UPL for new the top-performing multiple hearth units for hydrogen chloride was greater than the existing unit floor was because EPA chose a unit with only two test runs

as the top performer. This unexplained and unacknowledged departure from the agency's own stated methodology is itself arbitrary and capricious.⁶

Although EPA provided no rationale in its rule for setting new unit floors at the existing unit floor level, EPA argues in its letter denying Sierra Club's reconsideration petition that it interprets § 129 as just precluding new unit floors from being "less stringent" than existing unit limits. EPA-HQ-OAR-2009-0559-0181 ("Reconsideration Denial") at 3-4, JA____-____. As this Court already has held, however, § 129 requires new unit floors to reflect the emission level achieved by the best-performing unit. *Northeast Maryland*, 358 F.3d at 955; *Sierra Club*, 167 F.3d at 665 (floors must reasonably estimate performance of best controlled similar unit). Contrary to EPA's claim, floors do not even purport to satisfy this requirement just because they are not "less stringent" than floors for existing units – i.e., than the average emission level achieved by the best-performing 12 percent of units. If Congress did not intend new unit floors to be more stringent than existing unit floors, it need not have enacted different, more stringent language to govern them. *Asiana Airlines v. FAA*, 134 F.3d 393, 398 (D.C. Cir. 1998) ("A

⁶ In its revised MACT Floor Memo, EPA purported to replace the hydrogen chloride UPL with a value three times the representative method detection limit. MACT Floor Memo. This appears to be merely a typo. The top-performing unit did not have any results below the detection level, and three times the representative method detection limit would have been lower than the existing unit standard. See Floor Memo, Attach.B, Tbl. B-3, JA____; Floor Memo Table 5-1 & n3, JA____.

cardinal principle of interpretation requires us to construe a statute so that no provision is rendered inoperative or superfluous, void or insignificant.”) (internal quotations omitted).⁷

EPA’s denial of reconsideration on this issue is independently unlawful. EPA argues that, because it used the “same methodology” to set new unit floors in the proposed and final rules, it was not impracticable to comment on the agency’s decision to simply set new unit floors at the existing unit floor level in its final rule. Reconsideration Denial at 2, JA____. EPA’s “methodology” for setting hydrogen chloride and sulfur dioxide floors for new multiple hearth units, however, was to simply set them at the existing unit level, and it appears for the first time with the agency’s final rule. Floor Memo at 19, Table 5-2 & n3. Accordingly, it was not possible to comment on this flatly unlawful approach to setting floors. Because these standards would be more protective if EPA had complied with § 129’s new unit floor requirements, this issue is “of central relevance to the outcome of the rule.” 42 U.S.C. § 7607(d)(7)(B) (requiring EPA to grant reconsideration where it was impracticable to raise objection during public comment period and objection

⁷ EPA also suggests because Sierra Club did not provide the agency with an alternative methodology to account for variability in setting new unit floors, the agency is released from its statutory duty to set floors that reflect the best units’ emission levels. Reconsideration Denial. To the contrary, it is EPA’s job to devise a floor approach “capable of producing floors that satisfy the Clean Air Act.” *CKRC*, 255 F.3d at 865. Here, for example, EPA could have addressed its concerns about variability by gathering more emissions data.

was of central relevance to outcome of rule). *See Portland Cement Ass'n v. EPA* 665 F.3d 177, 186 (D.C. Cir. 2011) (§ 307(d)(7)(B) does “not require telepathy,” nor require commenters “to anticipate every contingency.”).

II. EPA’S REFUSAL TO SET FINAL STANDARDS REFLECTING THE MAXIMUM ACHIEVABLE DEGREE OF REDUCTION IS UNLAWFUL AND ARBITRARY.

A. EPA’s Refusal To Set Beyond-The-Floor Standards For New Multiple Hearth Units Is Unlawful And Arbitrary.

Although § 129(a)(2) unambiguously mandates standards requiring the maximum achievable degree of reduction in emissions, 42 U.S.C. § 7429(a)(2), EPA’s standards for new multiple hearth units do not purport to satisfy this mandate. EPA simply set floors; it did not even consider whether more stringent standards are “achievable.” *See* 76 Fed. Reg. at 15,393-15,394, JA____-____ (no discussion of beyond-the-floor standards for new units); BTF Memo, JA____-____ (same). In particular, EPA failed to consider setting beyond-the-floor standards for new multiple hearth units based on the use of fluidized bed design, even though it is undisputed that fluidized bed units achieve far lower emission levels and that many operators have already chosen to replace their multiple hearth units with fluidized beds. *See* SC Reconsideration Petition at 7-8, JA____-____. EPA’s complete failure to implement § 129’s requirement for final standards reflecting

the maximum achievable degree of reduction is unlawful. *Chevron*, 467 U.S. at 842-43 (“[i]f the intent of Congress is clear, that is the end of the matter”).

In its letter denying Sierra Club’s reconsideration petition, EPA claims that it provided a rationale for refusing to set beyond-the-floor standards in its proposed rule. Reconsideration Denial at 2, JA____ (citing 75 Fed. Reg. at 63,277, JA____). EPA’s sole rationale for refusing to propose beyond-the-floor standards, however, was that its floors for all new units were so strong that further reductions would be unreasonable. 75 Fed. Reg. at 63,277/2-3, JA____. But EPA ultimately set much weaker floors for new multiple hearth incinerators. See SC Reconsideration Petition at 5, JA____ (EPA weakened its floors by between 188 percent (in the case of dioxins) and 15,000 percent (in the case of mercury)). EPA does not and cannot claim that its rationale from the proposal – that it proposed extremely strong floors – supports refusing to set standards that are more stringent than the greatly weakened floors in EPA’s final rule.

EPA’s denial of reconsideration on this issue is independently unlawful. Even if the public might have anticipated that EPA would set weaker floors for new multiple hearth units (Reconsideration Denial at 2, JA____), it had no way to anticipate that EPA would also refuse to consider beyond-the-floor standards without any further analysis. Indeed, given that § 129(a)(2) requires the maximum achievable degree of reduction, it would be reasonable to anticipate that if EPA no

longer claimed its new unit floors reflected the maximum achievable degree of reduction it would revisit the beyond-the-floor analysis. Because EPA's new unit standards would be far more protective if EPA had set beyond-the-floor standards, this issue is "of central relevance to the outcome of the rule." 42 U.S.C. § 7607(d)(7)(B); *See Portland Cement Ass'n*, 665 F.3d at 186.

B. EPA's Refusal To Set Beyond-The-Floor Standards For Existing Units Is Unlawful And Arbitrary.

EPA contends that it can refuse to set beyond-the-floor standards whenever it believes that they are not cost-effective – *i.e.*, that the cost-per-ton is not "appropriate." 76 Fed. Reg. at 15,393-15,394, JA____-____; BTF Memo at 5-6, JA____-____; 75 Fed. Reg. at 63,275-77, JA____-____. Clean Air Act § 129, however, requires the "maximum" degree of reduction in emissions that is "achievable" considering cost. 42 U.S.C. § 7429(a)(2). Far from giving EPA discretion to base decisions on whether to set an emission standard on its subjective view about whether the cost-per-ton of that standard is "appropriate," 76 Fed. Reg. at 15,394, JA____, this language unambiguously requires the "maximum" degree of reduction that can be achieved considering cost and the other statutory factors. EPA's contention that it can reject beyond-the-floor standards merely because it views their cost-effectiveness as inappropriate

contravenes Congress's plainly expressed intent. *Chevron*, 467 U.S. at 842-43; *New Jersey*, 517 F.3d at 582.

By rejecting beyond-the-floor measures on cost-effectiveness grounds – without even addressing whether they are too costly to be “achievable” – EPA drains the terms “maximum” and “achievable” of meaning and essentially rewrites § 129(a)(2) to provide a far greater level of discretion than the statutory text confers. *New York v. EPA*, 443 F.3d at 885; *New Jersey*, 517 F.3d at 582. When Congress intends EPA to base Clean Air Act rulemaking decisions on whether the agency believes that standards will be cost-effective, it says so. *See, e.g.*, 42 U.S.C. § 7521(i)(3)(A)(iii) (directing EPA to consider cost-effectiveness in deciding whether to require new engines for light-duty trucks). Here Congress directed EPA to set standards requiring the “maximum” degree of reduction that is “achievable,” not the degree of reduction EPA considers “cost-effective,” and its decision must be respected. *Barnhart v. Sigmon Coal Co., Inc.*, 534 U.S. 438, 452-53 (2002) (“[W]hen Congress includes particular language in one section of a statute but omits it in another section of the same Act, it is generally presumed that Congress acts intentionally and purposely in the disparate inclusion or exclusion.”) (quotation omitted). Further, because EPA bases its rejection of beyond-the-floor standards on cost-effectiveness claims without making any effort to explain how its rationale comports with the statutory language, and because its reading of § 129

“diverges from any realistic meaning of the statute,” the agency’s reading is also unreasonable under *Chevron* step two. *See Massachusetts*, 93 F.3d at 893; *Mountain Communications*, 355 F.3d at 644; SC Comments at 10, JA____.

Even if § 129 allowed EPA to make its beyond-the-floor decisions on cost-effectiveness concerns, the agency’s rejection of standards based on a combination of afterburner, fabric filter and activated carbon injection was unlawful and arbitrary. EPA evaluated the cost of this technology combination only against the mercury reductions it would yield, and ignored that the same investment in the same technology would also yield reductions in dioxins, non-mercury metals (cadmium and lead) particulate matter, and carbon monoxide. EPA’s selective consideration of the benefits resulted in a cost figure for mercury alone (\$80,000 per pound) that the agency did not consider cost-effective. Had EPA considered the reductions in other pollutants that are reduced by these same technologies (at no additional cost) it would have reached an entirely different (and more favorable) conclusion. SC Reconsideration Petition at 11-12, JA____. Nowhere does EPA state why it decided to consider all the cost of this beyond-the-floor option but only some of the pollution reductions. *Village of Barrington*, 636 F.3d at 660. *Transactive Corp. v. US*, 91 F.3d 232, 237 (D.C. Cir. 1996) (“A long line of precedent has established that an agency action is arbitrary when the agency offered insufficient reasons for treating similar situations differently.”)

EPA's denial of reconsideration on this issue is unlawful as well. In its proposed rule, EPA claimed that sources could apply activated carbon injection alone and did not consider it in combination with other measures. 75 Fed. Reg. at 63,275-63,276, JA__-__. Thus, EPA's proposal neither mentions beyond-the-floor standards based on using afterburners, fabric filters and activated carbon injection together, nor articulates the rationale for rejecting this system that EPA advances in its final rule. Contrary to EPA's claim, therefore, it was not practicable to comment on this issue. Because standards for mercury, dioxins, cadmium, lead, particulate matter, carbon monoxide, and oxides of nitrogen would be more protective had EPA engaged in a non-arbitrary beyond-the-floor analysis, this issue is of central relevance and the agency's denial of reconsideration contravenes § 307(d)(7)(B).

Finally, EPA also acted unlawfully and arbitrarily by failing to consider beyond-the-floor standards based on source control measures aimed at reducing the concentration of mercury in sludge, as suggested by the City of Palo Alto. Palo Alto Comments at 5. EPA responded that "source reduction is outside of the scope of this rulemaking" because "EPA is required by Section 129 of the Clean Air Act to issue emission standards for SSI's." EPA-HQ-OAR-2009-0559-0171 ("Response To Comments") at 27-3, JA__. Far from limiting incinerator standards to reductions based on control at the point of emission, § 129 directs that standards

“shall be based on methods and technologies for removal or destruction of pollutants before, during, or after combustion...” 42 U.S.C. § 7429(a)(3). Because EPA failed to either consider these potentially significant and achievable reductions or explain its decision not to in a way that comported with the statute, its refusal was also unreasonable under *Chevron* step two and arbitrary and capricious. *State Farm*, 463 U.S. at 43 (1983); *Village of Barrington*, 636 F.3d at 660; *Transactive Corp.*, 91 F.3d at 236.

III. EPA’S REFUSAL TO REQUIRE EMISSIONS MONITORING IS UNLAWFUL AND ARBITRARY.

Section 129(c) mandates that the agency’s rule require operators “to monitor emissions from the unit at the point at which such emissions are emitted into the ambient air (or within the stack, combustion chamber or pollution control equipment, as appropriate”). 42 U.S.C. § 7429(c)(1) (emphasis added). It also mandates monitoring of “such other parameters relating to the operation of the unit and its control technology as the Administrator determines are appropriate.” *Id.* § 7429(c)(2) (emphasis added). Because § 129(c) unambiguously requires “emissions” monitoring and “parameter” monitoring and expressly distinguishes between the two, EPA’s contention that it can require only parameter monitoring contravenes Congress’ plainly expressed intent. *See New York*, 443 F.3d at 885.

Although EPA received comment pointing out that its refusal to establish emissions monitoring requirements is unlawful, SC Comments at 9, JA____, the agency makes no attempt to square its parameter-only monitoring requirements with § 129(c). Instead, the agency simply restates that it chose to require only “parameter” monitoring and to make emissions monitoring an “option.” Response To Comments at 12-23, JA____-____. Because § 129 provides that EPA’s rule must “require[]” emissions monitoring, not just allow it as an option, EPA’s explanation of its monitoring requirements merely confirm that they are unlawful. Further, because setting parameter-only monitoring requirements defeats Congress’ intent and because EPA does not explain how its monitoring requirements satisfy that intent, the agency’s position is unreasonable under *Chevron* step two as well. *See, e.g., Village of Barrington*, 636 F.3d at 665.

EPA’s complete failure to respond to comments pointing out that it is violating § 129(c)’s requirement for emissions monitoring or even to acknowledge the existence of this requirement also renders the agency’s rule arbitrary and capricious. *Int’l Ladies’ Garment Workers’ Union v. Donovan*, 722 F.2d 795, 818 (D.C. Cir. 1983). It bears emphasis that EPA agrees that emission monitoring systems are available for oxides of nitrogen, sulfur dioxide, particulate matter, hydrogen chloride, mercury, dioxins, and “multi-metals” (*e.g.*, lead and cadmium). 75 Fed. Reg. at 63,278/2, JA____. Indeed, EPA’s rule allows sources to use these

systems to show compliance with the standards, making plain that the agency regards them as accurate and reliable. 76 Fed. Reg. at 15,413/3, JA____ (40 C.F.R. § 60.4885(b)(2)).

CONCLUSION

For the reasons given above, Sierra Club respectfully requests that this Court remand the sewage sludge incinerators rule to EPA and direct the agency to revise the emission standards and monitoring requirements in compliance with the Clean Air Act and this Court's precedent. Further, in light of EPA's consistent record of egregious delay in responding to this Court's remands, Sierra Club respectfully requests that this Court take the unusual step of setting a one-year deadline for EPA's remand response. *See Portland Cemen Ass'nt*, 665 F.3d at 188 (D.C. Cir. 2011) (EPA took 10 years to respond to remand of § 112 rule for cement plants); *Medical Waste Inst. v. EPA*, 645 F.3d 420, 423-424 (D.C. Cir. 2011) (EPA took more than ten years to respond to remand of its medical waste incinerator standards). Sierra Club members and other Americans exposed to pollution from sewage sludge incinerators already have waited more than a decade for the standards that the Clean Air Act requires.

DATED: July 24, 2012

Respectfully submitted,

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CERTIFICATE REGARDING WORD LIMITATION

Counsel hereby certifies that, in accordance with Federal Rule of Appellate Procedure 32(a)(7)(C), the foregoing Proof Brief for Petitioner Sierra Club contains 9,683 words, as counted by counsel's word processing system.

DATED: July 24, 2012

/s/ James S. Pew
James S. Pew

CERTIFICATE OF SERVICE

I hereby certify that on this 24th day of July, 2012 I have served the foregoing **Proof Brief for Petitioner Sierra Club** on all registered counsel through the Court's electronic filing system (ECF).

/s/ James S. Pew
James S. Pew

STATUTORY AND REGULATORY ADDENDUM

STATUTES

42 U.S.C. § 7412

42 U.S.C. § 7429

42 U.S.C. § 7521

42 U.S.C. § 7607

CODE OF FEDERAL REGULATIONS

40 C.F.R. § 60.4885

United States Code Annotated

Title 42. The Public Health and Welfare

Chapter 85. Air Pollution Prevention and Control (Refs & Annos)

Subchapter I. Programs and Activities

Part A. Air Quality and Emissions Limitations (Refs & Annos)

42 U.S.C.A. § 7412

§ 7412. Hazardous air pollutants

Effective: August 5, 1999

Currentness

(a) Definitions

For purposes of this section, except subsection (r) of this section--

(1) Major source

The term “major source” means any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants. The Administrator may establish a lesser quantity, or in the case of radionuclides different criteria, for a major source than that specified in the previous sentence, on the basis of the potency of the air pollutant, persistence, potential for bioaccumulation, other characteristics of the air pollutant, or other relevant factors.

(2) Area source

The term “area source” means any stationary source of hazardous air pollutants that is not a major source. For purposes of this section, the term “area source” shall not include motor vehicles or nonroad vehicles subject to regulation under subchapter II of this chapter.

(3) Stationary source

The term “stationary source” shall have the same meaning as such term has under [section 7411\(a\)](#) of this title.

(4) New source

The term “new source” means a stationary source the construction or reconstruction of which is commenced after the Administrator first proposes regulations under this section establishing an emission standard applicable to such source.

(5) Modification

The term “modification” means any physical change in, or change in the method of operation of, a major source which increases the actual emissions of any hazardous air pollutant emitted by such source by more than a de minimis amount or which results in the emission of any hazardous air pollutant not previously emitted by more than a de minimis amount.

(6) Hazardous air pollutant

The term “hazardous air pollutant” means any air pollutant listed pursuant to subsection (b) of this section.

(7) Adverse environmental effect

The term “adverse environmental effect” means any significant and widespread adverse effect, which may reasonably be anticipated, to wildlife, aquatic life, or other natural resources, including adverse impacts on populations of endangered or threatened species or significant degradation of environmental quality over broad areas.

(8) Electric utility steam generating unit

The term “electric utility steam generating unit” means any fossil fuel fired combustion unit of more than 25 megawatts that serves a generator that produces electricity for sale. A unit that cogenerates steam and electricity and supplies more than one-third of its potential electric output capacity and more than 25 megawatts electrical output to any utility power distribution system for sale shall be considered an electric utility steam generating unit.

(9) Owner or operator

The term “owner or operator” means any person who owns, leases, operates, controls, or supervises a stationary source.

(10) Existing source

The term “existing source” means any stationary source other than a new source.

(11) Carcinogenic effect

Unless revised, the term “carcinogenic effect” shall have the meaning provided by the Administrator under Guidelines for Carcinogenic Risk Assessment as of the date of enactment. Any revisions in the existing Guidelines shall be subject to notice and opportunity for comment.

(b) List of pollutants

(1) Initial list

The Congress establishes for purposes of this section a list of hazardous air pollutants as follows:

| CAS number | Chemical name |
|---------------|---|
| 75070 | Acetaldehyde |
| 60355 | Acetamide |
| 75058 | Acetonitrile |
| 98862 | Acetophenone |
| 53963 | 2-Acetylaminofluorene |
| 107028 | Acrolein |
| 79061 | Acrylamide |
| 79107 | Acrylic acid |
| 107131 | Acrylonitrile |
| 107051 | Allyl chloride |
| 92671 | 4-Aminobiphenyl |
| 62533 | Aniline |
| 90040 | o-Anisidine |
| 1332214 | Asbestos |
| 71432 | Benzene (including benzene from gasoline) |
| 92875 | Benzidine |
| 98077 | Benzotrichloride |
| 100447 | Benzyl chloride |
| 92524 | Biphenyl |
| 117817 | Bis(2-ethylhexyl)phthalate (DEHP) |
| 542881 | Bis(chloromethyl)ether |
| 75252 | Bromoform |
| 106990 | 1,3-Butadiene |
| 156627 | Calcium cyanamide |
| 105602 | Caprolactam |
| 133062 | Captan |
| 63252 | Carbaryl |
| 75150 | Carbon disulfide |

56235 Carbon tetrachloride
463581 Carbonyl sulfide
120809 Catechol
133904 Chloramben
57749 Chlordane
7782505 Chlorine
79118 Chloroacetic acid
532274 2-Chloroacetophenone
108907 Chlorobenzene
510156 Chlorobenzilate
67663 Chloroform
107302 Chloromethyl methyl ether
126998 Chloroprene
1319773 Cresols/Cresylic acid (isomers and mixture)
95487 o-Cresol
108394 m-Cresol
106445 p-Cresol
98828 Cumene
94757 2,4-D, salts and esters
3547044 DDE
334883 Diazomethane
132649 Dibenzofurans
96128 1,2-Dibromo-3-chloropropane
84742 Dibutylphthalate
106467 1,4-Dichlorobenzene(p)
91941 3,3-Dichlorobenzidene
111444 Dichloroethyl ether (Bis(2-chloroethyl)ether)
542756 1,3-Dichloropropene
62737 Dichlorvos
111422 Diethanolamine
121697 N,N-Diethyl aniline (N,N-Dimethylaniline)
64675 Diethyl sulfate
119904 3,3-Dimethoxybenzidine
60117 Dimethyl aminoazobenzene
119937 3,3#-Dimethyl benzidine
79447 Dimethyl carbamoyl chloride
68122 Dimethyl formamide
57147 1,1-Dimethyl hydrazine
131113 Dimethyl phthalate
77781 Dimethyl sulfate
534521 4,6-Dinitro-o-cresol, and salts
51285 2,4-Dinitrophenol
121142 2,4-Dinitrotoluene
123911 1,4-Dioxane (1,4-Diethyleneoxide)
122667 1,2-Diphenylhydrazine
106898 Epichlorohydrin (1-Chloro-2,3-epoxypropane)
106887 1,2-Epoxybutane
140885 Ethyl acrylate
100414 Ethyl benzene

51796 Ethyl carbamate (Urethane)
75003 Ethyl chloride (Chloroethane)
106934 Ethylene dibromide (Dibromoethane)
107062 Ethylene dichloride (1,2-Dichloroethane)
107211 Ethylene glycol
151564 Ethylene imine (Aziridine)
75218 Ethylene oxide
96457 Ethylene thiourea
75343 Ethylidene dichloride (1,1-Dichloroethane)
50000 Formaldehyde
76448 Heptachlor
118741 Hexachlorobenzene
87683 Hexachlorobutadiene
77474 Hexachlorocyclopentadiene
67721 Hexachloroethane
822060 Hexamethylene-1,6-diisocyanate
680319 Hexamethylphosphoramide
110543 Hexane
302012 Hydrazine
7647010 Hydrochloric acid
7664393 Hydrogen fluoride (Hydrofluoric acid)
123319 Hydroquinone
78591 Isophorone
58899 Lindane (all isomers)
108316 Maleic anhydride
67561 Methanol
72435 Methoxychlor
74839 Methyl bromide (Bromomethane)
74873 Methyl chloride (Chloromethane)
71556 Methyl chloroform (1,1,1-Trichloroethane)
78933 Methyl ethyl ketone (2-Butanone)
60344 Methyl hydrazine
74884 Methyl iodide (Iodomethane)
108101 Methyl isobutyl ketone (Hexone)
624839 Methyl isocyanate
80626 Methyl methacrylate
1634044 Methyl tert butyl ether
101144 4,4-Methylene bis(2-chloroaniline)
75092 Methylene chloride (Dichloromethane)
101688 Methylene diphenyl diisocyanate (MDI)
101779 4,4'-Methylenedianiline
91203 Naphthalene
98953 Nitrobenzene
92933 4-Nitrobiphenyl
100027 4-Nitrophenol
79469 2-Nitropropane
684935 N-Nitroso-N-methylurea
62759 N-Nitrosodimethylamine
59892 N-Nitrosomorpholine

56382 Parathion
82688 Pentachloronitrobenzene (Quintobenzene)
87865 Pentachlorophenol
108952 Phenol
106503 p-Phenylenediamine
75445 Phosgene
7803512 Phosphine
7723140 Phosphorus
85449 Phthalic anhydride
1336363 Polychlorinated biphenyls (Aroclors)
1120714 1,3-Propane sultone
57578 beta-Propiolactone
123386 Propionaldehyde
114261 Propoxur (Baygon)
78875 Propylene dichloride (1,2-Dichloropropane)
75569 Propylene oxide
75558 1,2-Propylenimine (2-Methyl aziridine)
91225 Quinoline
106514 Quinone
100425 Styrene
96093 Styrene oxide
1746016 2,3,7,8-Tetrachlorodibenzo-p-dioxin
79345 1,1,2,2-Tetrachloroethane
127184 Tetrachloroethylene (Perchloroethylene)
7550450 Titanium tetrachloride
108883 Toluene
95807 2,4-Toluene diamine
584849 2,4-Toluene diisocyanate
95534 o-Toluidine
8001352 Toxaphene (chlorinated camphene)
120821 1,2,4-Trichlorobenzene
79005 1,1,2-Trichloroethane
79016 Trichloroethylene
95954 2,4,5-Trichlorophenol
88062 2,4,6-Trichlorophenol
121448 Triethylamine
1582098 Trifluralin
540841 2,2,4-Trimethylpentane
108054 Vinyl acetate
593602 Vinyl bromide
75014 Vinyl chloride
75354 Vinylidene chloride (1,1-Dichloroethylene)
1330207 Xylenes (isomers and mixture)
95476 o-Xylenes
108383 m-Xylenes
106423 p-Xylenes
0 Antimony Compounds
0 Arsenic Compounds (inorganic including arsine)
0 Beryllium Compounds

- 0 Cadmium Compounds
- 0 Chromium Compounds
- 0 Cobalt Compounds
- 0 Coke Oven Emissions
- 0 Cyanide Compounds¹
- 0 Glycol ethers²
- 0 Lead Compounds
- 0 Manganese Compounds
- 0 Mercury Compounds
- 0 Fine mineral fibers³
- 0 Nickel Compounds
- 0 Polycyclic Organic Matter⁴
- 0 Radionuclides (including radon)⁵
- 0 Selenium Compounds

NOTE: For all listings above which contain the word “compounds” and for glycol ethers, the following applies: Unless otherwise specified, these listings are defined as including any unique chemical substance that contains the named chemical (i.e., antimony, arsenic, etc.) as part of that chemical's infrastructure.

¹ X#CN where X = H# or any other group where a formal dissociation may occur. For example KCN or Ca(CN)₂

² Includes mono- and di- ethers of ethylene glycol, diethylene glycol, and triethylene glycol R-(OCH₂CH₂)_n-OR# where n = 1, 2, or 3

R = alkyl or aryl groups

R# = R, H, or groups which, when removed, yield glycol ethers with the structure: R-(OCH₂CH)_n-OH. Polymers are excluded from the glycol category.

³ Includes mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral derived fibers) of average diameter 1 micrometer or less.

⁴ Includes organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100°C.

⁵ A type of atom which spontaneously undergoes radioactive decay.

(2) Revision of the list

The Administrator shall periodically review the list established by this subsection and publish the results thereof and, where appropriate, revise such list by rule, adding pollutants which present, or may present, through inhalation or other routes of exposure, a threat of adverse human health effects (including, but not limited to, substances which are known to be, or may reasonably be anticipated to be, carcinogenic, mutagenic, teratogenic, neurotoxic, which cause reproductive dysfunction, or which are acutely or chronically toxic) or adverse environmental effects whether through ambient concentrations, bioaccumulation, deposition, or otherwise, but not including releases subject to regulation under subsection (r) of this section as a result of emissions to the air. No air pollutant which is listed under [section 7408\(a\)](#) of this title may be added to the list under this section, except that the prohibition of this sentence shall not apply to any pollutant which independently meets the listing criteria of this paragraph and is a precursor to a pollutant which is listed under [section 7408\(a\)](#) of this title or to any pollutant which is in a class of pollutants listed under such section. No substance, practice, process or activity regulated under subchapter VI of this chapter shall be subject to regulation under this section solely due to its adverse effects on the environment.

(3) Petitions to modify the list

(A) Beginning at any time after 6 months after November 15, 1990, any person may petition the Administrator to modify the list of hazardous air pollutants under this subsection by adding or deleting a substance or, in case of listed pollutants without CAS numbers (other than coke oven emissions, mineral fibers, or polycyclic organic matter) removing certain unique

substances. Within 18 months after receipt of a petition, the Administrator shall either grant or deny the petition by publishing a written explanation of the reasons for the Administrator's decision. Any such petition shall include a showing by the petitioner that there is adequate data on the health or environmental defects¹ of the pollutant or other evidence adequate to support the petition. The Administrator may not deny a petition solely on the basis of inadequate resources or time for review.

(B) The Administrator shall add a substance to the list upon a showing by the petitioner or on the Administrator's own determination that the substance is an air pollutant and that emissions, ambient concentrations, bioaccumulation or deposition of the substance are known to cause or may reasonably be anticipated to cause adverse effects to human health or adverse environmental effects.

(C) The Administrator shall delete a substance from the list upon a showing by the petitioner or on the Administrator's own determination that there is adequate data on the health and environmental effects of the substance to determine that emissions, ambient concentrations, bioaccumulation or deposition of the substance may not reasonably be anticipated to cause any adverse effects to the human health or adverse environmental effects.

(D) The Administrator shall delete one or more unique chemical substances that contain a listed hazardous air pollutant not having a CAS number (other than coke oven emissions, mineral fibers, or polycyclic organic matter) upon a showing by the petitioner or on the Administrator's own determination that such unique chemical substances that contain the named chemical of such listed hazardous air pollutant meet the deletion requirements of subparagraph (C). The Administrator must grant or deny a deletion petition prior to promulgating any emission standards pursuant to subsection (d) of this section applicable to any source category or subcategory of a listed hazardous air pollutant without a CAS number listed under subsection (b) of this section for which a deletion petition has been filed within 12 months of November 15, 1990.

(4) Further information

If the Administrator determines that information on the health or environmental effects of a substance is not sufficient to make a determination required by this subsection, the Administrator may use any authority available to the Administrator to acquire such information.

(5) Test methods

The Administrator may establish, by rule, test measures and other analytic procedures for monitoring and measuring emissions, ambient concentrations, deposition, and bioaccumulation of hazardous air pollutants.

(6) Prevention of significant deterioration

The provisions of part C of this subchapter (prevention of significant deterioration) shall not apply to pollutants listed under this section.

(7) Lead

The Administrator may not list elemental lead as a hazardous air pollutant under this subsection.

(c) List of source categories

(1) In general

Not later than 12 months after November 15, 1990, the Administrator shall publish, and shall from time to time, but no less often than every 8 years, revise, if appropriate, in response to public comment or new information, a list of all categories and subcategories of major sources and area sources (listed under paragraph (3)) of the air pollutants listed pursuant to subsection (b) of this section. To the extent practicable, the categories and subcategories listed under this subsection shall be consistent with the list of source categories established pursuant to [section 7411](#) of this title and part C of this subchapter. Nothing in the preceding sentence limits the Administrator's authority to establish subcategories under this section, as appropriate.

(2) Requirement for emissions standards

For the categories and subcategories the Administrator lists, the Administrator shall establish emissions standards under subsection (d) of this section, according to the schedule in this subsection and subsection (e) of this section.

(3) Area sources

The Administrator shall list under this subsection each category or subcategory of area sources which the Administrator finds presents a threat of adverse effects to human health or the environment (by such sources individually or in the aggregate) warranting regulation under this section. The Administrator shall, not later than 5 years after November 15, 1990, and pursuant to subsection (k)(3)(B) of this section, list, based on actual or estimated aggregate emissions of a listed pollutant or pollutants, sufficient categories or subcategories of area sources to ensure that area sources representing 90 percent of the area source emissions of the 30 hazardous air pollutants that present the greatest threat to public health in the largest number of urban areas are subject to regulation under this section. Such regulations shall be promulgated not later than 10 years after November 15, 1990.

(4) Previously regulated categories

The Administrator may, in the Administrator's discretion, list any category or subcategory of sources previously regulated under this section as in effect before November 15, 1990.

(5) Additional categories

In addition to those categories and subcategories of sources listed for regulation pursuant to paragraphs (1) and (3), the Administrator may at any time list additional categories and subcategories of sources of hazardous air pollutants according to the same criteria for listing applicable under such paragraphs. In the case of source categories and subcategories listed after publication of the initial list required under paragraph (1) or (3), emission standards under subsection (d) of this section for the category or subcategory shall be promulgated within 10 years after November 15, 1990, or within 2 years after the date on which such category or subcategory is listed, whichever is later.

(6) Specific pollutants

With respect to alkylated lead compounds, polycyclic organic matter, hexachlorobenzene, mercury, polychlorinated biphenyls, 2,3,7,8-tetrachlorodibenzofurans and 2,3,7,8-tetrachlorodibenzo-p-dioxin, the Administrator shall, not later than 5 years after November 15, 1990, list categories and subcategories of sources assuring that sources accounting for not less than 90 per centum of the aggregate emissions of each such pollutant are subject to standards under subsection (d)(2) or (d)(4) of this section. Such standards shall be promulgated not later than 10 years after November 15, 1990. This paragraph shall not be construed to require the Administrator to promulgate standards for such pollutants emitted by electric utility steam generating units.

(7) Research facilities

The Administrator shall establish a separate category covering research or laboratory facilities, as necessary to assure the equitable treatment of such facilities. For purposes of this section, "research or laboratory facility" means any stationary source whose primary purpose is to conduct research and development into new processes and products, where such source is operated under the close supervision of technically trained personnel and is not engaged in the manufacture of products for commercial sale in commerce, except in a de minimis manner.

(8) Boat manufacturing

When establishing emissions standards for styrene, the Administrator shall list boat manufacturing as a separate subcategory unless the Administrator finds that such listing would be inconsistent with the goals and requirements of this chapter.

(9) Deletions from the list

(A) Where the sole reason for the inclusion of a source category on the list required under this subsection is the emission of a unique chemical substance, the Administrator shall delete the source category from the list if it is appropriate because of action taken under either subparagraphs (C) or (D) of subsection (b)(3) of this section.

(B) The Administrator may delete any source category from the list under this subsection, on petition of any person or on the Administrator's own motion, whenever the Administrator makes the following determination or determinations, as applicable:

(i) In the case of hazardous air pollutants emitted by sources in the category that may result in cancer in humans, a determination that no source in the category (or group of sources in the case of area sources) emits such hazardous air pollutants in quantities which may cause a lifetime risk of cancer greater than one in one million to the individual in the population who is most exposed to emissions of such pollutants from the source (or group of sources in the case of area sources).

(ii) In the case of hazardous air pollutants that may result in adverse health effects in humans other than cancer or adverse environmental effects, a determination that emissions from no source in the category or subcategory concerned (or group of sources in the case of area sources) exceed a level which is adequate to protect public health with an ample margin of safety and no adverse environmental effect will result from emissions from any source (or from a group of sources in the case of area sources).

The Administrator shall grant or deny a petition under this paragraph within 1 year after the petition is filed.

(d) Emission standards

(1) In general

The Administrator shall promulgate regulations establishing emission standards for each category or subcategory of major sources and area sources of hazardous air pollutants listed for regulation pursuant to subsection (c) of this section in accordance with the schedules provided in subsections (c) and (e) of this section. The Administrator may distinguish among classes, types, and sizes of sources within a category or subcategory in establishing such standards except that, there shall be no delay in the compliance date for any standard applicable to any source under subsection (i) of this section as the result of the authority provided by this sentence.

(2) Standards and methods

Emissions standards promulgated under this subsection and applicable to new or existing sources of hazardous air pollutants shall require the maximum degree of reduction in emissions of the hazardous air pollutants subject to this section (including a prohibition on such emissions, where achievable) that the Administrator, taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements, determines is achievable for new or existing sources in the category or subcategory to which such emission standard applies, through application of measures, processes, methods, systems or techniques including, but not limited to, measures which--

(A) reduce the volume of, or eliminate emissions of, such pollutants through process changes, substitution of materials or other modifications,

(B) enclose systems or processes to eliminate emissions,

(C) collect, capture or treat such pollutants when released from a process, stack, storage or fugitive emissions point,

(D) are design, equipment, work practice, or operational standards (including requirements for operator training or certification) as provided in subsection (h) of this section, or

(E) are a combination of the above.

None of the measures described in subparagraphs (A) through (D) shall, consistent with the provisions of [section 7414\(c\)](#) of this title, in any way compromise any United States patent or United States trademark right, or any confidential business information, or any trade secret or any other intellectual property right.

(3) New and existing sources

The maximum degree of reduction in emissions that is deemed achievable for new sources in a category or subcategory shall not be less stringent than the emission control that is achieved in practice by the best controlled similar source, as determined by the Administrator. Emission standards promulgated under this subsection for existing sources in a category or subcategory

may be less stringent than standards for new sources in the same category or subcategory but shall not be less stringent, and may be more stringent than--

(A) the average emission limitation achieved by the best performing 12 percent of the existing sources (for which the Administrator has emissions information), excluding those sources that have, within 18 months before the emission standard is proposed or within 30 months before such standard is promulgated, whichever is later, first achieved a level of emission rate or emission reduction which complies, or would comply if the source is not subject to such standard, with the lowest achievable emission rate (as defined by [section 7501](#) of this title) applicable to the source category and prevailing at the time, in the category or subcategory for categories and subcategories with 30 or more sources, or

(B) the average emission limitation achieved by the best performing 5 sources (for which the Administrator has or could reasonably obtain emissions information) in the category or subcategory for categories or subcategories with fewer than 30 sources.

(4) Health threshold

With respect to pollutants for which a health threshold has been established, the Administrator may consider such threshold level, with an ample margin of safety, when establishing emission standards under this subsection.

(5) Alternative standard for area sources

With respect only to categories and subcategories of area sources listed pursuant to subsection (c) of this section, the Administrator may, in lieu of the authorities provided in paragraph (2) and subsection (f) of this section, elect to promulgate standards or requirements applicable to sources in such categories or subcategories which provide for the use of generally available control technologies or management practices by such sources to reduce emissions of hazardous air pollutants.

(6) Review and revision

The Administrator shall review, and revise as necessary (taking into account developments in practices, processes, and control technologies), emission standards promulgated under this section no less often than every 8 years.

(7) Other requirements preserved

No emission standard or other requirement promulgated under this section shall be interpreted, construed or applied to diminish or replace the requirements of a more stringent emission limitation or other applicable requirement established pursuant to [section 7411](#) of this title, part C or D of this subchapter, or other authority of this chapter or a standard issued under State authority.

(8) Coke ovens

(A) Not later than December 31, 1992, the Administrator shall promulgate regulations establishing emission standards under paragraphs (2) and (3) of this subsection for coke oven batteries. In establishing such standards, the Administrator shall evaluate--

(i) the use of sodium silicate (or equivalent) luting compounds to prevent door leaks, and other operating practices and technologies for their effectiveness in reducing coke oven emissions, and their suitability for use on new and existing coke oven batteries, taking into account costs and reasonable commercial door warranties; and

(ii) as a basis for emission standards under this subsection for new coke oven batteries that begin construction after the date of proposal of such standards, the Jewell design Thompson non-recovery coke oven batteries and other non-recovery coke oven technologies, and other appropriate emission control and coke production technologies, as to their effectiveness in reducing coke oven emissions and their capability for production of steel quality coke.

Such regulations shall require at a minimum that coke oven batteries will not exceed 8 per centum leaking doors, 1 per centum leaking lids, 5 per centum leaking oftakes, and 16 seconds visible emissions per charge, with no exclusion for emissions during the period after the closing of self-sealing oven doors. Notwithstanding subsection (i) of this section, the compliance date for such emission standards for existing coke oven batteries shall be December 31, 1995.

(B) The Administrator shall promulgate work practice regulations under this subsection for coke oven batteries requiring, as appropriate--

(i) the use of sodium silicate (or equivalent) luting compounds, if the Administrator determines that use of sodium silicate is an effective means of emissions control and is achievable, taking into account costs and reasonable commercial warranties for doors and related equipment; and

(ii) door and jam cleaning practices.

Notwithstanding subsection (i) of this section, the compliance date for such work practice regulations for coke oven batteries shall be not later than the date 3 years after November 15, 1990.

(C) For coke oven batteries electing to qualify for an extension of the compliance date for standards promulgated under subsection (f) of this section in accordance with subsection (i)(8) of this section, the emission standards under this subsection for coke oven batteries shall require that coke oven batteries not exceed 8 per centum leaking doors, 1 per centum leaking lids, 5 per centum leaking offtakes, and 16 seconds visible emissions per charge, with no exclusion for emissions during the period after the closing of self-sealing doors. Notwithstanding subsection (i) of this section, the compliance date for such emission standards for existing coke oven batteries seeking an extension shall be not later than the date 3 years after November 15, 1990.

(9) Sources licensed by the Nuclear Regulatory Commission

No standard for radionuclide emissions from any category or subcategory of facilities licensed by the Nuclear Regulatory Commission (or an Agreement State) is required to be promulgated under this section if the Administrator determines, by rule, and after consultation with the Nuclear Regulatory Commission, that the regulatory program established by the Nuclear Regulatory Commission pursuant to the Atomic Energy Act [42 U.S.C.A. § 2011 et seq.] for such category or subcategory provides an ample margin of safety to protect the public health. Nothing in this subsection shall preclude or deny the right of any State or political subdivision thereof to adopt or enforce any standard or limitation respecting emissions of radionuclides which is more stringent than the standard or limitation in effect under [section 7411](#) of this title or this section.

(10) Effective date

Emission standards or other regulations promulgated under this subsection shall be effective upon promulgation.

(e) Schedule for standards and review

(1) In general

The Administrator shall promulgate regulations establishing emission standards for categories and subcategories of sources initially listed for regulation pursuant to subsection (c)(1) of this section as expeditiously as practicable, assuring that--

(A) emission standards for not less than 40 categories and subcategories (not counting coke oven batteries) shall be promulgated not later than 2 years after November 15, 1990;

(B) emission standards for coke oven batteries shall be promulgated not later than December 31, 1992;

(C) emission standards for 25 per centum of the listed categories and subcategories shall be promulgated not later than 4 years after November 15, 1990;

(D) emission standards for an additional 25 per centum of the listed categories and subcategories shall be promulgated not later than 7 years after November 15, 1990; and

(E) emission standards for all categories and subcategories shall be promulgated not later than 10 years after November 15, 1990.

(2) Priorities

In determining priorities for promulgating standards under subsection (d) of this section, the Administrator shall consider--

- (A) the known or anticipated adverse effects of such pollutants on public health and the environment;
- (B) the quantity and location of emissions or reasonably anticipated emissions of hazardous air pollutants that each category or subcategory will emit; and
- (C) the efficiency of grouping categories or subcategories according to the pollutants emitted, or the processes or technologies used.

(3) Published schedule

Not later than 24 months after November 15, 1990, and after opportunity for comment, the Administrator shall publish a schedule establishing a date for the promulgation of emission standards for each category and subcategory of sources listed pursuant to subsection (c)(1) and (3) of this section which shall be consistent with the requirements of paragraphs (1) and (2). The determination of priorities for the promulgation of standards pursuant to this paragraph is not a rulemaking and shall not be subject to judicial review, except that, failure to promulgate any standard pursuant to the schedule established by this paragraph shall be subject to review under [section 7604](#) of this title.

(4) Judicial review

Notwithstanding [section 7607](#) of this title, no action of the Administrator adding a pollutant to the list under subsection (b) of this section or listing a source category or subcategory under subsection (c) of this section shall be a final agency action subject to judicial review, except that any such action may be reviewed under such [section 7607](#) of this title when the Administrator issues emission standards for such pollutant or category.

(5) Publicly owned treatment works

The Administrator shall promulgate standards pursuant to subsection (d) of this section applicable to publicly owned treatment works (as defined in title II of the Federal Water Pollution Control Act [[33 U.S.C.A. § 1281 et seq.](#)]) not later than 5 years after November 15, 1990.

(f) Standard to protect health and environment

(1) Report

Not later than 6 years after November 15, 1990, the Administrator shall investigate and report, after consultation with the Surgeon General and after opportunity for public comment, to Congress on--

- (A) methods of calculating the risk to public health remaining, or likely to remain, from sources subject to regulation under this section after the application of standards under subsection (d) of this section;
- (B) the public health significance of such estimated remaining risk and the technologically and commercially available methods and costs of reducing such risks;
- (C) the actual health effects with respect to persons living in the vicinity of sources, any available epidemiological or other health studies, risks presented by background concentrations of hazardous air pollutants, any uncertainties in risk assessment methodology or other health assessment technique, and any negative health or environmental consequences to the community of efforts to reduce such risks; and
- (D) recommendations as to legislation regarding such remaining risk.

(2) Emission standards

(A) If Congress does not act on any recommendation submitted under paragraph (1), the Administrator shall, within 8 years after promulgation of standards for each category or subcategory of sources pursuant to subsection (d) of this section, promulgate standards for such category or subcategory if promulgation of such standards is required in order to provide an

ample margin of safety to protect public health in accordance with this section (as in effect before November 15, 1990) or to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect. Emission standards promulgated under this subsection shall provide an ample margin of safety to protect public health in accordance with this section (as in effect before November 15, 1990), unless the Administrator determines that a more stringent standard is necessary to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect. If standards promulgated pursuant to subsection (d) of this section and applicable to a category or subcategory of sources emitting a pollutant (or pollutants) classified as a known, probable or possible human carcinogen do not reduce lifetime excess cancer risks to the individual most exposed to emissions from a source in the category or subcategory to less than one in one million, the Administrator shall promulgate standards under this subsection for such source category.

(B) Nothing in subparagraph (A) or in any other provision of this section shall be construed as affecting, or applying to the Administrator's interpretation of this section, as in effect before November 15, 1990, and set forth in the Federal Register of September 14, 1989 ([54 Federal Register 38044](#)).

(C) The Administrator shall determine whether or not to promulgate such standards and, if the Administrator decides to promulgate such standards, shall promulgate the standards 8 years after promulgation of the standards under subsection (d) of this section for each source category or subcategory concerned. In the case of categories or subcategories for which standards under subsection (d) of this section are required to be promulgated within 2 years after November 15, 1990, the Administrator shall have 9 years after promulgation of the standards under subsection (d) of this section to make the determination under the preceding sentence and, if required, to promulgate the standards under this paragraph.

(3) Effective date

Any emission standard established pursuant to this subsection shall become effective upon promulgation.

(4) Prohibition

No air pollutant to which a standard under this subsection applies may be emitted from any stationary source in violation of such standard, except that in the case of an existing source--

(A) such standard shall not apply until 90 days after its effective date, and

(B) the Administrator may grant a waiver permitting such source a period of up to 2 years after the effective date of a standard to comply with the standard if the Administrator finds that such period is necessary for the installation of controls and that steps will be taken during the period of the waiver to assure that the health of persons will be protected from imminent endangerment.

(5) Area sources

The Administrator shall not be required to conduct any review under this subsection or promulgate emission limitations under this subsection for any category or subcategory of area sources that is listed pursuant to subsection (c)(3) of this section and for which an emission standard is promulgated pursuant to subsection (d)(5) of this section.

(6) Unique chemical substances

In establishing standards for the control of unique chemical substances of listed pollutants without CAS numbers under this subsection, the Administrator shall establish such standards with respect to the health and environmental effects of the substances actually emitted by sources and direct transformation byproducts of such emissions in the categories and subcategories.

(g) Modifications

(1) Offsets

(A) A physical change in, or change in the method of operation of, a major source which results in a greater than de minimis increase in actual emissions of a hazardous air pollutant shall not be considered a modification, if such increase in the quantity

of actual emissions of any hazardous air pollutant from such source will be offset by an equal or greater decrease in the quantity of emissions of another hazardous air pollutant (or pollutants) from such source which is deemed more hazardous, pursuant to guidance issued by the Administrator under subparagraph (B). The owner or operator of such source shall submit a showing to the Administrator (or the State) that such increase has been offset under the preceding sentence.

(B) The Administrator shall, after notice and opportunity for comment and not later than 18 months after November 15, 1990, publish guidance with respect to implementation of this subsection. Such guidance shall include an identification, to the extent practicable, of the relative hazard to human health resulting from emissions to the ambient air of each of the pollutants listed under subsection (b) of this section sufficient to facilitate the offset showing authorized by subparagraph (A). Such guidance shall not authorize offsets between pollutants where the increased pollutant (or more than one pollutant in a stream of pollutants) causes adverse effects to human health for which no safety threshold for exposure can be determined unless there are corresponding decreases in such types of pollutant(s).

(2) Construction, reconstruction and modifications

(A) After the effective date of a permit program under subchapter V of this chapter in any State, no person may modify a major source of hazardous air pollutants in such State, unless the Administrator (or the State) determines that the maximum achievable control technology emission limitation under this section for existing sources will be met. Such determination shall be made on a case-by-case basis where no applicable emissions limitations have been established by the Administrator.

(B) After the effective date of a permit program under subchapter V of this chapter in any State, no person may construct or reconstruct any major source of hazardous air pollutants, unless the Administrator (or the State) determines that the maximum achievable control technology emission limitation under this section for new sources will be met. Such determination shall be made on a case-by-case basis where no applicable emission limitations have been established by the Administrator.

(3) Procedures for modifications

The Administrator (or the State) shall establish reasonable procedures for assuring that the requirements applying to modifications under this section are reflected in the permit.

(h) Work practice standards and other requirements

(1) In general

For purposes of this section, if it is not feasible in the judgment of the Administrator to prescribe or enforce an emission standard for control of a hazardous air pollutant or pollutants, the Administrator may, in lieu thereof, promulgate a design, equipment, work practice, or operational standard, or combination thereof, which in the Administrator's judgment is consistent with the provisions of subsection (d) or (f) of this section. In the event the Administrator promulgates a design or equipment standard under this subsection, the Administrator shall include as part of such standard such requirements as will assure the proper operation and maintenance of any such element of design or equipment.

(2) Definition

For the purpose of this subsection, the phrase "not feasible to prescribe or enforce an emission standard" means any situation in which the Administrator determines that--

(A) a hazardous air pollutant or pollutants cannot be emitted through a conveyance designed and constructed to emit or capture such pollutant, or that any requirement for, or use of, such a conveyance would be inconsistent with any Federal, State or local law, or

(B) the application of measurement methodology to a particular class of sources is not practicable due to technological and economic limitations.

(3) Alternative standard

If after notice and opportunity for comment, the owner or operator of any source establishes to the satisfaction of the Administrator that an alternative means of emission limitation will achieve a reduction in emissions of any air pollutant at least equivalent to the reduction in emissions of such pollutant achieved under the requirements of paragraph (1), the Administrator shall permit the use of such alternative by the source for purposes of compliance with this section with respect to such pollutant.

(4) Numerical standard required

Any standard promulgated under paragraph (1) shall be promulgated in terms of an emission standard whenever it is feasible to promulgate and enforce a standard in such terms.

(i) Schedule for compliance

(1) Preconstruction and operating requirements

After the effective date of any emission standard, limitation, or regulation under subsection (d), (f) or (h) of this section, no person may construct any new major source or reconstruct any existing major source subject to such emission standard, regulation or limitation unless the Administrator (or a State with a permit program approved under subchapter V of this chapter) determines that such source, if properly constructed, reconstructed and operated, will comply with the standard, regulation or limitation.

(2) Special rule

Notwithstanding the requirements of paragraph (1), a new source which commences construction or reconstruction after a standard, limitation or regulation applicable to such source is proposed and before such standard, limitation or regulation is promulgated shall not be required to comply with such promulgated standard until the date 3 years after the date of promulgation if--

(A) the promulgated standard, limitation or regulation is more stringent than the standard, limitation or regulation proposed; and

(B) the source complies with the standard, limitation, or regulation as proposed during the 3-year period immediately after promulgation.

(3) Compliance schedule for existing sources

(A) After the effective date of any emissions standard, limitation or regulation promulgated under this section and applicable to a source, no person may operate such source in violation of such standard, limitation or regulation except, in the case of an existing source, the Administrator shall establish a compliance date or dates for each category or subcategory of existing sources, which shall provide for compliance as expeditiously as practicable, but in no event later than 3 years after the effective date of such standard, except as provided in subparagraph (B) and paragraphs (4) through (8).

(B) The Administrator (or a State with a program approved under subchapter V of this chapter) may issue a permit that grants an extension permitting an existing source up to 1 additional year to comply with standards under subsection (d) of this section if such additional period is necessary for the installation of controls. An additional extension of up to 3 years may be added for mining waste operations, if the 4-year compliance time is insufficient to dry and cover mining waste in order to reduce emissions of any pollutant listed under subsection (b) of this section.

(4) Presidential exemption

The President may exempt any stationary source from compliance with any standard or limitation under this section for a period of not more than 2 years if the President determines that the technology to implement such standard is not available and that it is in the national security interests of the United States to do so. An exemption under this paragraph may be extended for 1 or more additional periods, each period not to exceed 2 years. The President shall report to Congress with respect to each exemption (or extension thereof) made under this paragraph.

(5) Early reduction

(A) The Administrator (or a State acting pursuant to a permit program approved under subchapter V of this chapter) shall issue a permit allowing an existing source, for which the owner or operator demonstrates that the source has achieved a reduction of 90 per centum or more in emissions of hazardous air pollutants (95 per centum in the case of hazardous air pollutants which are particulates) from the source, to meet an alternative emission limitation reflecting such reduction in lieu of an emission limitation promulgated under subsection (d) of this section for a period of 6 years from the compliance date for the otherwise applicable standard, provided that such reduction is achieved before the otherwise applicable standard under subsection (d) of this section is first proposed. Nothing in this paragraph shall preclude a State from requiring reductions in excess of those specified in this subparagraph as a condition of granting the extension authorized by the previous sentence.

(B) An existing source which achieves the reduction referred to in subparagraph (A) after the proposal of an applicable standard but before January 1, 1994, may qualify under subparagraph (A), if the source makes an enforceable commitment to achieve such reduction before the proposal of the standard. Such commitment shall be enforceable to the same extent as a regulation under this section.

(C) The reduction shall be determined with respect to verifiable and actual emissions in a base year not earlier than calendar year 1987, provided that, there is no evidence that emissions in the base year are artificially or substantially greater than emissions in other years prior to implementation of emissions reduction measures. The Administrator may allow a source to use a baseline year of 1985 or 1986 provided that the source can demonstrate to the satisfaction of the Administrator that emissions data for the source reflects verifiable data based on information for such source, received by the Administrator prior to November 15, 1990, pursuant to an information request issued under [section 7414](#) of this title.

(D) For each source granted an alternative emission limitation under this paragraph there shall be established by a permit issued pursuant to subchapter V of this chapter an enforceable emission limitation for hazardous air pollutants reflecting the reduction which qualifies the source for an alternative emission limitation under this paragraph. An alternative emission limitation under this paragraph shall not be available with respect to standards or requirements promulgated pursuant to subsection (f) of this section and the Administrator shall, for the purpose of determining whether a standard under subsection (f) of this section is necessary, review emissions from sources granted an alternative emission limitation under this paragraph at the same time that other sources in the category or subcategory are reviewed.

(E) With respect to pollutants for which high risks of adverse public health effects may be associated with exposure to small quantities including, but not limited to, chlorinated dioxins and furans, the Administrator shall by regulation limit the use of offsetting reductions in emissions of other hazardous air pollutants from the source as counting toward the 90 per centum reduction in such high-risk pollutants qualifying for an alternative emissions limitation under this paragraph.

(6) Other reductions

Notwithstanding the requirements of this section, no existing source that has installed--

(A) best available control technology (as defined in [section 7479\(3\)](#) of this title), or

(B) technology required to meet a lowest achievable emission rate (as defined in [section 7501](#) of this title), prior to the promulgation of a standard under this section applicable to such source and the same pollutant (or stream of pollutants) controlled pursuant to an action described in subparagraph (A) or (B) shall be required to comply with such standard under this section until the date 5 years after the date on which such installation or reduction has been achieved, as determined by the Administrator. The Administrator may issue such rules and guidance as are necessary to implement this paragraph.

(7) Extension for new sources

A source for which construction or reconstruction is commenced after the date an emission standard applicable to such source is proposed pursuant to subsection (d) of this section but before the date an emission standard applicable to such source is

proposed pursuant to subsection (f) of this section shall not be required to comply with the emission standard under subsection (f) of this section until the date 10 years after the date construction or reconstruction is commenced.

(8) Coke ovens

(A) Any coke oven battery that complies with the emission limitations established under subsection (d)(8)(C) of this section, subparagraph (B), and subparagraph (C), and complies with the provisions of subparagraph (E), shall not be required to achieve emission limitations promulgated under subsection (f) of this section until January 1, 2020.

(B)(i) Not later than December 31, 1992, the Administrator shall promulgate emission limitations for coke oven emissions from coke oven batteries. Notwithstanding paragraph (3) of this subsection, the compliance date for such emission limitations for existing coke oven batteries shall be January 1, 1998. Such emission limitations shall reflect the lowest achievable emission rate as defined in [section 7501](#) of this title for a coke oven battery that is rebuilt or a replacement at a coke oven plant for an existing battery. Such emission limitations shall be no less stringent than--

(I) 3 per centum leaking doors (5 per centum leaking doors for six meter batteries);

(II) 1 per centum leaking lids;

(III) 4 per centum leaking offtakes; and

(IV) 16 seconds visible emissions per charge,

with an exclusion for emissions during the period after the closing of self-sealing oven doors (or the total mass emissions equivalent). The rulemaking in which such emission limitations are promulgated shall also establish an appropriate measurement methodology for determining compliance with such emission limitations, and shall establish such emission limitations in terms of an equivalent level of mass emissions reduction from a coke oven battery, unless the Administrator finds that such a mass emissions standard would not be practicable or enforceable. Such measurement methodology, to the extent it measures leaking doors, shall take into consideration alternative test methods that reflect the best technology and practices actually applied in the affected industries, and shall assure that the final test methods are consistent with the performance of such best technology and practices.

(ii) If the Administrator fails to promulgate such emission limitations under this subparagraph prior to the effective date of such emission limitations, the emission limitations applicable to coke oven batteries under this subparagraph shall be--

(I) 3 per centum leaking doors (5 per centum leaking doors for six meter batteries);

(II) 1 per centum leaking lids;

(III) 4 per centum leaking offtakes; and

(IV) 16 seconds visible emissions per charge,

or the total mass emissions equivalent (if the total mass emissions equivalent is determined to be practicable and enforceable), with no exclusion for emissions during the period after the closing of self-sealing oven doors.

(C) Not later than January 1, 2007, the Administrator shall review the emission limitations promulgated under subparagraph (B) and revise, as necessary, such emission limitations to reflect the lowest achievable emission rate as defined in [section 7501](#) of this title at the time for a coke oven battery that is rebuilt or a replacement at a coke oven plant for an existing battery. Such emission limitations shall be no less stringent than the emission limitation promulgated under subparagraph (B). Notwithstanding paragraph (2) of this subsection, the compliance date for such emission limitations for existing coke oven batteries shall be January 1, 2010.

(D) At any time prior to January 1, 1998, the owner or operator of any coke oven battery may elect to comply with emission limitations promulgated under subsection (f) of this section by the date such emission limitations would otherwise apply

to such coke oven battery, in lieu of the emission limitations and the compliance dates provided under subparagraphs (B) and (C) of this paragraph. Any such owner or operator shall be legally bound to comply with such emission limitations promulgated under subsection (f) of this section with respect to such coke oven battery as of January 1, 2003. If no such emission limitations have been promulgated for such coke oven battery, the Administrator shall promulgate such emission limitations in accordance with subsection (f) of this section for such coke oven battery.

(E) Coke oven batteries qualifying for an extension under subparagraph (A) shall make available not later than January 1, 2000, to the surrounding communities the results of any risk assessment performed by the Administrator to determine the appropriate level of any emission standard established by the Administrator pursuant to subsection (f) of this section.

(F) Notwithstanding the provisions of this section, reconstruction of any source of coke oven emissions qualifying for an extension under this paragraph shall not subject such source to emission limitations under subsection (f) of this section more stringent than those established under subparagraphs (B) and (C) until January 1, 2020. For the purposes of this subparagraph, the term “reconstruction” includes the replacement of existing coke oven battery capacity with new coke oven batteries of comparable or lower capacity and lower potential emissions.

(j) Equivalent emission limitation by permit

(1) Effective date

The requirements of this subsection shall apply in each State beginning on the effective date of a permit program established pursuant to subchapter V of this chapter in such State, but not prior to the date 42 months after November 15, 1990.

(2) Failure to promulgate a standard

In the event that the Administrator fails to promulgate a standard for a category or subcategory of major sources by the date established pursuant to subsection (e)(1) and (3) of this section, and beginning 18 months after such date (but not prior to the effective date of a permit program under subchapter V of this chapter), the owner or operator of any major source in such category or subcategory shall submit a permit application under paragraph (3) and such owner or operator shall also comply with paragraphs (5) and (6).

(3) Applications

By the date established by paragraph (2), the owner or operator of a major source subject to this subsection shall file an application for a permit. If the owner or operator of a source has submitted a timely and complete application for a permit required by this subsection, any failure to have a permit shall not be a violation of paragraph (2), unless the delay in final action is due to the failure of the applicant to timely submit information required or requested to process the application. The Administrator shall not later than 18 months after November 15, 1990, and after notice and opportunity for comment, establish requirements for applications under this subsection including a standard application form and criteria for determining in a timely manner the completeness of applications.

(4) Review and approval

Permit applications submitted under this subsection shall be reviewed and approved or disapproved according to the provisions of [section 7661d](#) of this title. In the event that the Administrator (or the State) disapproves a permit application submitted under this subsection or determines that the application is incomplete, the applicant shall have up to 6 months to revise the application to meet the objections of the Administrator (or the State).

(5) Emission limitation

The permit shall be issued pursuant to subchapter V of this chapter and shall contain emission limitations for the hazardous air pollutants subject to regulation under this section and emitted by the source that the Administrator (or the State) determines, 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) of this section. In the alternative, if the applicable criteria are met, the permit may contain an emissions limitation established according to the provisions of subsection (i)(5) of this section. For purposes of the preceding sentence, the reduction required by subsection (i)(5)(A) of this section shall be achieved by the

date on which the relevant standard should have been promulgated under subsection (d) of this section. No such pollutant may be emitted in amounts exceeding an emission limitation contained in a permit immediately for new sources and, as expeditiously as practicable, but not later than the date 3 years after the permit is issued for existing sources or such other compliance date as would apply under subsection (i) of this section.

(6) Applicability of subsequent standards

If the Administrator promulgates an emission standard that is applicable to the major source prior to the date on which a permit application is approved, the emission limitation in the permit shall reflect the promulgated standard rather than the emission limitation determined pursuant to paragraph (5), provided that the source shall have the compliance period provided under subsection (i) of this section. If the Administrator promulgates a standard under subsection (d) of this section that would be applicable to the source in lieu of the emission limitation established by permit under this subsection after the date on which the permit has been issued, the Administrator (or the State) shall revise such permit upon the next renewal to reflect the standard promulgated by the Administrator providing such source 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 emissions limitation established by paragraph (5), whichever is earlier.

(k) Area source program

(1) Findings and purpose

The Congress finds that emissions of hazardous air pollutants from area sources may individually, or in the aggregate, present significant risks to public health in urban areas. Considering the large number of persons exposed and the risks of carcinogenic and other adverse health effects from hazardous air pollutants, ambient concentrations characteristic of large urban areas should be reduced to levels substantially below those currently experienced. It is the purpose of this subsection to achieve a substantial reduction in emissions of hazardous air pollutants from area sources and an equivalent reduction in the public health risks associated with such sources including a reduction of not less than 75 per centum in the incidence of cancer attributable to emissions from such sources.

(2) Research program

The Administrator shall, after consultation with State and local air pollution control officials, conduct a program of research with respect to sources of hazardous air pollutants in urban areas and shall include within such program--

(A) ambient monitoring for a broad range of hazardous air pollutants (including, but not limited to, volatile organic compounds, metals, pesticides and products of incomplete combustion) in a representative number of urban locations;

(B) analysis to characterize the sources of such pollution with a focus on area sources and the contribution that such sources make to public health risks from hazardous air pollutants; and

(C) consideration of atmospheric transformation and other factors which can elevate public health risks from such pollutants.

Health effects considered under this program shall include, but not be limited to, carcinogenicity, mutagenicity, teratogenicity, neurotoxicity, reproductive dysfunction and other acute and chronic effects including the role of such pollutants as precursors of ozone or acid aerosol formation. The Administrator shall report the preliminary results of such research not later than 3 years after November 15, 1990.

(3) National strategy

(A) Considering information collected pursuant to the monitoring program authorized by paragraph (2), the Administrator shall, not later than 5 years after November 15, 1990, and after notice and opportunity for public comment, prepare and transmit to the Congress a comprehensive strategy to control emissions of hazardous air pollutants from area sources in urban areas.

(B) The strategy shall--

(i) identify not less than 30 hazardous air pollutants which, as the result of emissions from area sources, present the greatest threat to public health in the largest number of urban areas and that are or will be listed pursuant to subsection (b) of this section, and

(ii) identify the source categories or subcategories emitting such pollutants that are or will be listed pursuant to subsection (c) of this section. When identifying categories and subcategories of sources under this subparagraph, the Administrator shall assure that sources accounting for 90 per centum or more of the aggregate emissions of each of the 30 identified hazardous air pollutants are subject to standards pursuant to subsection (d) of this section.

(C) The strategy shall include a schedule of specific actions to substantially reduce the public health risks posed by the release of hazardous air pollutants from area sources that will be implemented by the Administrator under the authority of this or other laws (including, but not limited to, the Toxic Substances Control Act [15 U.S.C.A. § 2601 et seq.], the Federal Insecticide, Fungicide and Rodenticide Act [7 U.S.C.A. § 136 et seq.] and the Resource Conservation and Recovery Act [42 U.S.C.A. § 6901 et seq.]) or by the States. The strategy shall achieve a reduction in the incidence of cancer attributable to exposure to hazardous air pollutants emitted by stationary sources of not less than 75 per centum, considering control of emissions of hazardous air pollutants from all stationary sources and resulting from measures implemented by the Administrator or by the States under this or other laws.

(D) The strategy may also identify research needs in monitoring, analytical methodology, modeling or pollution control techniques and recommendations for changes in law that would further the goals and objectives of this subsection.

(E) Nothing in this subsection shall be interpreted to preclude or delay implementation of actions with respect to area sources of hazardous air pollutants under consideration pursuant to this or any other law and that may be promulgated before the strategy is prepared.

(F) The Administrator shall implement the strategy as expeditiously as practicable assuring that all sources are in compliance with all requirements not later than 9 years after November 15, 1990.

(G) As part of such strategy the Administrator shall provide for ambient monitoring and emissions modeling in urban areas as appropriate to demonstrate that the goals and objectives of the strategy are being met.

(4) Areawide activities

In addition to the national urban air toxics strategy authorized by paragraph (3), the Administrator shall also encourage and support areawide strategies developed by State or local air pollution control agencies that are intended to reduce risks from emissions by area sources within a particular urban area. From the funds available for grants under this section, the Administrator shall set aside not less than 10 per centum to support areawide strategies addressing hazardous air pollutants emitted by area sources and shall award such funds on a demonstration basis to those States with innovative and effective strategies. At the request of State or local air pollution control officials, the Administrator shall prepare guidelines for control technologies or management practices which may be applicable to various categories or subcategories of area sources.

(5) Report

The Administrator shall report to the Congress at intervals not later than 8 and 12 years after November 15, 1990, on actions taken under this subsection and other parts of this chapter to reduce the risk to public health posed by the release of hazardous air pollutants from area sources. The reports shall also identify specific metropolitan areas that continue to experience high risks to public health as the result of emissions from area sources.

(I) State programs

(1) In general

Each State may develop and submit to the Administrator for approval a program for the implementation and enforcement (including a review of enforcement delegations previously granted) of emission standards and other requirements for

air pollutants subject to this section or requirements for the prevention and mitigation of accidental releases pursuant to subsection (r) of this section. A program submitted by a State under this subsection may provide for partial or complete delegation of the Administrator's authorities and responsibilities to implement and enforce emissions standards and prevention requirements but shall not include authority to set standards less stringent than those promulgated by the Administrator under this chapter.

(2) Guidance

Not later than 12 months after November 15, 1990, the Administrator shall publish guidance that would be useful to the States in developing programs for submittal under this subsection. The guidance shall also provide for the registration of all facilities producing, processing, handling or storing any substance listed pursuant to subsection (r) of this section in amounts greater than the threshold quantity. The Administrator shall include as an element in such guidance an optional program begun in 1986 for the review of high-risk point sources of air pollutants including, but not limited to, hazardous air pollutants listed pursuant to subsection (b) of this section.

(3) Technical assistance

The Administrator shall establish and maintain an air toxics clearinghouse and center to provide technical information and assistance to State and local agencies and, on a cost recovery basis, to others on control technology, health and ecological risk assessment, risk analysis, ambient monitoring and modeling, and emissions measurement and monitoring. The Administrator shall use the authority of [section 7403](#) of this title to examine methods for preventing, measuring, and controlling emissions and evaluating associated health and ecological risks. Where appropriate, such activity shall be conducted with not-for-profit organizations. The Administrator may conduct research on methods for preventing, measuring and controlling emissions and evaluating associated health and environment risks. All information collected under this paragraph shall be available to the public.

(4) Grants

Upon application of a State, the Administrator may make grants, subject to such terms and conditions as the Administrator deems appropriate, to such State for the purpose of assisting the State in developing and implementing a program for submittal and approval under this subsection. Programs assisted under this paragraph may include program elements addressing air pollutants or extremely hazardous substances other than those specifically subject to this section. Grants under this paragraph may include support for high-risk point source review as provided in paragraph (2) and support for the development and implementation of areawide area source programs pursuant to subsection (k) of this section.

(5) Approval or disapproval

Not later than 180 days after receiving a program submitted by a State, and after notice and opportunity for public comment, the Administrator shall either approve or disapprove such program. The Administrator shall disapprove any program submitted by a State, if the Administrator determines that--

(A) the authorities contained in the program are not adequate to assure compliance by all sources within the State with each applicable standard, regulation or requirement established by the Administrator under this section;

(B) adequate authority does not exist, or adequate resources are not available, to implement the program;

(C) the schedule for implementing the program and assuring compliance by affected sources is not sufficiently expeditious;
or

(D) the program is otherwise not in compliance with the guidance issued by the Administrator under paragraph (2) or is not likely to satisfy, in whole or in part, the objectives of this chapter.

If the Administrator disapproves a State program, the Administrator shall notify the State of any revisions or modifications necessary to obtain approval. The State may revise and resubmit the proposed program for review and approval pursuant to the provisions of this subsection.

(6) Withdrawal

Whenever the Administrator determines, after public hearing, that a State is not administering and enforcing a program approved pursuant to this subsection in accordance with the guidance published pursuant to paragraph (2) or the requirements of paragraph (5), the Administrator shall so notify the State and, if action which will assure prompt compliance is not taken within 90 days, the Administrator shall withdraw approval of the program. The Administrator shall not withdraw approval of any program unless the State shall have been notified and the reasons for withdrawal shall have been stated in writing and made public.

(7) Authority to enforce

Nothing in this subsection shall prohibit the Administrator from enforcing any applicable emission standard or requirement under this section.

(8) Local program

The Administrator may, after notice and opportunity for public comment, approve a program developed and submitted by a local air pollution control agency (after consultation with the State) pursuant to this subsection and any such agency implementing an approved program may take any action authorized to be taken by a State under this section.

(9) Permit authority

Nothing in this subsection shall affect the authorities and obligations of the Administrator or the State under subchapter V of this chapter.

(m) Atmospheric deposition to Great Lakes and coastal waters

(1) Deposition assessment

The Administrator, in cooperation with the Under Secretary of Commerce for Oceans and Atmosphere, shall conduct a program to identify and assess the extent of atmospheric deposition of hazardous air pollutants (and in the discretion of the Administrator, other air pollutants) to the Great Lakes, the Chesapeake Bay, Lake Champlain and coastal waters. As part of such program, the Administrator shall--

(A) monitor the Great Lakes, the Chesapeake Bay, Lake Champlain and coastal waters, including monitoring of the Great Lakes through the monitoring network established pursuant to paragraph (2) of this subsection and designing and deploying an atmospheric monitoring network for coastal waters pursuant to paragraph (4);

(B) investigate the sources and deposition rates of atmospheric deposition of air pollutants (and their atmospheric transformation precursors);

(C) conduct research to develop and improve monitoring methods and to determine the relative contribution of atmospheric pollutants to total pollution loadings to the Great Lakes, the Chesapeake Bay, Lake Champlain, and coastal waters;

(D) evaluate any adverse effects to public health or the environment caused by such deposition (including effects resulting from indirect exposure pathways) and assess the contribution of such deposition to violations of water quality standards established pursuant to the Federal Water Pollution Control Act [33 U.S.C.A. § 1251 et seq.] and drinking water standards established pursuant to the Safe Drinking Water Act [42 U.S.C.A. § 300f et seq.]; and

(E) sample for such pollutants in biota, fish, and wildlife of the Great Lakes, the Chesapeake Bay, Lake Champlain and coastal waters and characterize the sources of such pollutants.

(2) Great Lakes monitoring network

The Administrator shall oversee, in accordance with Annex 15 of the Great Lakes Water Quality Agreement, the establishment and operation of a Great Lakes atmospheric deposition network to monitor atmospheric deposition of hazardous air pollutants (and in the Administrator's discretion, other air pollutants) to the Great Lakes.

(A) As part of the network provided for in this paragraph, and not later than December 31, 1991, the Administrator shall establish in each of the 5 Great Lakes at least 1 facility capable of monitoring the atmospheric deposition of hazardous air pollutants in both dry and wet conditions.

(B) The Administrator shall use the data provided by the network to identify and track the movement of hazardous air pollutants through the Great Lakes, to determine the portion of water pollution loadings attributable to atmospheric deposition of such pollutants, and to support development of remedial action plans and other management plans as required by the Great Lakes Water Quality Agreement.

(C) The Administrator shall assure that the data collected by the Great Lakes atmospheric deposition monitoring network is in a format compatible with databases sponsored by the International Joint Commission, Canada, and the several States of the Great Lakes region.

(3) Monitoring for the Chesapeake Bay and Lake Champlain

The Administrator shall establish at the Chesapeake Bay and Lake Champlain atmospheric deposition stations to monitor deposition of hazardous air pollutants (and in the Administrator's discretion, other air pollutants) within the Chesapeake Bay and Lake Champlain watersheds. The Administrator shall determine the role of air deposition in the pollutant loadings of the Chesapeake Bay and Lake Champlain, investigate the sources of air pollutants deposited in the watersheds, evaluate the health and environmental effects of such pollutant loadings, and shall sample such pollutants in biota, fish and wildlife within the watersheds, as necessary to characterize such effects.

(4) Monitoring for coastal waters

The Administrator shall design and deploy atmospheric deposition monitoring networks for coastal waters and their watersheds and shall make any information collected through such networks available to the public. As part of this effort, the Administrator shall conduct research to develop and improve deposition monitoring methods, and to determine the relative contribution of atmospheric pollutants to pollutant loadings. For purposes of this subsection, "coastal waters" shall mean estuaries selected pursuant to section 320(a)(2)(A) of the Federal Water Pollution Control Act [33 U.S.C.A. § 1330(a)(2)(A)] or listed pursuant to section 320(a)(2)(B) of such Act [33 U.S.C.A. § 1330(a)(2)(B)] or estuarine research reserves designated pursuant to section 1461 of Title 16.

(5) Report

Within 3 years of November 15, 1990, and biennially thereafter, the Administrator, in cooperation with the Under Secretary of Commerce for Oceans and Atmosphere, shall submit to the Congress a report on the results of any monitoring, studies, and investigations conducted pursuant to this subsection. Such report shall include, at a minimum, an assessment of--

(A) the contribution of atmospheric deposition to pollution loadings in the Great Lakes, the Chesapeake Bay, Lake Champlain and coastal waters;

(B) the environmental and public health effects of any pollution which is attributable to atmospheric deposition to the Great Lakes, the Chesapeake Bay, Lake Champlain and coastal waters;

(C) the source or sources of any pollution to the Great Lakes, the Chesapeake Bay, Lake Champlain and coastal waters which is attributable to atmospheric deposition;

(D) whether pollution loadings in the Great Lakes, the Chesapeake Bay, Lake Champlain or coastal waters cause or contribute to exceedances² of drinking water standards pursuant to the Safe Drinking Water Act [42 U.S.C.A. § 300f et seq.] or water quality standards pursuant to the Federal Water Pollution Control Act [33 U.S.C.A. § 1251 et seq.] or, with respect to the Great Lakes, exceedances² of the specific objectives of the Great Lakes Water Quality Agreement; and

(E) a description of any revisions of the requirements, standards, and limitations pursuant to this chapter and other applicable Federal laws as are necessary to assure protection of human health and the environment.

(6) Additional regulation

As part of the report to Congress, the Administrator shall determine whether the other provisions of this section are adequate to prevent serious adverse effects to public health and serious or widespread environmental effects, including such effects resulting from indirect exposure pathways, associated with atmospheric deposition to the Great Lakes, the Chesapeake Bay, Lake Champlain and coastal waters of hazardous air pollutants (and their atmospheric transformation products). The Administrator shall take into consideration the tendency of such pollutants to bioaccumulate. Within 5 years after November 15, 1990, the Administrator shall, based on such report and determination, promulgate, in accordance with this section, such further emission standards or control measures as may be necessary and appropriate to prevent such effects, including effects due to bioaccumulation and indirect exposure pathways. Any requirements promulgated pursuant to this paragraph with respect to coastal waters shall only apply to the coastal waters of the States which are subject to [section 7627\(a\)](#) of this title.

(n) Other provisions**(1) Electric utility steam generating units**

(A) The Administrator shall perform a study of the hazards to public health reasonably anticipated to occur as a result of emissions by electric utility steam generating units of pollutants listed under subsection (b) of this section after imposition of the requirements of this chapter. The Administrator shall report the results of this study to the Congress within 3 years after November 15, 1990. The Administrator shall develop and describe in the Administrator's report to Congress alternative control strategies for emissions which may warrant regulation under this section. The Administrator shall regulate electric utility steam generating units under this section, if the Administrator finds such regulation is appropriate and necessary after considering the results of the study required by this subparagraph.

(B) The Administrator shall conduct, and transmit to the Congress not later than 4 years after November 15, 1990, a study of mercury emissions from electric utility steam generating units, municipal waste combustion units, and other sources, including area sources. Such study shall consider the rate and mass of such emissions, the health and environmental effects of such emissions, technologies which are available to control such emissions, and the costs of such technologies.

(C) The National Institute of Environmental Health Sciences shall conduct, and transmit to the Congress not later than 3 years after November 15, 1990, a study to determine the threshold level of mercury exposure below which adverse human health effects are not expected to occur. Such study shall include a threshold for mercury concentrations in the tissue of fish which may be consumed (including consumption by sensitive populations) without adverse effects to public health.

(2) Coke oven production technology study

(A) The Secretary of the Department of Energy and the Administrator shall jointly undertake a 6-year study to assess coke oven production emission control technologies and to assist in the development and commercialization of technically practicable and economically viable control technologies which have the potential to significantly reduce emissions of hazardous air pollutants from coke oven production facilities. In identifying control technologies, the Secretary and the Administrator shall consider the range of existing coke oven operations and battery design and the availability of sources of materials for such coke ovens as well as alternatives to existing coke oven production design.

(B) The Secretary and the Administrator are authorized to enter into agreements with persons who propose to develop, install and operate coke production emission control technologies which have the potential for significant emissions reductions of hazardous air pollutants provided that Federal funds shall not exceed 50 per centum of the cost of any project assisted pursuant to this paragraph.

(C) On completion of the study, the Secretary shall submit to Congress a report on the results of the study and shall make recommendations to the Administrator identifying practicable and economically viable control technologies for coke oven production facilities to reduce residual risks remaining after implementation of the standard under subsection (d) of this section.

(D) There are authorized to be appropriated \$5,000,000 for each of the fiscal years 1992 through 1997 to carry out the program authorized by this paragraph.

(3) Publicly owned treatment works

The Administrator may conduct, in cooperation with the owners and operators of publicly owned treatment works, studies to characterize emissions of hazardous air pollutants emitted by such facilities, to identify industrial, commercial and residential discharges that contribute to such emissions and to demonstrate control measures for such emissions. When promulgating any standard under this section applicable to publicly owned treatment works, the Administrator may provide for control measures that include pretreatment of discharges causing emissions of hazardous air pollutants and process or product substitutions or limitations that may be effective in reducing such emissions. The Administrator may prescribe uniform sampling, modeling and risk assessment methods for use in implementing this subsection.

(4) Oil and gas wells; pipeline facilities

(A) Notwithstanding the provisions of subsection (a) of this section, emissions from any oil or gas exploration or production well (with its associated equipment) and emissions from any pipeline compressor or pump station shall not be aggregated with emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are major sources, and in the case of any oil or gas exploration or production well (with its associated equipment), such emissions shall not be aggregated for any purpose under this section.

(B) The Administrator shall not list oil and gas production wells (with its associated equipment) as an area source category under subsection (c) of this section, except that the Administrator may establish an area source category for oil and gas production wells located in any metropolitan statistical area or consolidated metropolitan statistical area with a population in excess of 1 million, if the Administrator determines that emissions of hazardous air pollutants from such wells present more than a negligible risk of adverse effects to public health.

(5) Hydrogen sulfide

The Administrator is directed to assess the hazards to public health and the environment resulting from the emission of hydrogen sulfide associated with the extraction of oil and natural gas resources. To the extent practicable, the assessment shall build upon and not duplicate work conducted for an assessment pursuant to section 8002(m) of the Solid Waste Disposal Act [42 U.S.C.A. § 6982(m)] and shall reflect consultation with the States. The assessment shall include a review of existing State and industry control standards, techniques and enforcement. The Administrator shall report to the Congress within 24 months after November 15, 1990, with the findings of such assessment, together with any recommendations, and shall, as appropriate, develop and implement a control strategy for emissions of hydrogen sulfide to protect human health and the environment, based on the findings of such assessment, using authorities under this chapter including sections³ 7411 of this title and this section.

(6) Hydrofluoric acid

Not later than 2 years after November 15, 1990, the Administrator shall, for those regions of the country which do not have comprehensive health and safety regulations with respect to hydrofluoric acid, complete a study of the potential hazards of hydrofluoric acid and the uses of hydrofluoric acid in industrial and commercial applications to public health and the environment considering a range of events including worst-case accidental releases and shall make recommendations to the Congress for the reduction of such hazards, if appropriate.

(7) RCRA facilities

In the case of any category or subcategory of sources the air emissions of which are regulated under subtitle C of the Solid Waste Disposal Act [42 U.S.C.A. § 6921 et seq.], the Administrator shall take into account any regulations of such emissions which are promulgated under such subtitle and shall, to the maximum extent practicable and consistent with the provisions of this section, ensure that the requirements of such subtitle and this section are consistent.

(o) National Academy of Sciences study**(1) Request of the Academy**

Within 3 months of November 15, 1990, the Administrator shall enter into appropriate arrangements with the National Academy of Sciences to conduct a review of--

(A) risk assessment methodology used by the Environmental Protection Agency to determine the carcinogenic risk associated with exposure to hazardous air pollutants from source categories and subcategories subject to the requirements of this section; and

(B) improvements in such methodology.

(2) Elements to be studied

In conducting such review, the National Academy of Sciences should consider, but not be limited to, the following--

(A) the techniques used for estimating and describing the carcinogenic potency to humans of hazardous air pollutants; and

(B) the techniques used for estimating exposure to hazardous air pollutants (for hypothetical and actual maximally exposed individuals as well as other exposed individuals).

(3) Other health effects of concern

To the extent practicable, the Academy shall evaluate and report on the methodology for assessing the risk of adverse human health effects other than cancer for which safe thresholds of exposure may not exist, including, but not limited to, inheritable genetic mutations, birth defects, and reproductive dysfunctions.

(4) Report

A report on the results of such review shall be submitted to the Senate Committee on Environment and Public Works, the House Committee on Energy and Commerce, the Risk Assessment and Management Commission established by section 303 of the Clean Air Act Amendments of 1990 and the Administrator not later than 30 months after November 15, 1990.

(5) Assistance

The Administrator shall assist the Academy in gathering any information the Academy deems necessary to carry out this subsection. The Administrator may use any authority under this chapter to obtain information from any person, and to require any person to conduct tests, keep and produce records, and make reports respecting research or other activities conducted by such person as necessary to carry out this subsection.

(6) Authorization

Of the funds authorized to be appropriated to the Administrator by this chapter, such amounts as are required shall be available to carry out this subsection.

(7) Guidelines for carcinogenic risk assessment

The Administrator shall consider, but need not adopt, the recommendations contained in the report of the National Academy of Sciences prepared pursuant to this subsection and the views of the Science Advisory Board, with respect to such report. Prior to the promulgation of any standard under subsection (f) of this section, and after notice and opportunity for comment, the Administrator shall publish revised Guidelines for Carcinogenic Risk Assessment or a detailed explanation of the reasons that any recommendations contained in the report of the National Academy of Sciences will not be implemented. The publication of such revised Guidelines shall be a final Agency action for purposes of [section 7607](#) of this title.

(p) Mickey Leland National Urban Air Toxics Research Center**(1) Establishment**

The Administrator shall oversee the establishment of a National Urban Air Toxics Research Center, to be located at a university, a hospital, or other facility capable of undertaking and maintaining similar research capabilities in the areas of epidemiology, oncology, toxicology, pulmonary medicine, pathology, and biostatistics. The center shall be known as the Mickey Leland National Urban Air Toxics Research Center. The geographic site of the National Urban Air Toxics Research Center should be further directed to Harris County, Texas, in order to take full advantage of the well developed scientific community presence on-site at the Texas Medical Center as well as the extensive data previously compiled for the comprehensive monitoring system currently in place.

(2) Board of Directors

The National Urban Air Toxics Research Center shall be governed by a Board of Directors to be comprised of 9 members, the appointment of which shall be allocated pro rata among the Speaker of the House, the Majority Leader of the Senate and the President. The members of the Board of Directors shall be selected based on their respective academic and professional backgrounds and expertise in matters relating to public health, environmental pollution and industrial hygiene. The duties of the Board of Directors shall be to determine policy and research guidelines, submit views from center sponsors and the public and issue periodic reports of center findings and activities.

(3) Scientific Advisory Panel

The Board of Directors shall be advised by a Scientific Advisory Panel, the 13 members of which shall be appointed by the Board, and to include eminent members of the scientific and medical communities. The Panel membership may include scientists with relevant experience from the National Institute of Environmental Health Sciences, the Center for Disease Control, the Environmental Protection Agency, the National Cancer Institute, and others, and the Panel shall conduct peer review and evaluate research results. The Panel shall assist the Board in developing the research agenda, reviewing proposals and applications, and advise on the awarding of research grants.

(4) Funding

The center shall be established and funded with both Federal and private source funds.

(q) Savings provision

(1) Standards previously promulgated

Any standard under this section in effect before the date of enactment of the Clean Air Act Amendments of 1990 [Nov. 15, 1990] shall remain in force and effect after such date unless modified as provided in this section before the date of enactment of such Amendments or under such Amendments. Except as provided in paragraph (4), any standard under this section which has been promulgated, but has not taken effect, before such date shall not be affected by such Amendments unless modified as provided in this section before such date or under such Amendments. Each such standard shall be reviewed and, if appropriate, revised, to comply with the requirements of subsection (d) of this section within 10 years after the date of enactment of the Clean Air Act Amendments of 1990. If a timely petition for review of any such standard under [section 7607](#) of this title is pending on such date of enactment, the standard shall be upheld if it complies with this section as in effect before that date. If any such standard is remanded to the Administrator, the Administrator may in the Administrator's discretion apply either the requirements of this section, or those of this section as in effect before the date of enactment of the Clean Air Act Amendments of 1990.

(2) Special rule

Notwithstanding paragraph (1), no standard shall be established under this section, as amended by the Clean Air Act Amendments of 1990, for radionuclide emissions from (A) elemental phosphorous plants, (B) grate calcination elemental phosphorous plants, (C) phosphogypsum stacks, or (D) any subcategory of the foregoing. This section, as in effect prior to the date of enactment of the Clean Air Act Amendments of 1990 [November 15, 1990], shall remain in effect for radionuclide emissions from such plants and stacks.

(3) Other categories

Notwithstanding paragraph (1), this section, as in effect prior to the date of enactment of the Clean Air Act Amendments of 1990 [Nov. 15, 1990], shall remain in effect for radionuclide emissions from non-Department of Energy Federal facilities that are not licensed by the Nuclear Regulatory Commission, coal-fired utility and industrial boilers, underground uranium mines, surface uranium mines, and disposal of uranium mill tailings piles, unless the Administrator, in the Administrator's discretion, applies the requirements of this section as modified by the Clean Air Act Amendments of 1990 to such sources of radionuclides.

(4) Medical facilities

Notwithstanding paragraph (1), no standard promulgated under this section prior to November 15, 1990, with respect to medical research or treatment facilities shall take effect for two years following November 15, 1990, unless the Administrator makes a determination pursuant to a rulemaking under subsection (d)(9) of this section. If the Administrator determines that the regulatory program established by the Nuclear Regulatory Commission for such facilities does not provide an ample margin of safety to protect public health, the requirements of this section shall fully apply to such facilities. If the Administrator determines that such regulatory program does provide an ample margin of safety to protect the public health, the Administrator is not required to promulgate a standard under this section for such facilities, as provided in subsection (d)(9) of this section.

(r) Prevention of accidental releases

(1) Purpose and general duty

It shall be the objective of the regulations and programs authorized under this subsection to prevent the accidental release and to minimize the consequences of any such release of any substance listed pursuant to paragraph (3) or any other extremely hazardous substance. The owners and operators of stationary sources producing, processing, handling or storing such substances have a general duty in the same manner and to the same extent as [section 654 of Title 29](#) to identify hazards which may result from such releases using appropriate hazard assessment techniques, to design and maintain a safe facility taking such steps as are necessary to prevent releases, and to minimize the consequences of accidental releases which do occur. For purposes of this paragraph, the provisions of [section 7604](#) of this title shall not be available to any person or otherwise be construed to be applicable to this paragraph. Nothing in this section shall be interpreted, construed, implied or applied to create any liability or basis for suit for compensation for bodily injury or any other injury or property damages to any person which may result from accidental releases of such substances.

(2) Definitions

(A) The term “accidental release” means an unanticipated emission of a regulated substance or other extremely hazardous substance into the ambient air from a stationary source.

(B) The term “regulated substance” means a substance listed under paragraph (3).

(C) The term “stationary source” means any buildings, structures, equipment, installations or substance emitting stationary activities (i) which belong to the same industrial group, (ii) which are located on one or more contiguous properties, (iii) which are under the control of the same person (or persons under common control), and (iv) from which an accidental release may occur.

(D) The term “retail facility” means a stationary source at which more than one-half of the income is obtained from direct sales to end users or at which more than one-half of the fuel sold, by volume, is sold through a cylinder exchange program.

(3) List of substances

The Administrator shall promulgate not later than 24 months after November 15, 1990, an initial list of 100 substances which, in the case of an accidental release, are known to cause or may reasonably be anticipated to cause death, injury, or serious adverse effects to human health or the environment. For purposes of promulgating such list, the Administrator shall use, but is not limited to, the list of extremely hazardous substances published under the Emergency Planning and Community Right-to-Know Act of 1986 [[42 U.S.C.A. § 11001 et seq.](#)], with such modifications as the Administrator deems appropriate. The initial

list shall include chlorine, anhydrous ammonia, methyl chloride, ethylene oxide, vinyl chloride, methyl isocyanate, hydrogen cyanide, ammonia, hydrogen sulfide, toluene diisocyanate, phosgene, bromine, anhydrous hydrogen chloride, hydrogen fluoride, anhydrous sulfur dioxide, and sulfur trioxide. The initial list shall include at least 100 substances which pose the greatest risk of causing death, injury, or serious adverse effects to human health or the environment from accidental releases. Regulations establishing the list shall include an explanation of the basis for establishing the list. The list may be revised from time to time by the Administrator on the Administrator's own motion or by petition and shall be reviewed at least every 5 years. No air pollutant for which a national primary ambient air quality standard has been established shall be included on any such list. No substance, practice, process, or activity regulated under subchapter VI of this chapter shall be subject to regulations under this subsection. The Administrator shall establish procedures for the addition and deletion of substances from the list established under this paragraph consistent with those applicable to the list in subsection (b) of this section.

(4) Factors to be considered

In listing substances under paragraph (3), the Administrator--

(A) shall consider--

- (i) the severity of any acute adverse health effects associated with accidental releases of the substance;
- (ii) the likelihood of accidental releases of the substance; and
- (iii) the potential magnitude of human exposure to accidental releases of the substance; and

(B) shall not list a flammable substance when used as a fuel or held for sale as a fuel at a retail facility under this subsection solely because of the explosive or flammable properties of the substance, unless a fire or explosion caused by the substance will result in acute adverse health effects from human exposure to the substance, including the unburned fuel or its combustion byproducts, other than those caused by the heat of the fire or impact of the explosion.

(5) Threshold quantity

At the time any substance is listed pursuant to paragraph (3), the Administrator shall establish by rule, a threshold quantity for the substance, taking into account the toxicity, reactivity, volatility, dispersibility, combustibility, or flammability of the substance and the amount of the substance which, as a result of an accidental release, is known to cause or may reasonably be anticipated to cause death, injury or serious adverse effects to human health for which the substance was listed. The Administrator is authorized to establish a greater threshold quantity for, or to exempt entirely, any substance that is a nutrient used in agriculture when held by a farmer.

(6) Chemical Safety Board

(A) There is hereby established an independent safety board to be known as the Chemical Safety and Hazard Investigation Board.

(B) The Board shall consist of 5 members, including a Chairperson, who shall be appointed by the President, by and with the advice and consent of the Senate. Members of the Board shall be appointed on the basis of technical qualification, professional standing, and demonstrated knowledge in the fields of accident reconstruction, safety engineering, human factors, toxicology, or air pollution regulation. The terms of office of members of the Board shall be 5 years. Any member of the Board, including the Chairperson, may be removed for inefficiency, neglect of duty, or malfeasance in office. The Chairperson shall be the Chief Executive Officer of the Board and shall exercise the executive and administrative functions of the Board.

(C) The Board shall--

- (i) investigate (or cause to be investigated), determine and report to the public in writing the facts, conditions, and circumstances and the cause or probable cause of any accidental release resulting in a fatality, serious injury or substantial property damages;

(ii) issue periodic reports to the Congress, Federal, State and local agencies, including the Environmental Protection Agency and the Occupational Safety and Health Administration, concerned with the safety of chemical production, processing, handling and storage, and other interested persons recommending measures to reduce the likelihood or the consequences of accidental releases and proposing corrective steps to make chemical production, processing, handling and storage as safe and free from risk of injury as is possible and may include in such reports proposed rules or orders which should be issued by the Administrator under the authority of this section or the Secretary of Labor under the Occupational Safety and Health Act [29 U.S.C.A. § 651 et seq.] to prevent or minimize the consequences of any release of substances that may cause death, injury or other serious adverse effects on human health or substantial property damage as the result of an accidental release; and

(iii) establish by regulation requirements binding on persons for reporting accidental releases into the ambient air subject to the Board's investigatory jurisdiction. Reporting releases to the National Response Center, in lieu of the Board directly, shall satisfy such regulations. The National Response Center shall promptly notify the Board of any releases which are within the Board's jurisdiction.

(D) The Board may utilize the expertise and experience of other agencies.

(E) The Board shall coordinate its activities with investigations and studies conducted by other agencies of the United States having a responsibility to protect public health and safety. The Board shall enter into a memorandum of understanding with the National Transportation Safety Board to assure coordination of functions and to limit duplication of activities which shall designate the National Transportation Safety Board as the lead agency for the investigation of releases which are transportation related. The Board shall not be authorized to investigate marine oil spills, which the National Transportation Safety Board is authorized to investigate. The Board shall enter into a memorandum of understanding with the Occupational Safety and Health Administration so as to limit duplication of activities. In no event shall the Board forego an investigation where an accidental release causes a fatality or serious injury among the general public, or had the potential to cause substantial property damage or a number of deaths or injuries among the general public.

(F) The Board is authorized to conduct research and studies with respect to the potential for accidental releases, whether or not an accidental release has occurred, where there is evidence which indicates the presence of a potential hazard or hazards. To the extent practicable, the Board shall conduct such studies in cooperation with other Federal agencies having emergency response authorities, State and local governmental agencies and associations and organizations from the industrial, commercial, and nonprofit sectors.

(G) No part of the conclusions, findings, or recommendations of the Board relating to any accidental release or the investigation thereof shall be admitted as evidence or used in any action or suit for damages arising out of any matter mentioned in such report.

(H) Not later than 18 months after November 15, 1990, the Board shall publish a report accompanied by recommendations to the Administrator on the use of hazard assessments in preventing the occurrence and minimizing the consequences of accidental releases of extremely hazardous substances. The recommendations shall include a list of extremely hazardous substances which are not regulated substances (including threshold quantities for such substances) and categories of stationary sources for which hazard assessments would be an appropriate measure to aid in the prevention of accidental releases and to minimize the consequences of those releases that do occur. The recommendations shall also include a description of the information and analysis which would be appropriate to include in any hazard assessment. The Board shall also make recommendations with respect to the role of risk management plans as required by paragraph (8)(B) ⁴ in preventing accidental releases. The Board may from time to time review and revise its recommendations under this subparagraph.

(I) Whenever the Board submits a recommendation with respect to accidental releases to the Administrator, the Administrator shall respond to such recommendation formally and in writing not later than 180 days after receipt thereof. The response to the Board's recommendation by the Administrator shall indicate whether the Administrator will--

(i) initiate a rulemaking or issue such orders as are necessary to implement the recommendation in full or in part, pursuant to any timetable contained in the recommendation;

(ii) decline to initiate a rulemaking or issue orders as recommended.

Any determination by the Administrator not to implement a recommendation of the Board or to implement a recommendation only in part, including any variation from the schedule contained in the recommendation, shall be accompanied by a statement from the Administrator setting forth the reasons for such determination.

(J) The Board may make recommendations with respect to accidental releases to the Secretary of Labor. Whenever the Board submits such recommendation, the Secretary shall respond to such recommendation formally and in writing not later than 180 days after receipt thereof. The response to the Board's recommendation by the Administrator shall indicate whether the Secretary will--

(i) initiate a rulemaking or issue such orders as are necessary to implement the recommendation in full or in part, pursuant to any timetable contained in the recommendation;

(ii) decline to initiate a rulemaking or issue orders as recommended.

Any determination by the Secretary not to implement a recommendation or to implement a recommendation only in part, including any variation from the schedule contained in the recommendation, shall be accompanied by a statement from the Secretary setting forth the reasons for such determination.

(K) Within 2 years after November 15, 1990, the Board shall issue a report to the Administrator of the Environmental Protection Agency and to the Administrator of the Occupational Safety and Health Administration recommending the adoption of regulations for the preparation of risk management plans and general requirements for the prevention of accidental releases of regulated substances into the ambient air (including recommendations for listing substances under paragraph (3)) and for the mitigation of the potential adverse effect on human health or the environment as a result of accidental releases which should be applicable to any stationary source handling any regulated substance in more than threshold amounts. The Board may include proposed rules or orders which should be issued by the Administrator under authority of this subsection or by the Secretary of Labor under the Occupational Safety and Health Act [29 U.S.C.A. § 651 et seq.]. Any such recommendations shall be specific and shall identify the regulated substance or class of regulated substances (or other substances) to which the recommendations apply. The Administrator shall consider such recommendations before promulgating regulations required by paragraph (7)(B).

(L) The Board, or upon authority of the Board, any member thereof, any administrative law judge employed by or assigned to the Board, or any officer or employee duly designated by the Board, may for the purpose of carrying out duties authorized by subparagraph (C)--

(i) hold such hearings, sit and act at such times and places, administer such oaths, and require by subpoena or otherwise attendance and testimony of such witnesses and the production of evidence and may require by order that any person engaged in the production, processing, handling, or storage of extremely hazardous substances submit written reports and responses to requests and questions within such time and in such form as the Board may require; and

(ii) upon presenting appropriate credentials and a written notice of inspection authority, enter any property where an accidental release causing a fatality, serious injury or substantial property damage has occurred and do all things therein necessary for a proper investigation pursuant to subparagraph (C) and inspect at reasonable times records, files, papers, processes, controls, and facilities and take such samples as are relevant to such investigation.

Whenever the Administrator or the Board conducts an inspection of a facility pursuant to this subsection, employees and their representatives shall have the same rights to participate in such inspections as provided in the Occupational Safety and Health Act [29 U.S.C.A. § 651 et seq.].

(M) In addition to that described in subparagraph (L), the Board may use any information gathering authority of the Administrator under this chapter, including the subpoena power provided in [section 7607\(a\)\(1\)](#) of this title.

(N) The Board is authorized to establish such procedural and administrative rules as are necessary to the exercise of its functions and duties. The Board is authorized without regard to [section 6101 of Title 41](#) to enter into contracts, leases, cooperative agreements or other transactions as may be necessary in the conduct of the duties and functions of the Board with any other agency, institution, or person.

(O) After the effective date of any reporting requirement promulgated pursuant to subparagraph (C)(iii) it shall be unlawful for any person to fail to report any release of any extremely hazardous substance as required by such subparagraph. The Administrator is authorized to enforce any regulation or requirements established by the Board pursuant to subparagraph (C) (iii) using the authorities of [sections 7413 and 7414](#) of this title. Any request for information from the owner or operator of a stationary source made by the Board or by the Administrator under this section shall be treated, for purposes of [sections 7413, 7414, 7416, 7420, 7603, 7604 and 7607](#) of this title and any other enforcement provisions of this chapter, as a request made by the Administrator under [section 7414](#) of this title and may be enforced by the Chairperson of the Board or by the Administrator as provided in such section.

(P) The Administrator shall provide to the Board such support and facilities as may be necessary for operation of the Board.

(Q) Consistent with subsection (G)⁵ and [section 7414\(c\)](#) of this title any records, reports or information obtained by the Board shall be available to the Administrator, the Secretary of Labor, the Congress and the public, except that upon a showing satisfactory to the Board by any person that records, reports, or information, or particular part thereof (other than release or emissions data) to which the Board has access, if made public, is likely to cause substantial harm to the person's competitive position, the Board shall consider such record, report, or information or particular portion thereof confidential in accordance with [section 1905 of Title 18](#), except that such record, report, or information may be disclosed to other officers, employees, and authorized representatives of the United States concerned with carrying out this chapter or when relevant under any proceeding under this chapter. This subparagraph does not constitute authority to withhold records, reports, or information from the Congress.

(R) Whenever the Board submits or transmits any budget estimate, budget request, supplemental budget request, or other budget information, legislative recommendation, prepared testimony for congressional hearings, recommendation or study to the President, the Secretary of Labor, the Administrator, or the Director of the Office of Management and Budget, it shall concurrently transmit a copy thereof to the Congress. No report of the Board shall be subject to review by the Administrator or any Federal agency or to judicial review in any court. No officer or agency of the United States shall have authority to require the Board to submit its budget requests or estimates, legislative recommendations, prepared testimony, comments, recommendations or reports to any officer or agency of the United States for approval or review prior to the submission of such recommendations, testimony, comments or reports to the Congress. In the performance of their functions as established by this chapter, the members, officers and employees of the Board shall not be responsible to or subject to supervision or direction, in carrying out any duties under this subsection, of any officer or employee or agent of the Environmental Protection Agency, the Department of Labor or any other agency of the United States except that the President may remove any member, officer or employee of the Board for inefficiency, neglect of duty or malfeasance in office. Nothing in this section shall affect the application of Title 5 to officers or employees of the Board.

(S) The Board shall submit an annual report to the President and to the Congress which shall include, but not be limited to, information on accidental releases which have been investigated by or reported to the Board during the previous year, recommendations for legislative or administrative action which the Board has made, the actions which have been taken by the Administrator or the Secretary of Labor or the heads of other agencies to implement such recommendations, an identification of priorities for study and investigation in the succeeding year, progress in the development of risk-reduction technologies and the response to and implementation of significant research findings on chemical safety in the public and private sector.

(7) Accident prevention

(A) In order to prevent accidental releases of regulated substances, the Administrator is authorized to promulgate release prevention, detection, and correction requirements which may include monitoring, record-keeping, reporting, training, vapor recovery, secondary containment, and other design, equipment, work practice, and operational requirements. Regulations promulgated under this paragraph may make distinctions between various types, classes, and kinds of facilities, devices and systems taking into consideration factors including, but not limited to, the size, location, process, process controls, quantity of substances handled, potency of substances, and response capabilities present at any stationary source. Regulations promulgated pursuant to this subparagraph shall have an effective date, as determined by the Administrator, assuring compliance as expeditiously as practicable.

(B)(i) Within 3 years after November 15, 1990, the Administrator shall promulgate reasonable regulations and appropriate guidance to provide, to the greatest extent practicable, for the prevention and detection of accidental releases of regulated substances and for response to such releases by the owners or operators of the sources of such releases. The Administrator shall utilize the expertise of the Secretaries of Transportation and Labor in promulgating such regulations. As appropriate, such regulations shall cover the use, operation, repair, replacement, and maintenance of equipment to monitor, detect, inspect, and control such releases, including training of persons in the use and maintenance of such equipment and in the conduct of periodic inspections. The regulations shall include procedures and measures for emergency response after an accidental release of a regulated substance in order to protect human health and the environment. The regulations shall cover storage, as well as operations. The regulations shall, as appropriate, recognize differences in size, operations, processes, class and categories of sources and the voluntary actions of such sources to prevent such releases and respond to such releases. The regulations shall be applicable to a stationary source 3 years after the date of promulgation, or 3 years after the date on which a regulated substance present at the source in more than threshold amounts is first listed under paragraph (3), whichever is later.

(ii) The regulations under this subparagraph shall require the owner or operator of stationary sources at which a regulated substance is present in more than a threshold quantity to prepare and implement a risk management plan to detect and prevent or minimize accidental releases of such substances from the stationary source, and to provide a prompt emergency response to any such releases in order to protect human health and the environment. Such plan shall provide for compliance with the requirements of this subsection and shall also include each of the following:

(I) a hazard assessment to assess the potential effects of an accidental release of any regulated substance. This assessment shall include an estimate of potential release quantities and a determination of downwind effects, including potential exposures to affected populations. Such assessment shall include a previous release history of the past 5 years, including the size, concentration, and duration of releases, and shall include an evaluation of worst case accidental releases;

(II) a program for preventing accidental releases of regulated substances, including safety precautions and maintenance, monitoring and employee training measures to be used at the source; and

(III) a response program providing for specific actions to be taken in response to an accidental release of a regulated substance so as to protect human health and the environment, including procedures for informing the public and local agencies responsible for responding to accidental releases, emergency health care, and employee training measures.

At the time regulations are promulgated under this subparagraph, the Administrator shall promulgate guidelines to assist stationary sources in the preparation of risk management plans. The guidelines shall, to the extent practicable, include model risk management plans.

(iii) The owner or operator of each stationary source covered by clause (ii) shall register a risk management plan prepared under this subparagraph with the Administrator before the effective date of regulations under clause (i) in such form and manner as the Administrator shall, by rule, require. Plans prepared pursuant to this subparagraph shall also be submitted to the Chemical Safety and Hazard Investigation Board, to the State in which the stationary source is located, and to any local agency or entity having responsibility for planning for or responding to accidental releases which may occur at such source,

and shall be available to the public under [section 7414\(c\)](#) of this title. The Administrator shall establish, by rule, an auditing system to regularly review and, if necessary, require revision in risk management plans to assure that the plans comply with this subparagraph. Each such plan shall be updated periodically as required by the Administrator, by rule.

(C) Any regulations promulgated pursuant to this subsection shall to the maximum extent practicable, consistent with this subsection, be consistent with the recommendations and standards established by the American Society of Mechanical Engineers (ASME), the American National Standards Institute (ANSI) or the American Society of Testing Materials (ASTM). The Administrator shall take into consideration the concerns of small business in promulgating regulations under this subsection.

(D) In carrying out the authority of this paragraph, the Administrator shall consult with the Secretary of Labor and the Secretary of Transportation and shall coordinate any requirements under this paragraph with any requirements established for comparable purposes by the Occupational Safety and Health Administration or the Department of Transportation. Nothing in this subsection shall be interpreted, construed or applied to impose requirements affecting, or to grant the Administrator, the Chemical Safety and Hazard Investigation Board, or any other agency any authority to regulate (including requirements for hazard assessment), the accidental release of radionuclides arising from the construction and operation of facilities licensed by the Nuclear Regulatory Commission.

(E) After the effective date of any regulation or requirement imposed under this subsection, it shall be unlawful for any person to operate any stationary source subject to such regulation or requirement in violation of such regulation or requirement. Each regulation or requirement under this subsection shall for purposes of [sections 7413, 7414, 7416, 7420, 7604, and 7607](#) of this title and other enforcement provisions of this chapter, be treated as a standard in effect under subsection (d) of this section.

(F) Notwithstanding the provisions of subchapter V of this chapter or this section, no stationary source shall be required to apply for, or operate pursuant to, a permit issued under such subchapter solely because such source is subject to regulations or requirements under this subsection.

(G) In exercising any authority under this subsection, the Administrator shall not, for purposes of [section 653\(b\)\(1\) of Title 29](#), be deemed to be exercising statutory authority to prescribe or enforce standards or regulations affecting occupational safety and health.

(H) Public access to off-site consequence analysis information

(i) Definitions

In this subparagraph:

(I) Covered person

The term “covered person” means--

(aa) an officer or employee of the United States;

(bb) an officer or employee of an agent or contractor of the Federal Government;

(cc) an officer or employee of a State or local government;

(dd) an officer or employee of an agent or contractor of a State or local government;

(ee) an individual affiliated with an entity that has been given, by a State or local government, responsibility for preventing, planning for, or responding to accidental releases;

(ff) an officer or employee or an agent or contractor of an entity described in item (ee); and

(gg) a qualified researcher under clause (vii).

(II) Official use

The term “official use” means an action of a Federal, State, or local government agency or an entity referred to in subclause (I)(ee) intended to carry out a function relevant to preventing, planning for, or responding to accidental releases.

(III) Off-site consequence analysis information

The term “off-site consequence analysis information” means those portions of a risk management plan, excluding the executive summary of the plan, consisting of an evaluation of 1 or more worst-case release scenarios or alternative release scenarios, and any electronic data base created by the Administrator from those portions.

(IV) Risk management plan

The term “risk management plan” means a risk management plan submitted to the Administrator by an owner or operator of a stationary source under subparagraph (B)(iii).

(ii) Regulations

Not later than 1 year after the date of enactment of this subparagraph, the President shall--

(I) assess--

(aa) the increased risk of terrorist and other criminal activity associated with the posting of off-site consequence analysis information on the Internet; and

(bb) the incentives created by public disclosure of off-site consequence analysis information for reduction in the risk of accidental releases; and

(II) based on the assessment under subclause (I), promulgate regulations governing the distribution of off-site consequence analysis information in a manner that, in the opinion of the President, minimizes the likelihood of accidental releases and the risk described in subclause (I)(aa) and the likelihood of harm to public health and welfare, and--

(aa) allows access by any member of the public to paper copies of off-site consequence analysis information for a limited number of stationary sources located anywhere in the United States, without any geographical restriction;

(bb) allows other public access to off-site consequence analysis information as appropriate;

(cc) allows access for official use by a covered person described in any of items (cc) through (ff) of clause (i)(I) (referred to in this subclause as a ‘State or local covered person’) to off-site consequence analysis information relating to stationary sources located in the person’s State;

(dd) allows a State or local covered person to provide, for official use, off-site consequence analysis information relating to stationary sources located in the person’s State to a State or local covered person in a contiguous State; and

(ee) allows a State or local covered person to obtain for official use, by request to the Administrator, off-site consequence analysis information that is not available to the person under item (cc).

(iii) Availability under freedom of information act

(I) First year

Off-site consequence analysis information, and any ranking of stationary sources derived from the information, shall not be made available under [section 552 of Title 5](#), during the 1-year period beginning on the date of enactment of this subparagraph.

(II) After first year

If the regulations under clause (ii) are promulgated on or before the end of the period described in subclause (I), off-site consequence analysis information covered by the regulations, and any ranking of stationary sources derived from the information, shall not be made available under [section 552 of Title 5](#), after the end of that period.

(III) Applicability

Subclauses (I) and (II) apply to off-site consequence analysis information submitted to the Administrator before, on, or after the date of enactment of this subparagraph.

(iv) Availability of information during transition period

The Administrator shall make off-site consequence analysis information available to covered persons for official use in a manner that meets the requirements of items (cc)through (ee) of clause (ii)(II), and to the public in a form that does not make available any information concerning the identity or location of stationary sources, during the period--

(I) beginning on the date of enactment of this subparagraph; and

(II) ending on the earlier of the date of promulgation of the regulations under clause (ii) or the date that is 1 year after the date of enactment of this subparagraph.

(v) Prohibition on unauthorized disclosure of information by covered persons

(I) In general

Beginning on the date of enactment of this subparagraph, a covered person shall not disclose to the public off-site consequence analysis information in any form, or any statewide or national ranking of identified stationary sources derived from such information, except as authorized by this subparagraph (including the regulations promulgated under clause (ii)). After the end of the 1-year period beginning on the date of enactment of this subparagraph, if regulations have not been promulgated under clause (ii), the preceding sentence shall not apply.

(II) Criminal penalties

Notwithstanding [section 7413](#) of this title, a covered person that willfully violates a restriction or prohibition established by this subparagraph (including the regulations promulgated under clause (ii)) shall, upon conviction, be fined for an infraction under [section 3571 of Title 18](#), (but shall not be subject to imprisonment) for each unauthorized disclosure of off-site consequence analysis information, except that subsection (d) of such section 3571 shall not apply to a case in which the offense results in pecuniary loss unless the defendant knew that such loss would occur. The disclosure of off-site consequence analysis information for each specific stationary source shall be considered a separate offense. The total of all penalties that may be imposed on a single person or organization under this item shall not exceed \$1,000,000 for violations committed during any 1 calendar year.

(III) Applicability

If the owner or operator of a stationary source makes off-site consequence analysis information relating to that stationary source available to the public without restriction--

(aa) subclauses (I) and (II) shall not apply with respect to the information; and

(bb) the owner or operator shall notify the Administrator of the public availability of the information.

(IV) List

The Administrator shall maintain and make publicly available a list of all stationary sources that have provided notification under subclause (III)(bb).

(vi) Notice

The Administrator shall provide notice of the definition of official use as provided in clause (i)(III) and examples of actions that would and would not meet that definition, and notice of the restrictions on further dissemination and the penalties established by this Act to each covered person who receives off-site consequence analysis information under clause (iv) and each covered person who receives off-site consequence analysis information for an official use under the regulations promulgated under clause (ii).

(vii) Qualified researchers

(I) In general

Not later than 180 days after the date of enactment of this subparagraph, the Administrator, in consultation with the Attorney General, shall develop and implement a system for providing off-site consequence analysis information, including facility identification, to any qualified researcher, including a qualified researcher from industry or any public interest group.

(II) Limitation on dissemination

The system shall not allow the researcher to disseminate, or make available on the Internet, the off-site consequence analysis information, or any portion of the off-site consequence analysis information, received under this clause.

(viii) Read-only information technology system

In consultation with the Attorney General and the heads of other appropriate Federal agencies, the Administrator shall establish an information technology system that provides for the availability to the public of off-site consequence analysis information by means of a central data base under the control of the Federal Government that contains information that users may read, but that provides no means by which an electronic or mechanical copy of the information may be made.

(ix) Voluntary industry accident prevention standards

The Environmental Protection Agency, the Department of Justice, and other appropriate agencies may provide technical assistance to owners and operators of stationary sources and participate in the development of voluntary industry standards that will help achieve the objectives set forth in paragraph (1).

(x) Effect on State or local law

(I) In general

Subject to subclause (II), this subparagraph (including the regulations promulgated under this subparagraph) shall supersede any provision of State or local law that is inconsistent with this subparagraph (including the regulations).

(II) Availability of information under State law

Nothing in this subparagraph precludes a State from making available data on the off-site consequences of chemical releases collected in accordance with State law.

(xi) Report**(I) In general**

Not later than 3 years after the date of enactment of this subparagraph, the Attorney General, in consultation with appropriate State, local, and Federal Government agencies, affected industry, and the public, shall submit to Congress a report that describes the extent to which regulations promulgated under this paragraph have resulted in actions, including the design and maintenance of safe facilities, that are effective in detecting, preventing, and minimizing the consequences of releases of regulated substances that may be caused by criminal activity. As part of this report, the Attorney General, using available data to the extent possible, and a sampling of covered stationary sources selected at the discretion of the Attorney General, and in consultation with appropriate State, local, and Federal governmental agencies, affected industry, and the public, shall review the vulnerability of covered stationary sources to criminal and terrorist activity, current industry practices regarding site security, and security of transportation of regulated substances. The Attorney General shall submit this report, containing the results of the review, together with recommendations, if any, for reducing vulnerability of covered stationary sources to criminal and terrorist activity, to the Committee on Commerce of the United States House of Representatives and the Committee on Environment and Public Works of the United States Senate and other relevant committees of Congress.

(II) Interim report

Not later than 12 months after the date of enactment of this subparagraph, the Attorney General shall submit to the Committee on Commerce of the United States House of Representatives and the Committee on Environment and Public Works of the United States Senate, and other relevant committees of Congress, an interim report that includes, at a minimum--

(aa) the preliminary findings under subclause (I);

(bb) the methods used to develop the findings; and

(cc) an explanation of the activities expected to occur that could cause the findings of the report under subclause (I) to be different than the preliminary findings.

(III) Availability of information

Information that is developed by the Attorney General or requested by the Attorney General and received from a covered stationary source for the purpose of conducting the review under subclauses (I) and (II) shall be exempt from disclosure under [section 552 of Title 5](#), if such information would pose a threat to national security.

(xii) Scope

This subparagraph--

(I) applies only to covered persons; and

(II) does not restrict the dissemination of off-site consequence analysis information by any covered person in any manner or form except in the form of a risk management plan or an electronic data base created by the Administrator from off-site consequence analysis information.

(xiii) Authorization of appropriations

There are authorized to be appropriated to the Administrator and the Attorney General such sums as are necessary to carry out this subparagraph (including the regulations promulgated under clause (ii)), to remain available until expended.

(8) Research on hazard assessments

The Administrator may collect and publish information on accident scenarios and consequences covering a range of possible events for substances listed under paragraph (3). The Administrator shall establish a program of long-term research to develop and disseminate information on methods and techniques for hazard assessment which may be useful in improving and validating the procedures employed in the preparation of hazard assessments under this subsection.

(9) Order authority

(A) In addition to any other action taken, when the Administrator determines that there may be an imminent and substantial endangerment to the human health or welfare or the environment because of an actual or threatened accidental release of a regulated substance, the Administrator may secure such relief as may be necessary to abate such danger or threat, and the district court of the United States in the district in which the threat occurs shall have jurisdiction to grant such relief as the public interest and the equities of the case may require. The Administrator may also, after notice to the State in which the stationary source is located, take other action under this paragraph including, but not limited to, issuing such orders as may be necessary to protect human health. The Administrator shall take action under [section 7603](#) of this title rather than this paragraph whenever the authority of such section is adequate to protect human health and the environment.

(B) Orders issued pursuant to this paragraph may be enforced in an action brought in the appropriate United States district court as if the order were issued under [section 7603](#) of this title.

(C) Within 180 days after November 15, 1990, the Administrator shall publish guidance for using the order authorities established by this paragraph. Such guidance shall provide for the coordinated use of the authorities of this paragraph with other emergency powers authorized by [section 9606](#) of this title, sections 311(c), 308, 309 and 504(a) of the Federal Water Pollution Control Act [[33 U.S.C.A. §§ 1321\(c\), 1318, 1319 and 1364\(a\)](#)], sections 3007, 3008, 3013, and 7003 of the Solid Waste Disposal Act [[42 U.S.C.A. §§ 6927, 6928, 6934, and 6973](#)], sections 1445 and 1431 of the Safe Drinking Water Act [[42 U.S.C.A. §§ 300j-4 and 300i](#)], sections 5 and 7 of the Toxic Substances Control Act [[15 U.S.C.A. §§ 2604, 2606](#)], and [sections 7413, 7414, and 7603](#) of this title.

(10) Presidential review

The President shall conduct a review of release prevention, mitigation and response authorities of the various Federal agencies and shall clarify and coordinate agency responsibilities to assure the most effective and efficient implementation of such authorities and to identify any deficiencies in authority or resources which may exist. The President may utilize the resources and solicit the recommendations of the Chemical Safety and Hazard Investigation Board in conducting such review. At the conclusion of such review, but not later than 24 months after November 15, 1990, the President shall transmit a message to the Congress on the release prevention, mitigation and response activities of the Federal Government making such recommendations for change in law as the President may deem appropriate. Nothing in this paragraph shall be interpreted, construed or applied to authorize the President to modify or reassign release prevention, mitigation or response authorities otherwise established by law.

(11) State authority

Nothing in this subsection shall preclude, deny or limit any right of a State or political subdivision thereof to adopt or enforce any regulation, requirement, limitation or standard (including any procedural requirement) that is more stringent than a regulation, requirement, limitation or standard in effect under this subsection or that applies to a substance not subject to this subsection.

(s) Periodic report

Not later than January 15, 1993 and every 3 years thereafter, the Administrator shall prepare and transmit to the Congress a comprehensive report on the measures taken by the Agency and by the States to implement the provisions of this section. The Administrator shall maintain a database on pollutants and sources subject to the provisions of this section and shall include aggregate information from the database in each annual report. The report shall include, but not be limited to--

- (1) a status report on standard-setting under subsections (d) and (f) of this section;
- (2) information with respect to compliance with such standards including the costs of compliance experienced by sources in various categories and subcategories;
- (3) development and implementation of the national urban air toxics program; and
- (4) recommendations of the Chemical Safety and Hazard Investigation Board with respect to the prevention and mitigation of accidental releases.

Credits

(July 14, 1955, c. 360, Title I, § 112, as added Dec. 31, 1970, Pub.L. 91-604, § 4(a), 84 Stat. 1685; amended Aug. 7, 1977, Pub.L. 95-95, Title I, §§ 109(d)(2), 110, Title IV, § 401(c), 91 Stat. 701, 703, 791; Nov. 9, 1978, Pub.L. 95-623, § 13(b), 92 Stat. 3458; Nov. 15, 1990, Pub.L. 101-549, Title III, § 301, 104 Stat. 2531; Dec. 4, 1991, Pub.L. 102-187, 105 Stat. 1285; Nov. 10, 1998, Pub.L. 105-362, Title IV, § 402(b), 112 Stat. 3283; Aug. 5, 1999, Pub.L. 106-40, §§ 2, 3(a), 113 Stat. 207.)

Editors' Notes

MEMORANDA OF PRESIDENT

DELEGATION OF AUTHORITY TO REVIEW EMERGENCY RELEASE AUTHORITIES AND PREPARE AND TRANSMIT TO THE CONGRESS A MESSAGE CONCERNING SUCH AUTHORITIES

<Aug. 19, 1993, 58 F.R. 52397>

Memorandum for the Administrator of the Environmental Protection Agency

WHEREAS, the Environmental Protection Agency, the agencies and departments that are members of the National Response Team (authorized under Executive Order No. 12580, 52 Fed.Reg. 2923 (1987)) [set out as a note under section 9615 of this title], and other Federal agencies and departments undertake emergency release prevention, mitigation, and response activities pursuant to various authorities;

By the authority vested in me as President by the Constitution and the laws of the United States of America, including section 112(r)(10) of the Clean Air Act (the "Act") (section 7412(r)(10) of title 42 of the United States Code) [subsec. (r)(10) of this section] and section 301 of title 3 of the United States Code [section 301 of Title 3, The President], and in order to provide for the delegation of certain functions under the Act [42 U.S.C.A. § 7401 et seq.], I hereby:

- (1) Authorize you, in coordination with agencies and departments that are members of the National Response Team and other appropriate agencies and departments, to conduct a review of release prevention, mitigation, and response authorities of Federal agencies in order to assure the most effective and efficient implementation of such authorities and to identify any deficiencies in authority or resources that may exist, to the extent such review is required by section 112(r)(10) of the Act; and
- (2) Authorize you, in coordination with agencies and departments that are members of the National Response Team and other appropriate agencies and departments, to prepare and transmit a message to the Congress concerning the release prevention, mitigation, and response activities of the Federal Government with such recommendations for change in law as you deem appropriate, to the extent such message is required by section 112(r)(10) of the Act.

The authority delegated by this memorandum may be further redelegated within the Environmental Protection Agency.

You are hereby authorized and directed to publish this memorandum in the **Federal Register**.

WILLIAM J. CLINTON

MEMORANDA OF PRESIDENT

DELEGATION OF AUTHORITY TO CONDUCT ASSESSMENTS AND PROMULGATE
REGULATIONS ON PUBLIC ACCESS TO OFF-SITE CONSEQUENCE ANALYSIS INFORMATION

<Jan. 27, 2000, 65 F.R. 8631>

Memorandum for the Attorney General[,] the Administrator of the Environmental Protection Agency[,] and the
Director of the Office of Management and Budget

By the authority vested in me as President by the Constitution and laws of the United States of America, including section 112(r)(7)(H) of the Clean Air Act (“Act”) (42 U.S.C. 7412(r)(7)(H)) [subsec. (r)(7)(H) of this section], as added by section 3 of the Chemical Safety Information, Site Security and Fuels Regulatory Relief Act ([Public Law 106-40](#)), and [section 301 of title 3, United States Code](#), I hereby delegate to:

(1) the Attorney General the authority vested in the President under section 112(r)(7)(H)(i)(II)(aa) of the Act [subsec. (r)(7)(H)(i)(II)(aa) of this section] to assess the increased risk of terrorist and other criminal activity associated with the posting of off-site consequence analysis information on the Internet;

(2) the Administrator of the Environmental Protection Agency (EPA) the authority vested in the President under section 112(r)(7)(H)(ii)(I)(bb) of the Act [subsec. (r)(7)(H)(ii)(I)(bb) of this section] to assess the incentives created by public disclosure of off-site consequence analysis information for reduction in the risk of accidental releases; and

(3) the Attorney General and the Administrator of EPA, jointly, the authority vested in the President under section 112(r)(7)(H)(ii)(II) of the Act [subsec. (r)(7)(H)(ii)(II) of this section] to promulgate regulations, based on these assessments, governing the distribution of off-site consequence analysis information. These regulations, in proposed and final form, shall be subject to review and approval by the Director of the Office of Management and Budget.

The Administrator of EPA is authorized and directed to publish this memorandum in the **Federal Register**.

WILLIAM J. CLINTON

[Notes of Decisions \(68\)](#)

Footnotes

- 1 So in original. Probably should be “effects”.
- 2 So in original.
- 3 So in original. Probably should be “section”.
- 4 So in original. Probably should be paragraph “(7)(B)”.
- 5 So in original. Probably should be “subparagraph”.

42 U.S.C.A. § 7412, 42 USCA § 7412

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United States Code Annotated

Title 42. The Public Health and Welfare

Chapter 85. Air Pollution Prevention and Control (Refs & Annos)

Subchapter I. Programs and Activities

Part A. Air Quality and Emissions Limitations (Refs & Annos)

42 U.S.C.A. § 7429

§ 7429. Solid waste combustion

Currentness

(a) New source performance standards**(1) In general**

(A) The Administrator shall establish performance standards and other requirements pursuant to [section 7411](#) of this title and this section for each category of solid waste incineration units. Such standards shall include emissions limitations and other requirements applicable to new units and guidelines (under [section 7411\(d\)](#) of this title and this section) and other requirements applicable to existing units.

(B) Standards under [section 7411](#) of this title and this section applicable to solid waste incineration units with capacity greater than 250 tons per day combusting municipal waste shall be promulgated not later than 12 months after November 15, 1990. Nothing in this subparagraph shall alter any schedule for the promulgation of standards applicable to such units under [section 7411](#) of this title pursuant to any settlement and consent decree entered by the Administrator before November 15, 1990: *Provided*, That, such standards are subsequently modified pursuant to the schedule established in this subparagraph to include each of the requirements of this section.

(C) Standards under [section 7411](#) of this title and this section applicable to solid waste incineration units with capacity equal to or less than 250 tons per day combusting municipal waste and units combusting hospital waste, medical waste and infectious waste shall be promulgated not later than 24 months after November 15, 1990.

(D) Standards under [section 7411](#) of this title and this section applicable to solid waste incineration units combusting commercial or industrial waste shall be proposed not later than 36 months after November 15, 1990, and promulgated not later than 48 months after November 15, 1990.

(E) Not later than 18 months after November 15, 1990, the Administrator shall publish a schedule for the promulgation of standards under [section 7411](#) of this title and this section applicable to other categories of solid waste incineration units.

(2) Emissions standard

Standards applicable to solid waste incineration units promulgated under [section 7411](#) of this title and this section shall reflect the maximum degree of reduction in emissions of air pollutants listed under [section 1](#) (a)(4) that the Administrator, taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements, determines is achievable for new or existing units in each category. The Administrator may distinguish among classes, types (including mass-burn, refuse-derived fuel, modular and other types of units), and sizes of units within a category in establishing such standards. The degree of reduction in emissions that is deemed achievable for new units in a category shall not be less stringent than the emissions control that is achieved in practice by the best controlled similar unit, as determined by the Administrator. Emissions standards for existing units in a category may be less stringent than standards for new units in the same category but shall not be less stringent than the average emissions limitation achieved by the best

performing 12 percent of units in the category (excluding units which first met lowest achievable emissions rates 18 months before the date such standards are proposed or 30 months before the date such standards are promulgated, whichever is later).

(3) Control methods and technologies

Standards under [section 7411](#) of this title and this section applicable to solid waste incineration units shall be based on methods and technologies for removal or destruction of pollutants before, during, or after combustion, and shall incorporate for new units siting requirements that minimize, on a site specific basis, to the maximum extent practicable, potential risks to public health or the environment.

(4) Numerical emissions limitations

The performance standards promulgated under [section 7411](#) of this title and this section and applicable to solid waste incineration units shall specify numerical emission limitations for the following substances or mixtures: particulate matter (total and fine), opacity (as appropriate), sulfur dioxide, hydrogen chloride, oxides of nitrogen, carbon monoxide, lead, cadmium, mercury, and dioxins and dibenzofurans. The Administrator may promulgate numerical emissions limitations or provide for the monitoring of postcombustion concentrations of surrogate substances, parameters or periods of residence time in excess of stated temperatures with respect to pollutants other than those listed in this paragraph.

(5) Review and revision

Not later than 5 years following the initial promulgation of any performance standards and other requirements under this section and [section 7411](#) of this title applicable to a category of solid waste incineration units, and at 5 year intervals thereafter, the Administrator shall review, and in accordance with this section and [section 7411](#) of this title, revise such standards and requirements.

(b) Existing units

(1) Guidelines

Performance standards under this section and [section 7411](#) of this title for solid waste incineration units shall include guidelines promulgated pursuant to [section 7411\(d\)](#) of this title and this section applicable to existing units. Such guidelines shall include, as provided in this section, each of the elements required by subsection (a) of this section (emissions limitations, notwithstanding any restriction in [section 7411\(d\)](#) of this title regarding issuance of such limitations), subsection (c) of this section (monitoring), subsection (d) of this section (operator training), subsection (e) of this section (permits), and subsection (h)(4)² of this section (residual risk).

(2) State plans

Not later than 1 year after the Administrator promulgates guidelines for a category of solid waste incineration units, each State in which units in the category are operating shall submit to the Administrator a plan to implement and enforce the guidelines with respect to such units. The State plan shall be at least as protective as the guidelines promulgated by the Administrator and shall provide that each unit subject to the guidelines shall be in compliance with all requirements of this section not later than 3 years after the State plan is approved by the Administrator but not later than 5 years after the guidelines were promulgated. The Administrator shall approve or disapprove any State plan within 180 days of the submission, and if a plan is disapproved, the Administrator shall state the reasons for disapproval in writing. Any State may modify and resubmit a plan which has been disapproved by the Administrator.

(3) Federal plan

The Administrator shall develop, implement and enforce a plan for existing solid waste incineration units within any category located in any State which has not submitted an approvable plan under this subsection with respect to units in such category within 2 years after the date on which the Administrator promulgated the relevant guidelines. Such plan shall assure that each unit subject to the plan is in compliance with all provisions of the guidelines not later than 5 years after the date the relevant guidelines are promulgated.

(c) Monitoring

The Administrator shall, as part of each performance standard promulgated pursuant to subsection (a) of this section and [section 7411](#) of this title, promulgate regulations requiring the owner or operator of each solid waste incineration unit--

- (1) to monitor emissions from the unit at the point at which such emissions are emitted into the ambient air (or within the stack, combustion chamber or pollution control equipment, as appropriate) and at such other points as necessary to protect public health and the environment;
- (2) to monitor such other parameters relating to the operation of the unit and its pollution control technology as the Administrator determines are appropriate; and
- (3) to report the results of such monitoring.

Such regulations shall contain provisions regarding the frequency of monitoring, test methods and procedures validated on solid waste incineration units, and the form and frequency of reports containing the results of monitoring and shall require that any monitoring reports or test results indicating an exceedance of any standard under this section shall be reported separately and in a manner that facilitates review for purposes of enforcement actions. Such regulations shall require that copies of the results of such monitoring be maintained on file at the facility concerned and that copies shall be made available for inspection and copying by interested members of the public during business hours.

(d) Operator training

Not later than 24 months after November 15, 1990, the Administrator shall develop and promote a model State program for the training and certification of solid waste incineration unit operators and high-capacity fossil fuel fired plant operators. The Administrator may authorize any State to implement a model program for the training of solid waste incineration unit operators and high-capacity fossil fuel fired plant operators, if the State has adopted a program which is at least as effective as the model program developed by the Administrator. Beginning on the date 36 months after the date on which performance standards and guidelines are promulgated under subsection (a) of this section and [section 7411](#) of this title for any category of solid waste incineration units it shall be unlawful to operate any unit in the category unless each person with control over processes affecting emissions from such unit has satisfactorily completed a training program meeting the requirements established by the Administrator under this subsection.

(e) Permits

Beginning (1) 36 months after the promulgation of a performance standard under subsection (a) of this section and [section 7411](#) of this title applicable to a category of solid waste incineration units, or (2) the effective date of a permit program under subchapter V of this chapter in the State in which the unit is located, whichever is later, each unit in the category shall operate pursuant to a permit issued under this subsection and subchapter V of this chapter. Permits required by this subsection may be renewed according to the provisions of subchapter V of this chapter. Notwithstanding any other provision of this chapter, each permit for a solid waste incineration unit combusting municipal waste issued under this chapter shall be issued for a period of up to 12 years and shall be reviewed every 5 years after date of issuance or reissuance. Each permit shall continue in effect after the date of issuance until the date of termination, unless the Administrator or State determines that the unit is not in compliance with all standards and conditions contained in the permit. Such determination shall be made at regular intervals during the term of the permit, such intervals not to exceed 5 years, and only after public comment and public hearing. No permit for a solid waste incineration unit may be issued under this chapter by an agency, instrumentality or person that is also responsible, in whole or part, for the design and construction or operation of the unit. Notwithstanding any other provision of this subsection, the Administrator or the State shall require the owner or operator of any unit to comply with emissions limitations or implement any other measures, if the Administrator or the State determines that emissions in the absence of such limitations or measures may reasonably be anticipated to endanger public health or the environment. The Administrator's determination under the preceding sentence is a discretionary decision.

(f) Effective date and enforcement

(1) New units

Performance standards and other requirements promulgated pursuant to this section and [section 7411](#) of this title and applicable to new solid waste incineration units shall be effective as of the date 6 months after the date of promulgation.

(2) Existing units

Performance standards and other requirements promulgated pursuant to this section and [section 7411](#) of this title and applicable to existing solid waste incineration units shall be effective as expeditiously as practicable after approval of a State plan under subsection (b)(2) of this section (or promulgation of a plan by the Administrator under subsection (b)(3) of this section) but in no event later than 3 years after the State plan is approved or 5 years after the date such standards or requirements are promulgated, whichever is earlier.

(3) Prohibition

After the effective date of any performance standard, emission limitation or other requirement promulgated pursuant to this section and [section 7411](#) of this title, it shall be unlawful for any owner or operator of any solid waste incineration unit to which such standard, limitation or requirement applies to operate such unit in violation of such limitation, standard or requirement or for any other person to violate an applicable requirement of this section.

(4) Coordination with other authorities

For purposes of [sections 7411\(e\), 7413, 7414, 7416, 7420, 7603, 7604, 7607](#) of this title and other provisions for the enforcement of this chapter, each performance standard, emission limitation or other requirement established pursuant to this section by the Administrator or a State or local government, shall be treated in the same manner as a standard of performance under [section 7411](#) of this title which is an emission limitation.

(g) Definitions

For purposes of section 306 of the Clean Air Act Amendments of 1990 and this section only--

(1) Solid waste incineration unit

The term “solid waste incineration unit” means a distinct operating unit of any facility which combusts any solid waste material from commercial or industrial establishments or the general public (including single and multiple residences, hotels, and motels). Such term does not include incinerators or other units required to have a permit under section 3005 of the Solid Waste Disposal Act [[42 U.S.C.A. § 6925](#)]. The term “solid waste incineration unit” does not include (A) materials recovery facilities (including primary or secondary smelters) which combust waste for the primary purpose of recovering metals, (B) qualifying small power production facilities, as defined in [section 796\(17\)\(C\) of Title 16](#), or qualifying cogeneration facilities, as defined in [section 796\(18\)\(B\) of Title 16](#), which burn homogeneous waste (such as units which burn tires or used oil, but not including refuse-derived fuel) for the production of electric energy or in the case of qualifying cogeneration facilities which burn homogeneous waste for the production of electric energy and steam or forms of useful energy (such as heat) which are used for industrial, commercial, heating or cooling purposes, or (C) air curtain incinerators provided that such incinerators only burn wood wastes, yard wastes and clean lumber and that such air curtain incinerators comply with opacity limitations to be established by the Administrator by rule.

(2) New solid waste incineration unit

The term “new solid waste incineration unit” means a solid waste incineration unit the construction of which is commenced after the Administrator proposes requirements under this section establishing emissions standards or other requirements which would be applicable to such unit or a modified solid waste incineration unit.

(3) Modified solid waste incineration unit

The term “modified solid waste incineration unit” means a solid waste incineration unit at which modifications have occurred after the effective date of a standard under subsection (a) of this section if (A) the cumulative cost of the modifications, over the life of the unit, exceed 50 per centum of the original cost of construction and installation of the unit (not including the cost of any land purchased in connection with such construction or installation) updated to current costs, or (B) the modification is a physical change in or change in the method of operation of the unit which increases the amount of any air pollutant emitted by the unit for which standards have been established under this section or [section 7411](#) of this title.

(4) Existing solid waste incineration unit

The term “existing solid waste incineration unit” means a solid waste unit which is not a new or modified solid waste incineration unit.

(5) Municipal waste

The term “municipal waste” means refuse (and refuse-derived fuel) collected from the general public and from residential, commercial, institutional, and industrial sources consisting of paper, wood, yard wastes, food wastes, plastics, leather, rubber, and other combustible materials and non-combustible materials such as metal, glass and rock, provided that: (A) the term does not include industrial process wastes or medical wastes that are segregated from such other wastes; and (B) an incineration unit shall not be considered to be combusting municipal waste for purposes of [section 7411](#) of this title or this section if it combusts a fuel feed stream, 30 percent or less of the weight of which is comprised, in aggregate, of municipal waste.

(6) Other terms

The terms “solid waste” and “medical waste” shall have the meanings established by the Administrator pursuant to the Solid Waste Disposal Act [[42 U.S.C.A. § 6901 et seq.](#)].

(h) Other authority**(1) State authority**

Nothing in this section shall preclude or deny the right of any State or political subdivision thereof to adopt or enforce any regulation, requirement, limitation or standard relating to solid waste incineration units that is more stringent than a regulation, requirement, limitation or standard in effect under this section or under any other provision of this chapter.

(2) Other authority under this chapter

Nothing in this section shall diminish the authority of the Administrator or a State to establish any other requirements applicable to solid waste incineration units under any other authority of law, including the authority to establish for any air pollutant a national ambient air quality standard, except that no solid waste incineration unit subject to performance standards under this section and [section 7411](#) of this title shall be subject to standards under [section 7412\(d\)](#) of this title.

(3) Residual risk

The Administrator shall promulgate standards under [section 7412\(f\)](#) of this title for a category of solid waste incineration units, if promulgation of such standards is required under [section 7412\(f\)](#) of this title. For purposes of this ³ preceding sentence only--

(A) the performance standards under subsection (a) of this section and [section 7411](#) of this title applicable to a category of solid waste incineration units shall be deemed standards under [section 7412\(d\)\(2\)](#) of this title, and

(B) the Administrator shall consider and regulate, if required, the pollutants listed under subsection (a)(4) of this section and no others.

(4) Acid rain

A solid waste incineration unit shall not be a utility unit as defined in subchapter IV-A of this chapter: *Provided*, That, more than 80 per centum of its annual average fuel consumption measured on a Btu basis, during a period or periods to be determined by the Administrator, is from a fuel (including any waste burned as a fuel) other than a fossil fuel.

(5) Requirements of parts C and D

No requirement of an applicable implementation plan under [section 7475](#) of this title (relating to construction of facilities in regions identified pursuant to [section 7407\(d\)\(1\)\(A\)\(ii\)](#) or (iii) of this title) or under [section 7502\(c\)\(5\)](#) of this title (relating to permits for construction and operation in nonattainment areas) may be used to weaken the standards in effect under this section.

Credits

(July 14, 1955, c. 360, Title I, § 129, as added Nov. 15, 1990, Pub.L. 101-549, Title III, § 305(a), 104 Stat. 2577.)

Notes of Decisions (6)

Footnotes

[1](#) So in original. Probably should be “subsection”.

[2](#) So in original. Probably should be subsection “(h)(3)”.

[3](#) So in original. Probably should be “the”.

42 U.S.C.A. § 7429, 42 USCA § 7429

Current through P.L. 112-139 approved 6-27-12

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Title 42. The Public Health and Welfare

Chapter 85. Air Pollution Prevention and Control (Refs & Annos)

Subchapter II. Emission Standards for Moving Sources

Part A. Motor Vehicle Emission and Fuel Standards (Refs & Annos)

42 U.S.C.A. § 7521

§ 7521. Emission standards for new motor vehicles or new motor vehicle engines

Currentness

(a) Authority of Administrator to prescribe by regulation

Except as otherwise provided in subsection (b) of this section--

(1) The Administrator shall by regulation prescribe (and from time to time revise) in accordance with the provisions of this section, standards applicable to the emission of any air pollutant from any class or classes of new motor vehicles or new motor vehicle engines, which in his judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare. Such standards shall be applicable to such vehicles and engines for their useful life (as determined under subsection (d) of this section, relating to useful life of vehicles for purposes of certification), whether such vehicles and engines are designed as complete systems or incorporate devices to prevent or control such pollution.

(2) Any regulation prescribed under paragraph (1) of this subsection (and any revision thereof) shall take effect after such period as the Administrator finds necessary to permit the development and application of the requisite technology, giving appropriate consideration to the cost of compliance within such period.

(3)(A) In general

(i) Unless the standard is changed as provided in subparagraph (B), regulations under paragraph (1) of this subsection applicable to emissions of hydrocarbons, carbon monoxide, oxides of nitrogen, and particulate matter from classes or categories of heavy-duty vehicles or engines manufactured during or after model year 1983 shall contain standards which reflect the greatest degree of emission reduction achievable through the application of technology which the Administrator determines will be available for the model year to which such standards apply, giving appropriate consideration to cost, energy, and safety factors associated with the application of such technology.

(ii) In establishing classes or categories of vehicles or engines for purposes of regulations under this paragraph, the Administrator may base such classes or categories on gross vehicle weight, horsepower, type of fuel used, or other appropriate factors.

(B) Revised standards for heavy duty trucks

(i) On the basis of information available to the Administrator concerning the effects of air pollutants emitted from heavy-duty vehicles or engines and from other sources of mobile source related pollutants on the public health and welfare, and taking costs into account, the Administrator may promulgate regulations under paragraph (1) of this subsection revising any standard promulgated under, or before the date of, the enactment of the Clean Air Act Amendments of 1990 (or previously revised under this subparagraph) and applicable to classes or categories of heavy-duty vehicles or engines.

(ii) Effective for the model year 1998 and thereafter, the regulations under paragraph (1) of this subsection applicable to emissions of oxides of nitrogen (NO_x) from gasoline and diesel-fueled heavy duty trucks shall contain standards which provide that such emissions may not exceed 4.0 grams per brake horsepower hour (gbh).

(C) Lead time and stability

Any standard promulgated or revised under this paragraph and applicable to classes or categories of heavy-duty vehicles or engines shall apply for a period of no less than 3 model years beginning no earlier than the model year commencing 4 years after such revised standard is promulgated.

(D) Rebuilding practices

The Administrator shall study the practice of rebuilding heavy-duty engines and the impact rebuilding has on engine emissions. On the basis of that study and other information available to the Administrator, the Administrator may prescribe requirements to control rebuilding practices, including standards applicable to emissions from any rebuilt heavy-duty engines (whether or not the engine is past its statutory useful life), which in the Administrator's judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare taking costs into account. Any regulation shall take effect after a period the Administrator finds necessary to permit the development and application of the requisite control measures, giving appropriate consideration to the cost of compliance within the period and energy and safety factors.

(E) Motorcycles

For purposes of this paragraph, motorcycles and motorcycle engines shall be treated in the same manner as heavy-duty vehicles and engines (except as otherwise permitted under [section 7525\(f\)\(1\)](#) of this title) unless the Administrator promulgates a rule reclassifying motorcycles as light-duty vehicles within the meaning of this section or unless the Administrator promulgates regulations under subsection (a) of this section applying standards applicable to the emission of air pollutants from motorcycles as a separate class or category. In any case in which such standards are promulgated for such emissions from motorcycles as a separate class or category, the Administrator, in promulgating such standards, shall consider the need to achieve equivalency of emission reductions between motorcycles and other motor vehicles to the maximum extent practicable.

(4)(A) Effective with respect to vehicles and engines manufactured after model year 1978, no emission control device, system, or element of design shall be used in a new motor vehicle or new motor vehicle engine for purposes of complying with requirements prescribed under this subchapter if such device, system, or element of design will cause or contribute to an unreasonable risk to public health, welfare, or safety in its operation or function.

(B) In determining whether an unreasonable risk exists under subparagraph (A), the Administrator shall consider, among other factors, (i) whether and to what extent the use of any device, system, or element of design causes, increases, reduces, or eliminates emissions of any unregulated pollutants; (ii) available methods for reducing or eliminating any risk to public health, welfare, or safety which may be associated with the use of such device, system, or element of design, and (iii) the availability of other devices, systems, or elements of design which may be used to conform to requirements prescribed under this subchapter without causing or contributing to such unreasonable risk. The Administrator shall include in the consideration required by this paragraph all relevant information developed pursuant to [section 7548](#) of this title.

(5)(A) If the Administrator promulgates final regulations which define the degree of control required and the test procedures by which compliance could be determined for gasoline vapor recovery of uncontrolled emissions from the fueling of motor vehicles, the Administrator shall, after consultation with the Secretary of Transportation with respect to motor vehicle safety, prescribe, by regulation, fill pipe standards for new motor vehicles in order to insure effective connection between such fill pipe and any vapor recovery system which the Administrator determines may be required to comply with such vapor recovery regulations. In promulgating such standards the Administrator shall take into consideration limits on fill pipe diameter, minimum design criteria for nozzle retainer lips, limits on the location of the unleaded fuel restrictors, a minimum access zone surrounding a fill pipe, a minimum pipe or nozzle insertion angle, and such other factors as he deems pertinent.

(B) Regulations prescribing standards under subparagraph (A) shall not become effective until the introduction of the model year for which it would be feasible to implement such standards, taking into consideration the restraints of an adequate leadtime for design and production.

(C) Nothing in subparagraph (A) shall (i) prevent the Administrator from specifying different nozzle and fill neck sizes for gasoline with additives and gasoline without additives or (ii) permit the Administrator to require a specific location, configuration, modeling, or styling of the motor vehicle body with respect to the fuel tank fill neck or fill nozzle clearance envelope.

(D) For the purpose of this paragraph, the term “fill pipe” shall include the fuel tank fill pipe, fill neck, fill inlet, and closure.

(6) Onboard vapor recovery

Within 1 year after November 15, 1990, the Administrator shall, after consultation with the Secretary of Transportation regarding the safety of vehicle-based (“onboard”) systems for the control of vehicle refueling emissions, promulgate standards under this section requiring that new light-duty vehicles manufactured beginning in the fourth model year after the model year in which the standards are promulgated and thereafter shall be equipped with such systems. The standards required under this paragraph shall apply to a percentage of each manufacturer's fleet of new light-duty vehicles beginning with the fourth model year after the model year in which the standards are promulgated. The percentage shall be as specified in the following table:

IMPLEMENTATION SCHEDULE FOR ONBOARD VAPOR RECOVERY REQUIREMENTS

| Model year commencing after standards promulgated | Percentage* |
|--|-------------|
| Fourth..... | 40 |
| Fifth..... | 80 |
| After Fifth..... | 100 |

*Percentages in the table refer to a percentage of the manufacturer's sales volume.

The standards shall require that such systems provide a minimum evaporative emission capture efficiency of 95 percent. The requirements of [section 7511a\(b\)\(3\)](#) of this title (relating to stage II gasoline vapor recovery) for areas classified under [section 7511](#) of this title as moderate for ozone shall not apply after promulgation of such standards and the Administrator may, by rule, revise or waive the application of the requirements of such [section 7511a\(b\)\(3\)](#) of this title for areas classified under [section 7511](#) of this title as Serious, Severe, or Extreme for ozone, as appropriate, after such time as the Administrator determines that onboard emissions control systems required under this paragraph are in widespread use throughout the motor vehicle fleet.

(b) Emissions of carbon monoxide, hydrocarbons, and oxides of nitrogen; annual report to Congress; waiver of emission standards; research objectives

(1)(A) The regulations under subsection (a) of this section applicable to emissions of carbon monoxide and hydrocarbons from light-duty vehicles and engines manufactured during model years 1977 through 1979 shall contain standards which provide that such emissions from such vehicles and engines may not exceed 1.5 grams per vehicle mile of hydrocarbons and 15.0 grams per vehicle mile of carbon monoxide. The regulations under subsection (a) of this section applicable to emissions of carbon monoxide from light-duty vehicles and engines manufactured during the model year 1980 shall contain standards which provide that such emissions may not exceed 7.0 grams per vehicle mile. The regulations under subsection (a) of this section applicable to emissions of hydrocarbons from light-duty vehicles and engines manufactured during or after model year 1980 shall contain standards which require a reduction of at least 90 percent from emissions of such pollutant allowable under the standards under this section applicable to light-duty vehicles and engines manufactured in model year 1970. Unless waived as provided in paragraph (5), regulations under subsection (a) of this section applicable to emissions of carbon monoxide from light-duty vehicles and engines manufactured during or after the model year 1981 shall contain standards which require a reduction of at least 90 percent from emissions of such pollutant allowable under the standards under this section applicable to light-duty vehicles and engines manufactured in model year 1970.

(B) The regulations under subsection (a) of this section applicable to emissions of oxides of nitrogen from light-duty vehicles and engines manufactured during model years 1977 through 1980 shall contain standards which provide that such emissions from such vehicles and engines may not exceed 2.0 grams per vehicle mile. The regulations under subsection (a) of this section applicable to emissions of oxides of nitrogen from light-duty vehicles and engines manufactured during the model year 1981 and thereafter shall contain standards which provide that such emissions from such vehicles and engines may not exceed 1.0 gram per vehicle mile. The Administrator shall prescribe standards in lieu of those required by the preceding sentence, which provide that emissions of oxides of nitrogen may not exceed 2.0 grams per vehicle mile for any light-duty vehicle manufactured during model years 1981 and 1982 by any manufacturer whose production, by corporate identity, for calendar year 1976 was less than three hundred thousand light-duty motor vehicles worldwide if the Administrator determines that--

(i) the ability of such manufacturer to meet emission standards in the 1975 and subsequent model years was, and is, primarily dependent upon technology developed by other manufacturers and purchased from such manufacturers; and

(ii) such manufacturer lacks the financial resources and technological ability to develop such technology.

(C) The Administrator may promulgate regulations under subsection (a)(1) of this section revising any standard prescribed or previously revised under this subsection, as needed to protect public health or welfare, taking costs, energy, and safety into account. Any revised standard shall require a reduction of emissions from the standard that was previously applicable. Any such revision under this subchapter may provide for a phase-in of the standard. It is the intent of Congress that the numerical emission standards specified in subsections (a)(3)(B)(ii), (g), (h), and (i) of this section shall not be modified by the Administrator after November 15, 1990, for any model year before the model year 2004.

(2) Emission standards under paragraph (1), and measurement techniques on which such standards are based (if not promulgated prior to November 15, 1990), shall be promulgated by regulation within 180 days after November 15, 1990.

(3) For purposes of this part--

(A)(i) The term "model year" with reference to any specific calendar year means the manufacturer's annual production period (as determined by the Administrator) which includes January 1 of such calendar year. If the manufacturer has no annual production period, the term "model year" shall mean the calendar year.

(ii) For the purpose of assuring that vehicles and engines manufactured before the beginning of a model year were not manufactured for purposes of circumventing the effective date of a standard required to be prescribed by subsection (b) of this section, the Administrator may prescribe regulations defining "model year" otherwise than as provided in clause (i).

(B) Repealed. Pub.L. 101-549, Title II, § 230(1), Nov. 15, 1990, 104 Stat. 2529.

(C) The term "heavy duty vehicle" means a truck, bus, or other vehicle manufactured primarily for use on the public streets, roads, and highways (not including any vehicle operated exclusively on a rail or rails) which has a gross vehicle weight (as determined under regulations promulgated by the Administrator) in excess of six thousand pounds. Such term includes any such vehicle which has special features enabling off-street or off-highway operation and use.

(3)¹ Upon the petition of any manufacturer, the Administrator, after notice and opportunity for public hearing, may waive the standard required under subparagraph (B) of paragraph (1) to not exceed 1.5 grams of oxides of nitrogen per vehicle mile for any class or category of light-duty vehicles or engines manufactured by such manufacturer during any period of up to four model years beginning after the model year 1980 if the manufacturer demonstrates that such waiver is necessary to permit the use of an innovative power train technology, or innovative emission control device or system, in such class or category of vehicles or engines and that such technology or system was not utilized by more than 1 percent of the light-duty vehicles sold in the United States in the 1975 model year. Such waiver may be granted only if the Administrator determines--

(A) that such waiver would not endanger public health,

(B) that there is a substantial likelihood that the vehicles or engines will be able to comply with the applicable standard under this section at the expiration of the waiver, and

(C) that the technology or system has a potential for long-term air quality benefit and has the potential to meet or exceed the average fuel economy standard applicable under the Energy Policy and Conservation Act [42 U.S.C.A. § 6201 et seq.] upon the expiration of the waiver.

No waiver under this subparagraph² granted to any manufacturer shall apply to more than 5 percent of such manufacturer's production or more than fifty thousand vehicles or engines, whichever is greater.

(c) Feasibility study and investigation by National Academy of Sciences; reports to Administrator and Congress; availability of information

(1) The Administrator shall undertake to enter into appropriate arrangements with the National Academy of Sciences to conduct a comprehensive study and investigation of the technological feasibility of meeting the emissions standards required to be prescribed by the Administrator by subsection (b) of this section.

(2) Of the funds authorized to be appropriated to the Administrator by this chapter, such amounts as are required shall be available to carry out the study and investigation authorized by paragraph (1) of this subsection.

(3) In entering into any arrangement with the National Academy of Sciences for conducting the study and investigation authorized by paragraph (1) of this subsection, the Administrator shall request the National Academy of Sciences to submit semiannual reports on the progress of its study and investigation to the Administrator and the Congress, beginning not later than July 1, 1971, and continuing until such study and investigation is completed.

(4) The Administrator shall furnish to such Academy at its request any information which the Academy deems necessary for the purpose of conducting the investigation and study authorized by paragraph (1) of this subsection. For the purpose of furnishing such information, the Administrator may use any authority he has under this chapter (A) to obtain information from any person, and (B) to require such person to conduct such tests, keep such records, and make such reports respecting research or other activities conducted by such person as may be reasonably necessary to carry out this subsection.

(d) Useful life of vehicles

The Administrator shall prescribe regulations under which the useful life of vehicles and engines shall be determined for purposes of subsection (a)(1) of this section and [section 7541](#) of this title. Such regulations shall provide that except where a different useful life period is specified in this subchapter useful life shall--

(1) in the case of light duty vehicles and light duty vehicle engines and light-duty trucks up to 3,750 lbs. LVW and up to 6,000 lbs. GVWR, be a period of use of five years or fifty thousand miles (or the equivalent), whichever first occurs, except that in the case of any requirement of this section which first becomes applicable after November 15, 1990, where the useful life period is not otherwise specified for such vehicles and engines, the period shall be 10 years or 100,000 miles (or the equivalent), whichever first occurs, with testing for purposes of in-use compliance under [section 7541](#) of this title up to (but not beyond) 7 years or 75,000 miles (or the equivalent), whichever first occurs;

(2) in the case of any other motor vehicle or motor vehicle engine (other than motorcycles or motorcycle engines), be a period of use set forth in paragraph (1) unless the Administrator determines that a period of use of greater duration or mileage is appropriate; and

(3) in the case of any motorcycle or motorcycle engine, be a period of use the Administrator shall determine.

(e) New power sources or propulsion systems

In the event of a new power source or propulsion system for new motor vehicles or new motor vehicle engines is submitted for certification pursuant to [section 7525\(a\)](#) of this title, the Administrator may postpone certification until he has prescribed

standards for any air pollutants emitted by such vehicle or engine which in his judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger the public health or welfare but for which standards have not been prescribed under subsection (a) of this section.

(f) ³ High altitude regulations

(1) The high altitude regulation in effect with respect to model year 1977 motor vehicles shall not apply to the manufacture, distribution, or sale of 1978 and later model year motor vehicles. Any future regulation affecting the sale or distribution of motor vehicles or engines manufactured before the model year 1984 in high altitude areas of the country shall take effect no earlier than model year 1981.

(2) Any such future regulation applicable to high altitude vehicles or engines shall not require a percentage of reduction in the emissions of such vehicles which is greater than the required percentage of reduction in emissions from motor vehicles as set forth in subsection (b) of this section. This percentage reduction shall be determined by comparing any proposed high altitude emission standards to high altitude emissions from vehicles manufactured during model year 1970. In no event shall regulations applicable to high altitude vehicles manufactured before the model year 1984 establish a numerical standard which is more stringent than that applicable to vehicles certified under non-high altitude conditions.

(3) Section 7607(d) of this title shall apply to any high altitude regulation referred to in paragraph (2) and before promulgating any such regulation, the Administrator shall consider and make a finding with respect to--

(A) the economic impact upon consumers, individual high altitude dealers, and the automobile industry of any such regulation, including the economic impact which was experienced as a result of the regulation imposed during model year 1977 with respect to high altitude certification requirements;

(B) the present and future availability of emission control technology capable of meeting the applicable vehicle and engine emission requirements without reducing model availability; and

(C) the likelihood that the adoption of such a high altitude regulation will result in any significant improvement in air quality in any area to which it shall apply.

(g) Light-duty trucks up to 6,000 lbs. GVWR and light-duty vehicles; standards for model years after 1993

(1) NMHC, CO, and NO_x

Effective with respect to the model year 1994 and thereafter, the regulations under subsection (a) of this section applicable to emissions of nonmethane hydrocarbons (NMHC), carbon monoxide (CO), and oxides of nitrogen (NO_x) from light-duty trucks (LDTs) of up to 6,000 lbs. gross vehicle weight rating (GVWR) and light-duty vehicles (LDVs) shall contain standards which provide that emissions from a percentage of each manufacturer's sales volume of such vehicles and trucks shall comply with the levels specified in table G. The percentage shall be as specified in the implementation schedule below:

TABLE G--EMISSION STANDARDS FOR NMHC, CO, AND NO_x FROM LIGHT-DUTY TRUCKS OF UP TO 6,000 LBS. GVWR AND LIGHT-DUTY VEHICLES

| Vehicle type | Column A | | | Column B | | |
|--|-------------------|-----|-----------------|---------------------|-----|-----------------|
| | (5 yrs/50,000 mi) | | | (10 yrs/100,000 mi) | | |
| | NMHC | CO | NO _x | NMHC | CO | NO _x |
| LDTs (0-3,750 lbs. LVW) and light-duty vehicles..... | 0.25 | 3.4 | 0.4* | 0.31 | 4.2 | 0.6* |
| LDTs (3,751-5,750 lbs. LVW)..... | 0.32 | 4.4 | 0.7** | 0.40 | 5.5 | 0.97 |

Standards are expressed in grams per mile (gpm).

For standards under column A, for purposes of certification under section 7525 of this title, the applicable useful life shall be 5 years or 50,000 miles (or the equivalent), whichever first occurs.

For standards under column B, for purposes of certification under section 7525 of this title, the applicable useful life shall be 10 years or 100,000 miles (or the equivalent), whichever first occurs.

* In the case of diesel-fueled LDTs (0-3,750 lvw) and light-duty vehicles, before the model year 2004, in lieu of the 0.4 and 0.6 standards for NO_x, the applicable standards for NO_x shall be 1.0 gpm for a useful life of 5 years or 50,000 miles (or the equivalent), whichever first occurs, and 1.25 gpm for a useful life of 10 years or 100,000 miles (or the equivalent), whichever first occurs.

** This standard does not apply to diesel-fueled LDTs (3,751-5,750 lbs. LVW).

IMPLEMENTATION SCHEDULE FOR TABLE G STANDARDS

| Model year | Percentage * |
|-----------------|--------------|
| 1994..... | 40 |
| 1995..... | 80 |
| after 1995..... | 100 |

(2) PM Standard

Effective with respect to model year 1994 and thereafter in the case of light-duty vehicles, and effective with respect to the model year 1995 and thereafter in the case of light-duty trucks (LDTs) of up to 6,000 lbs. gross vehicle weight rating (GVWR), the regulations under subsection (a) of this section applicable to emissions of particulate matter (PM) from such vehicles and trucks shall contain standards which provide that such emissions from a percentage of each manufacturer's sales volume of such vehicles and trucks shall not exceed the levels specified in the table below. The percentage shall be as specified in the Implementation Schedule below.

PM STANDARD FOR LDTS OF UP TO 6,000 LBS. GVWR

| Useful life period | Standard |
|--------------------|----------|
| 5/50,000..... | 0.80 gpm |
| 10/100,000..... | 0.10 gpm |

The applicable useful life, for purposes of certification under [section 7525](#) of this title and for purposes of in-use compliance under [section 7541](#) of this title, shall be 5 years or 50,000 miles (or the equivalent), whichever first occurs, in the case of the 5/50,000 standard.

The applicable useful life, for purposes of certification under [section 7525](#) of this title and for purposes of in-use compliance under [section 7541](#) of this title, shall be 10 years or 100,000 miles (or the equivalent), whichever first occurs in the case of the 10/100,000 standard.

IMPLEMENTATION SCHEDULE FOR PM STANDARDS

| Model year | Light-duty vehicles | LDTs |
|-----------------|---------------------|--------|
| 1994..... | 40% * | |
| 1995..... | 80% * | 40% * |
| 1996..... | 100% * | 80% * |
| after 1996..... | 100% * | 100% * |

(h) Light-duty trucks of more than 6,000 lbs. GVWR; standards for model years after 1995

Effective with respect to the model year 1996 and thereafter, the regulations under subsection (a) of this section applicable to emissions of nonmethane hydrocarbons (NMHC), carbon monoxide (CO), oxides of nitrogen (NO_x), and particulate matter

(PM) from light-duty trucks (LDTs) of more than 6,000 lbs. gross vehicle weight rating (GVWR) shall contain standards which provide that emissions from a specified percentage of each manufacturer's sales volume of such trucks shall comply with the levels specified in table H. The specified percentage shall be 50 percent in model year 1996 and 100 percent thereafter.

TABLE H--EMISSION STANDARDS FOR NMHC AND CO FROM GASOLINE AND DIESEL FUELED LIGHT-DUTY TRUCKS OF MORE THAN 6,000 LBS. GVWR

| LDT Test weight | Column A | | | Column B | | | |
|---------------------|-------------------|-----|-----------------|---------------------|-----|-----------------|------|
| | (5 yrs/50,000 mi) | | | (11 yrs/120,000 mi) | | | |
| | NMHC | CO | NO _x | NMHC | CO | NO _x | PM |
| 3,751-5,750 lbs. TW | 0.32 | 4.4 | 0.7* | 0.46 | 6.4 | 0.98 | 0.10 |
| Over 5,750 lbs. TW | 0.39 | 5.0 | 1.1* | 0.56 | 7.3 | 1.53 | 0.12 |

Standards are expressed in grams per mile (GPM).

For standards under column A, for purposes of certification under section 7525 of this title, the applicable useful life shall be 5 years or 50,000 miles (or the equivalent) whichever first occurs.

For standards under column B, for purposes of certification under section 7525 of this title, the applicable useful life shall be 11 years or 120,000 miles (or the equivalent), whichever first occurs.

* Not applicable to diesel-fueled LDTs.

(i) Phase II study for certain light-duty vehicles and light-duty trucks

(1) The Administrator, with the participation of the Office of Technology Assessment, shall study whether or not further reductions in emissions from light-duty vehicles and light-duty trucks should be required pursuant to this subchapter. The study shall consider whether to establish with respect to model years commencing after January 1, 2003, the standards and useful life period for gasoline and diesel-fueled light-duty vehicles and light-duty trucks with a loaded vehicle weight (LVW) of 3,750 lbs. or less specified in the following table:

TABLE 3--PENDING EMISSION STANDARDS FOR GASOLINE AND DIESEL FUELED LIGHT-DUTY VEHICLES AND LIGHT-DUTY TRUCKS 3,750 LBS. LVW OR LESS

| Pollutant | Emission level * |
|-----------------------|------------------|
| NMHC..... | 0.125 GPM |
| NO _x | 0.2 GPM |
| CO..... | 1.7 GPM |

Such study shall also consider other standards and useful life periods which are more stringent or less stringent than those set forth in table 3 (but more stringent than those referred to in subsections (g) and (h) of this section).

(2)(A) As part of the study under paragraph (1), the Administrator shall examine the need for further reductions in emissions in order to attain or maintain the national ambient air quality standards, taking into consideration the waiver provisions of [section 7543\(b\)](#) of this title. As part of such study, the Administrator shall also examine--

(i) the availability of technology (including the costs thereof), in the case of light-duty vehicles and light-duty trucks with a loaded vehicle weight (LVW) of 3,750 lbs. or less, for meeting more stringent emission standards than those provided in subsections (g) and (h) of this section for model years commencing not earlier than after January 1, 2003, and not later than model year 2006, including the lead time and safety and energy impacts of meeting more stringent emission standards; and

(ii) the need for, and cost effectiveness of, obtaining further reductions in emissions from such light-duty vehicles and light-duty trucks, taking into consideration alternative means of attaining or maintaining the national primary ambient air quality

standards pursuant to State implementation plans and other requirements of this chapter, including their feasibility and cost effectiveness.

(B) The Administrator shall submit a report to Congress no later than June 1, 1997, containing the results of the study under this subsection, including the results of the examination conducted under subparagraph (A). Before submittal of such report the Administrator shall provide a reasonable opportunity for public comment and shall include a summary of such comments in the report to Congress.

(3)(A) Based on the study under paragraph (1) the Administrator shall determine, by rule, within 3 calendar years after the report is submitted to Congress, but not later than December 31, 1999, whether--

(i) there is a need for further reductions in emissions as provided in paragraph (2)(A);

(ii) the technology for meeting more stringent emission standards will be available, as provided in paragraph (2)(A)(i), in the case of light-duty vehicles and light-duty trucks with a loaded vehicle weight (LVW) of 3,750 lbs. or less, for model years commencing not earlier than January 1, 2003, and not later than model year 2006, considering the factors listed in paragraph (2)(A)(i); and

(iii) obtaining further reductions in emissions from such vehicles will be needed and cost effective, taking into consideration alternatives as provided in paragraph (2)(A)(ii).

The rulemaking under this paragraph shall commence within 3 months after submission of the report to Congress under paragraph (2)(B).

(B) If the Administrator determines under subparagraph (A) that--

(i) there is no need for further reductions in emissions as provided in paragraph (2)(A);

(ii) the technology for meeting more stringent emission standards will not be available as provided in paragraph (2)(A)(i), in the case of light-duty vehicles and light-duty trucks with a loaded vehicle weight (LVW) of 3,750 lbs. or less, for model years commencing not earlier than January 1, 2003, and not later than model year 2006, considering the factors listed in paragraph (2)(A)(i); or

(iii) obtaining further reductions in emissions from such vehicles will not be needed or cost effective, taking into consideration alternatives as provided in paragraph (2)(A)(ii),

the Administrator shall not promulgate more stringent standards than those in effect pursuant to subsections (g) and (h) of this section. Nothing in this paragraph shall prohibit the Administrator from exercising the Administrator's authority under subsection (a) of this section to promulgate more stringent standards for light-duty vehicles and light-duty trucks with a loaded vehicle weight (LVW) of 3,750 lbs. or less at any other time thereafter in accordance with subsection (a) of this section.

(C) If the Administrator determines under subparagraph (A) that--

(i) there is a need for further reductions in emissions as provided in paragraph (2)(A);

(ii) the technology for meeting more stringent emission standards will be available, as provided in paragraph (2)(A)(i), in the case of light-duty vehicles and light-duty trucks with a loaded vehicle weight (LVW) of 3,750 lbs. or less, for model years commencing not earlier than January 1, 2003, and not later than model year 2006, considering the factors listed in paragraph (2)(A)(i); and

(iii) obtaining further reductions in emissions from such vehicles will be needed and cost effective, taking into consideration alternatives as provided in paragraph (2)(A)(ii),

the Administrator shall either promulgate the standards (and useful life periods) set forth in Table 3 in paragraph (1) or promulgate alternative standards (and useful life periods) which are more stringent than those referred to in subsections (g) and (h) of this section. Any such standards (or useful life periods) promulgated by the Administrator shall take effect with respect

to any such vehicles or engines no earlier than the model year 2003 but not later than model year 2006, as determined by the Administrator in the rule.

(D) Nothing in this paragraph shall be construed by the Administrator or by a court as a presumption that any standards (or useful life period) set forth in Table 3 shall be promulgated in the rulemaking required under this paragraph. The action required of the Administrator in accordance with this paragraph shall be treated as a nondiscretionary duty for purposes of [section 7604\(a\)\(2\)](#) of this title (relating to citizen suits).

(E) Unless the Administrator determines not to promulgate more stringent standards as provided in subparagraph (B) or to postpone the effective date of standards referred to in Table 3 in paragraph (1) or to establish alternative standards as provided in subparagraph (C), effective with respect to model years commencing after January 1, 2003, the regulations under subsection (a) of this section applicable to emissions of nonmethane hydrocarbons (NMHC), oxides of nitrogen (NO_x), and carbon monoxide (CO) from motor vehicles and motor vehicle engines in the classes specified in Table 3 in paragraph (1) above shall contain standards which provide that emissions may not exceed the pending emission levels specified in Table 3 in paragraph (1).

(j) Cold CO standard

(1) Phase I

Not later than 12 months after November 15, 1990, the Administrator shall promulgate regulations under subsection (a) of this section applicable to emissions of carbon monoxide from 1994 and later model year light-duty vehicles and light-duty trucks when operated at 20 degrees Fahrenheit. The regulations shall contain standards which provide that emissions of carbon monoxide from a manufacturer's vehicles when operated at 20 degrees Fahrenheit may not exceed, in the case of light-duty vehicles, 10.0 grams per mile, and in the case of light-duty trucks, a level comparable in stringency to the standard applicable to light-duty vehicles. The standards shall take effect after model year 1993 according to a phase-in schedule which requires a percentage of each manufacturer's sales volume of light-duty vehicles and light-duty trucks to comply with applicable standards after model year 1993. The percentage shall be as specified in the following table:

PHASE-IN SCHEDULE FOR COLD START STANDARDS

| Model Year | Percentage |
|---------------------|------------|
| 1994..... | 40 |
| 1995..... | 80 |
| 1996 and after..... | 100 |

(2) Phase II

(A) Not later than June 1, 1997, the Administrator shall complete a study assessing the need for further reductions in emissions of carbon monoxide and the maximum reductions in such emissions achievable from model year 2001 and later model year light-duty vehicles and light-duty trucks when operated at 20 degrees Fahrenheit.

(B)(i) If as of June 1, 1997, 6 or more nonattainment areas have a carbon monoxide design value of 9.5 ppm or greater, the regulations under subsection (a)(1) of this section applicable to emissions of carbon monoxide from model year 2002 and later model year light-duty vehicles and light-duty trucks shall contain standards which provide that emissions of carbon monoxide from such vehicles and trucks when operated at 20 degrees Fahrenheit may not exceed 3.4 grams per mile (gpm) in the case of light-duty vehicles and 4.4 grams per mile (gpm) in the case of light-duty trucks up to 6,000 GVWR and a level comparable in stringency in the case of light-duty trucks 6,000 GVWR and above.

(ii) In determining for purposes of this subparagraph whether 6 or more nonattainment areas have a carbon monoxide design value of 9.5 ppm or greater, the Administrator shall exclude the areas of Steubenville, Ohio, and Oshkosh, Wisconsin.

(3) Useful-life for phase I and phase II standards

In the case of the standards referred to in paragraphs (1) and (2), for purposes of certification under [section 7525](#) of this title and in-use compliance under [section 7541](#) of this title, the applicable useful life period shall be 5 years or 50,000 miles,

whichever first occurs, except that the Administrator may extend such useful life period (for purposes of [section 7525](#) of this title, or [section 7541](#) of this title, or both) if he determines that it is feasible for vehicles and engines subject to such standards to meet such standards for a longer useful life. If the Administrator extends such useful life period, the Administrator may make an appropriate adjustment of applicable standards for such extended useful life. No such extended useful life shall extend beyond the useful life period provided in regulations under subsection (d) of this section.

(4) Heavy-duty vehicles and engines

The Administrator may also promulgate regulations under subsection (a)(1) of this section applicable to emissions of carbon monoxide from heavy-duty vehicles and engines when operated at cold temperatures.

(k) Control of evaporative emissions

The Administrator shall promulgate (and from time to time revise) regulations applicable to evaporative emissions of hydrocarbons from all gasoline-fueled motor vehicles--

(1) during operation; and

(2) over 2 or more days of nonuse;

under ozone-prone summertime conditions (as determined by regulations of the Administrator). The regulations shall take effect as expeditiously as possible and shall require the greatest degree of emission reduction achievable by means reasonably expected to be available for production during any model year to which the regulations apply, giving appropriate consideration to fuel volatility, and to cost, energy, and safety factors associated with the application of the appropriate technology. The Administrator shall commence a rulemaking under this subsection within 12 months after November 15, 1990. If final regulations are not promulgated under this subsection within 18 months after November 15, 1990, the Administrator shall submit a statement to the Congress containing an explanation of the reasons for the delay and a date certain for promulgation of such final regulations in accordance with this chapter. Such date certain shall not be later than 15 months after the expiration of such 18 month deadline.

(l) Mobile source-related air toxics

(1) Study

Not later than 18 months after November 15, 1990, the Administrator shall complete a study of the need for, and feasibility of, controlling emissions of toxic air pollutants which are unregulated under this chapter and associated with motor vehicles and motor vehicle fuels, and the need for, and feasibility of, controlling such emissions and the means and measures for such controls. The study shall focus on those categories of emissions that pose the greatest risk to human health or about which significant uncertainties remain, including emissions of benzene, formaldehyde, and 1, 3 butadiene. The proposed report shall be available for public review and comment and shall include a summary of all comments.

(2) Standards

Within 54 months after November 15, 1990, the Administrator shall, based on the study under paragraph (1), promulgate (and from time to time revise) regulations under subsection (a)(1) of this section or [section 7545\(c\)\(1\)](#) of this title containing reasonable requirements to control hazardous air pollutants from motor vehicles and motor vehicle fuels. The regulations shall contain standards for such fuels or vehicles, or both, which the Administrator determines reflect the greatest degree of emission reduction achievable through the application of technology which will be available, taking into consideration the standards established under subsection (a) of this section, the availability and costs of the technology, and noise, energy, and safety factors, and lead time. Such regulations shall not be inconsistent with standards under subsection (a) of this section. The regulations shall, at a minimum, apply to emissions of benzene and formaldehyde.

(m) Emissions control diagnostics

(1) Regulations

Within 18 months after November 15, 1990, the Administrator shall promulgate regulations under subsection (a) of this section requiring manufacturers to install on all new light duty vehicles and light duty trucks diagnostics systems capable of--

(A) accurately identifying for the vehicle's useful life as established under this section, emission-related systems deterioration or malfunction, including, at a minimum, the catalytic converter and oxygen sensor, which could cause or result in failure of the vehicles to comply with emission standards established under this section,

(B) alerting the vehicle's owner or operator to the likely need for emission-related components or systems maintenance or repair,

(C) storing and retrieving fault codes specified by the Administrator, and

(D) providing access to stored information in a manner specified by the Administrator.

The Administrator may, in the Administrator's discretion, promulgate regulations requiring manufacturers to install such onboard diagnostic systems on heavy-duty vehicles and engines.

(2) Effective date

The regulations required under paragraph (1) of this subsection shall take effect in model year 1994, except that the Administrator may waive the application of such regulations for model year 1994 or 1995 (or both) with respect to any class or category of motor vehicles if the Administrator determines that it would be infeasible to apply the regulations to that class or category in such model year or years, consistent with corresponding regulations or policies adopted by the California Air Resources Board for such systems.

(3) State inspection

The Administrator shall by regulation require States that have implementation plans containing motor vehicle inspection and maintenance programs to amend their plans within 2 years after promulgation of such regulations to provide for inspection of onboard diagnostics systems (as prescribed by regulations under paragraph (1) of this subsection) and for the maintenance or repair of malfunctions or system deterioration identified by or affecting such diagnostics systems. Such regulations shall not be inconsistent with the provisions for warranties promulgated under [section 7541\(a\)](#) and [\(b\)](#) of this title.

(4) Specific requirements

In promulgating regulations under this subsection, the Administrator shall require--

(A) that any connectors through which the emission control diagnostics system is accessed for inspection, diagnosis, service, or repair shall be standard and uniform on all motor vehicles and motor vehicle engines;

(B) that access to the emission control diagnostics system through such connectors shall be unrestricted and shall not require any access code or any device which is only available from a vehicle manufacturer; and

(C) that the output of the data from the emission control diagnostics system through such connectors shall be usable without the need for any unique decoding information or device.

(5) Information availability

The Administrator, by regulation, shall require (subject to the provisions of [section 7542\(c\)](#) of this title regarding the protection of methods or processes entitled to protection as trade secrets) manufacturers to provide promptly to any person engaged in the repairing or servicing of motor vehicles or motor vehicle engines, and the Administrator for use by any such persons, with any and all information needed to make use of the emission control diagnostics system prescribed under this subsection and such other information including instructions for making emission related diagnosis and repairs. No such information may be withheld under [section 7542\(c\)](#) of this title if that information is provided (directly or indirectly) by the manufacturer to franchised dealers or other persons engaged in the repair, diagnosing, or servicing of motor vehicles or motor vehicle engines. Such information shall also be available to the Administrator, subject to [section 7542\(c\)](#) of this title, in carrying out the Administrator's responsibilities under this section.

(f) ⁴ Model years after 1990

For model years prior to model year 1994, the regulations under subsection (a) of this section applicable to buses other than those subject to standards under [section 7554](#) of this title shall contain a standard which provides that emissions of particulate matter (PM) from such buses may not exceed the standards set forth in the following table:

PM STANDARD FOR BUSES

| Model year | Standard * |
|--------------------------|------------|
| 1991..... | 0.25 |
| 1992..... | 0.25 |
| 1993 and thereafter..... | 0.10 |

Credits

(July 14, 1955, c. 360, Title II, § 202, as added Oct. 20, 1965, Pub.L. 89-272, Title I, § 101(8), 79 Stat. 992; amended Nov. 21, 1967, Pub.L. 90-148, § 2, 81 Stat. 499; Dec. 31, 1970, Pub.L. 91-604, § 6(a), 84 Stat. 1690; June 22, 1974, [Pub.L. 93-319, § 5, 88 Stat. 258](#); Aug. 7, 1977, [Pub.L. 95-95, Title II, §§ 201, 202\(b\), 213\(b\), 214\(a\), 215 to 217, 224\(a\), \(b\), \(g\), Title IV, § 401\(d\), 91 Stat. 751 to 753, 758 to 761, 765, 767, 769, 791](#); Nov. 16, 1977, [Pub.L. 95-190, § 14\(a\)\(60\) to \(65\), \(b\)\(5\), 91 Stat. 1403, 1405](#); Nov. 15, 1990, [Pub.L. 101-549, Title II, §§ 201 to 207, 227\(b\), 230\(1\) to \(5\), 104 Stat. 2472 to 2481, 2507, 2529](#).)

Editors' Notes

EXECUTIVE ORDERS

EXECUTIVE ORDER NO. 13432

<May 14, 2007, [72 F.R. 27717](#)>

**COOPERATION AMONG AGENCIES IN PROTECTING THE ENVIRONMENT
WITH RESPECT TO GREENHOUSE GAS EMISSIONS FROM MOTOR
VEHICLES, NONROAD VEHICLES, AND NONROAD ENGINES**

By the authority vested in me as President by the Constitution and the laws of the United States of America, it is hereby ordered as follows:

Section 1. Policy. It is the policy of the United States to ensure the coordinated and effective exercise of the authorities of the President and the heads of the Department of Transportation, the Department of Energy, and the Environmental Protection Agency to protect the environment with respect to greenhouse gas emissions from motor vehicles, nonroad vehicles, and nonroad engines, in a manner consistent with sound science, analysis of benefits and costs, public safety, and economic growth.

Sec. 2. Definitions. As used in this order:

(a) “agencies” refers to the Department of Transportation, the Department of Energy, and the Environmental Protection Agency, and all units thereof, and “agency” refers to any of them;

(b) “alternative fuels” has the meaning specified for that term in section 301(2) of the Energy Policy Act of 1992 ([42 U.S.C. 13211\(2\)](#));

(c) “authorities” include the Clean Air Act ([42 U.S.C. 7401-7671q](#)), the Energy Policy Act of 1992 ([Public Law 102-486](#)), the Energy Policy Act of 2005 ([Public Law 109-58](#)), the Energy Policy and Conservation Act ([Public Law 94-163](#)), and any other current or future laws or regulations that may authorize or require any of the agencies to take regulatory action that directly or indirectly affects emissions of greenhouse gases from motor vehicles;

(d) “greenhouse gases” has the meaning specified for that term in [Executive Order 13423](#) of January 24, 2007;

(e) “motor vehicle” has the meaning specified for that term in section 216(2) of the Clean Air Act ([42 U.S.C. 7550\(2\)](#));

- (f) “nonroad engine” has the meaning specified for that term in section 216(10) of the Clean Air Act (42 U.S.C. 7550(10));
- (g) “nonroad vehicle” has the meaning specified for that term in section 216(11) of the Clean Air Act (42 U.S.C. 7550(11));
- (h) “regulation” has the meaning specified for that term in section 3(d) of Executive Order 12866 of September 30, 1993, as amended (Executive Order 12866); and
- (i) “regulatory action” has the meaning specified for that term in section 3(e) of Executive Order 12866.

Sec. 3. Coordination Among the Agencies. In carrying out the policy set forth in section 1 of this order, the head of an agency undertaking a regulatory action that can reasonably be expected to directly regulate emissions, or to substantially and predictably affect emissions, of greenhouse gases from motor vehicles, nonroad vehicles, nonroad engines, or the use of motor vehicle fuels, including alternative fuels, shall:

- (a) undertake such a regulatory action, to the maximum extent permitted by law and determined by the head of the agency to be practicable, jointly with the other agencies;
- (b) in undertaking such a regulatory action, consider, in accordance with applicable law, information and recommendations provided by the other agencies;
- (c) in undertaking such a regulatory action, exercise authority vested by law in the head of such agency effectively, in a manner consistent with the effective exercise by the heads of the other agencies of the authority vested in them by law; and
- (d) obtain, to the extent permitted by law, concurrence or other views from the heads of the other agencies during the development and preparation of the regulatory action and prior to any key decision points during that development and preparation process, and in no event later than 30 days prior to publication of such action.

Sec. 4. Duties of the Heads of Agencies. (a) To implement this order, the head of each agency shall:

- (1) designate appropriate personnel within the agency to (i) direct the agency's implementation of this order, (ii) ensure that the agency keeps the other agencies and the Office of Management and Budget informed of the agency regulatory actions to which section 3 refers, and (iii) coordinate such actions with the agencies;
 - (2) in coordination as appropriate with the Committee on Climate Change Science and Technology, continue to conduct and share research designed to advance technologies to further the policy set forth in section 1 of this order;
 - (3) facilitate the sharing of personnel and the sharing of information among the agencies to further the policy set forth in section 1 of this order;
 - (4) coordinate with the other agencies to avoid duplication of requests to the public for information from the public in the course of undertaking such regulatory action, consistent with the Paperwork Reduction Act (44 U.S.C. 3501 et seq.); and
 - (5) consult with the Secretary of Agriculture whenever a regulatory action will have a significant effect on agriculture related to the production or use of ethanol, biodiesel, or other renewable fuels, including actions undertaken in whole or in part based on authority or requirements in title XV of the Energy Policy Act of 2005, or the amendments made by such title, or when otherwise appropriate or required by law.
- (b) To implement this order, the heads of the agencies acting jointly may allocate as appropriate among the agencies administrative responsibilities relating to regulatory actions to which section 3 refers, such as publication of notices in the **Federal Register** and receipt of comments in response to notices.

Sec. 5. Duties of the Director of the Office of Management and Budget and the Chairman of the Council on Environmental Quality. (a) The Director of the Office of Management and Budget, with such assistance from the Chairman

of the Council on Environmental Quality as the Director may require, shall monitor the implementation of this order by the heads of the agencies and shall report thereon to the President from time to time, and not less often than semiannually, with any recommendations of the Director for strengthening the implementation of this order.

(b) To implement this order and further the policy set forth in section 1, the Director of the Office of Management and Budget may require the heads of the agencies to submit reports to, and coordinate with, such Office on matters related to this order.

Sec. 6. General Provisions. (a) This order shall be implemented in accordance with applicable law and subject to the availability of appropriations.

(b) This order shall not be construed to impair or otherwise affect the functions of the Director of the Office of Management and Budget relating to budget, administrative, and legislative proposals.

(c) This order is not intended to, and does not, create any right, benefit or privilege, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, instrumentalities, or entities, its officers or employees, or any other person.

GEORGE W. BUSH

Notes of Decisions (41)

Footnotes

* Percentages in the table refer to a percentage of each manufacturer's sales volume.

1 So in original. Probably should be "(4)".

2 So in original. Probably should be "paragraph".

3 Another subsec. (f) is set out following subsec. (m).

4 So in original. Probably should be (n).

42 U.S.C.A. § 7521, 42 USCA § 7521

Current through P.L. 112-139 approved 6-27-12

End of Document

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United States Code Annotated

Title 42. The Public Health and Welfare

Chapter 85. Air Pollution Prevention and Control (Refs & Annos)

Subchapter III. General Provisions

42 U.S.C.A. § 7607

§ 7607. Administrative proceedings and judicial review

Currentness

(a) Administrative subpoenas; confidentiality; witnesses

In connection with any determination under [section 7410\(f\)](#) of this title, or for purposes of obtaining information under [section 7521\(b\)\(4\)](#) or [7545\(c\)\(3\)](#) of this title, any investigation, monitoring, reporting requirement, entry, compliance inspection, or administrative enforcement proceeding under the ¹ chapter (including but not limited to [section 7413](#), [section 7414](#), [section 7420](#), [section 7429](#), [section 7477](#), [section 7524](#), [section 7525](#), [section 7542](#), [section 7603](#), or [section 7606](#) of this title),² the Administrator may issue subpoenas for the attendance and testimony of witnesses and the production of relevant papers, books, and documents, and he may administer oaths. Except for emission data, upon a showing satisfactory to the Administrator by such owner or operator that such papers, books, documents, or information or particular part thereof, if made public, would divulge trade secrets or secret processes of such owner or operator, the Administrator shall consider such record, report, or information or particular portion thereof confidential in accordance with the purposes of [section 1905 of Title 18](#), except that such paper, book, document, or information may be disclosed to other officers, employees, or authorized representatives of the United States concerned with carrying out this chapter, to persons carrying out the National Academy of Sciences' study and investigation provided for in [section 7521\(c\)](#) of this title, or when relevant in any proceeding under this chapter. Witnesses summoned shall be paid the same fees and mileage that are paid witnesses in the courts of the United States. In case of contumacy or refusal to obey a subpoena served upon any person under this subparagraph, the district court of the United States for any district in which such person is found or resides or transacts business, upon application by the United States and after notice to such person, shall have jurisdiction to issue an order requiring such person to appear and give testimony before the Administrator to appear and produce papers, books, and documents before the Administrator, or both, and any failure to obey such order of the court may be punished by such court as a contempt thereof.

(b) Judicial review

(1) A petition for review of action of the Administrator in promulgating any national primary or secondary ambient air quality standard, any emission standard or requirement under [section 7412](#) of this title, any standard of performance or requirement under [section 7411](#) of this title,² any standard under [section 7521](#) of this title (other than a standard required to be prescribed under [section 7521\(b\)\(1\)](#) of this title), any determination under [section 7521\(b\)\(5\)](#) of this title, any control or prohibition under [section 7545](#) of this title, any standard under [section 7571](#) of this title, any rule issued under [section 7413](#), [7419](#), or under [section 7420](#) of this title, or any other nationally applicable regulations promulgated, or final action taken, by the Administrator under this chapter may be filed only in the United States Court of Appeals for the District of Columbia. A petition for review of the Administrator's action in approving or promulgating any implementation plan under [section 7410](#) of this title or [section 7411\(d\)](#) of this title, any order under [section 7411\(j\)](#) of this title, under [section 7412](#) of this title,² under [section 7419](#) of this title, or under [section 7420](#) of this title, or his action under [section 1857c-10\(c\)\(2\)\(A\)](#), (B), or (C) of this title (as in effect before August 7, 1977) or under regulations thereunder, or revising regulations for enhanced monitoring and compliance certification programs under [section 7414\(a\)\(3\)](#) of this title, or any other final action of the Administrator under this chapter (including any denial or disapproval by the Administrator under subchapter I of this chapter) which is locally or regionally applicable may be filed only in the United States Court of Appeals for the appropriate circuit. Notwithstanding the preceding sentence a petition for review of any action referred to in such sentence may be filed only in the United States Court of Appeals for the District of

Columbia if such action is based on a determination of nationwide scope or effect and if in taking such action the Administrator finds and publishes that such action is based on such a determination. Any petition for review under this subsection shall be filed within sixty days from the date notice of such promulgation, approval, or action appears in the Federal Register, except that if such petition is based solely on grounds arising after such sixtieth day, then any petition for review under this subsection shall be filed within sixty days after such grounds arise. The filing of a petition for reconsideration by the Administrator of any otherwise final rule or action shall not affect the finality of such rule or action for purposes of judicial review nor extend the time within which a petition for judicial review of such rule or action under this section may be filed, and shall not postpone the effectiveness of such rule or action.

(2) Action of the Administrator with respect to which review could have been obtained under paragraph (1) shall not be subject to judicial review in civil or criminal proceedings for enforcement. Where a final decision by the Administrator defers performance of any nondiscretionary statutory action to a later time, any person may challenge the deferral pursuant to paragraph (1).

(c) Additional evidence

In any judicial proceeding in which review is sought of a determination under this chapter required to be made on the record after notice and opportunity for hearing, if any party applies to the court for leave to adduce additional evidence, and shows to the satisfaction of the court that such additional evidence is material and that there were reasonable grounds for the failure to adduce such evidence in the proceeding before the Administrator, the court may order such additional evidence (and evidence in rebuttal thereof) to be taken before the Administrator, in such manner and upon such terms and conditions as to ³ the court may deem proper. The Administrator may modify his findings as to the facts, or make new findings, by reason of the additional evidence so taken and he shall file such modified or new findings, and his recommendation, if any, for the modification or setting aside of his original determination, with the return of such additional evidence.

(d) Rulemaking

(1) This subsection applies to--

- (A) the promulgation or revision of any national ambient air quality standard under [section 7409](#) of this title,
- (B) the promulgation or revision of an implementation plan by the Administrator under [section 7410\(c\)](#) of this title,
- (C) the promulgation or revision of any standard of performance under [section 7411](#) of this title, or emission standard or limitation under [section 7412\(d\)](#) of this title, any standard under [section 7412\(f\)](#) of this title, or any regulation under [section 7412\(g\)\(1\)\(D\)](#) and (F) of this title, or any regulation under [section 7412\(m\)](#) or (n) of this title,
- (D) the promulgation of any requirement for solid waste combustion under [section 7429](#) of this title,
- (E) the promulgation or revision of any regulation pertaining to any fuel or fuel additive under [section 7545](#) of this title,
- (F) the promulgation or revision of any aircraft emission standard under [section 7571](#) of this title,
- (G) the promulgation or revision of any regulation under subchapter IV-A of this chapter (relating to control of acid deposition),
- (H) promulgation or revision of regulations pertaining to primary nonferrous smelter orders under [section 7419](#) of this title (but not including the granting or denying of any such order),
- (I) promulgation or revision of regulations under subchapter VI of this chapter (relating to stratosphere and ozone protection),
- (J) promulgation or revision of regulations under part C of subchapter I of this chapter (relating to prevention of significant deterioration of air quality and protection of visibility),

(K) promulgation or revision of regulations under [section 7521](#) of this title and test procedures for new motor vehicles or engines under [section 7525](#) of this title, and the revision of a standard under [section 7521\(a\)\(3\)](#) of this title,

(L) promulgation or revision of regulations for noncompliance penalties under [section 7420](#) of this title,

(M) promulgation or revision of any regulations promulgated under [section 7541](#) of this title (relating to warranties and compliance by vehicles in actual use),

(N) action of the Administrator under [section 7426](#) of this title (relating to interstate pollution abatement),

(O) the promulgation or revision of any regulation pertaining to consumer and commercial products under [section 7511b\(e\)](#) of this title,

(P) the promulgation or revision of any regulation pertaining to field citations under [section 7413\(d\)\(3\)](#) of this title,

(Q) the promulgation or revision of any regulation pertaining to urban buses or the clean-fuel vehicle, clean-fuel fleet, and clean fuel programs under part C of subchapter II of this chapter,

(R) the promulgation or revision of any regulation pertaining to nonroad engines or nonroad vehicles under [section 7547](#) of this title,

(S) the promulgation or revision of any regulation relating to motor vehicle compliance program fees under [section 7552](#) of this title,

(T) the promulgation or revision of any regulation under subchapter IV-A of this chapter (relating to acid deposition),

(U) the promulgation or revision of any regulation under [section 7511b\(f\)](#) of this title pertaining to marine vessels, and

(V) such other actions as the Administrator may determine.

The provisions of [section 553](#) through [557](#) and [section 706 of Title 5](#) shall not, except as expressly provided in this subsection, apply to actions to which this subsection applies. This subsection shall not apply in the case of any rule or circumstance referred to in subparagraphs (A) or (B) of subsection 553(b) of Title 5.

(2) Not later than the date of proposal of any action to which this subsection applies, the Administrator shall establish a rulemaking docket for such action (hereinafter in this subsection referred to as a “rule”). Whenever a rule applies only within a particular State, a second (identical) docket shall be simultaneously established in the appropriate regional office of the Environmental Protection Agency.

(3) In the case of any rule to which this subsection applies, notice of proposed rulemaking shall be published in the Federal Register, as provided under [section 553\(b\) of Title 5](#), shall be accompanied by a statement of its basis and purpose and shall specify the period available for public comment (hereinafter referred to as the “comment period”). The notice of proposed rulemaking shall also state the docket number, the location or locations of the docket, and the times it will be open to public inspection. The statement of basis and purpose shall include a summary of--

(A) the factual data on which the proposed rule is based;

(B) the methodology used in obtaining the data and in analyzing the data; and

(C) the major legal interpretations and policy considerations underlying the proposed rule.

The statement shall also set forth or summarize and provide a reference to any pertinent findings, recommendations, and comments by the Scientific Review Committee established under [section 7409\(d\)](#) of this title and the National Academy of Sciences, and, if the proposal differs in any important respect from any of these recommendations, an explanation of the reasons

for such differences. All data, information, and documents referred to in this paragraph on which the proposed rule relies shall be included in the docket on the date of publication of the proposed rule.

(4)(A) The rulemaking docket required under paragraph (2) shall be open for inspection by the public at reasonable times specified in the notice of proposed rulemaking. Any person may copy documents contained in the docket. The Administrator shall provide copying facilities which may be used at the expense of the person seeking copies, but the Administrator may waive or reduce such expenses in such instances as the public interest requires. Any person may request copies by mail if the person pays the expenses, including personnel costs to do the copying.

(B)(i) Promptly upon receipt by the agency, all written comments and documentary information on the proposed rule received from any person for inclusion in the docket during the comment period shall be placed in the docket. The transcript of public hearings, if any, on the proposed rule shall also be included in the docket promptly upon receipt from the person who transcribed such hearings. All documents which become available after the proposed rule has been published and which the Administrator determines are of central relevance to the rulemaking shall be placed in the docket as soon as possible after their availability.

(ii) The drafts of proposed rules submitted by the Administrator to the Office of Management and Budget for any interagency review process prior to proposal of any such rule, all documents accompanying such drafts, and all written comments thereon by other agencies and all written responses to such written comments by the Administrator shall be placed in the docket no later than the date of proposal of the rule. The drafts of the final rule submitted for such review process prior to promulgation and all such written comments thereon, all documents accompanying such drafts, and written responses thereto shall be placed in the docket no later than the date of promulgation.

(5) In promulgating a rule to which this subsection applies (i) the Administrator shall allow any person to submit written comments, data, or documentary information; (ii) the Administrator shall give interested persons an opportunity for the oral presentation of data, views, or arguments, in addition to an opportunity to make written submissions; (iii) a transcript shall be kept of any oral presentation; and (iv) the Administrator shall keep the record of such proceeding open for thirty days after completion of the proceeding to provide an opportunity for submission of rebuttal and supplementary information.

(6)(A) The promulgated rule shall be accompanied by (i) a statement of basis and purpose like that referred to in paragraph (3) with respect to a proposed rule and (ii) an explanation of the reasons for any major changes in the promulgated rule from the proposed rule.

(B) The promulgated rule shall also be accompanied by a response to each of the significant comments, criticisms, and new data submitted in written or oral presentations during the comment period.

(C) The promulgated rule may not be based (in part or whole) on any information or data which has not been placed in the docket as of the date of such promulgation.

(7)(A) The record for judicial review shall consist exclusively of the material referred to in paragraph (3), clause (i) of paragraph (4)(B), and subparagraphs (A) and (B) of paragraph (6).

(B) Only an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review. If the person raising an objection can demonstrate to the Administrator that it was impracticable to raise such objection within such time or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule, the Administrator shall convene a proceeding for reconsideration of the rule and provide the same procedural rights as would have been afforded had the information been available at the time the rule was proposed. If the Administrator refuses to convene such a proceeding, such person may seek review of such refusal in the United States court of appeals for the appropriate circuit (as provided in subsection (b) of this section). Such reconsideration shall not postpone the effectiveness of the rule. The effectiveness of the rule may be stayed during such reconsideration, however, by the Administrator or the court for a period not to exceed three months.

(8) The sole forum for challenging procedural determinations made by the Administrator under this subsection shall be in the United States court of appeals for the appropriate circuit (as provided in subsection (b) of this section) at the time of the substantive review of the rule. No interlocutory appeals shall be permitted with respect to such procedural determinations. In reviewing alleged procedural errors, the court may invalidate the rule only if the errors were so serious and related to matters of such central relevance to the rule that there is a substantial likelihood that the rule would have been significantly changed if such errors had not been made.

(9) In the case of review of any action of the Administrator to which this subsection applies, the court may reverse any such action found to be--

- (A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law;
- (B) contrary to constitutional right, power, privilege, or immunity;
- (C) in excess of statutory jurisdiction, authority, or limitations, or short of statutory right; or
- (D) without observance of procedure required by law, if (i) such failure to observe such procedure is arbitrary or capricious, (ii) the requirement of paragraph (7)(B) has been met, and (iii) the condition of the last sentence of paragraph (8) is met.

(10) Each statutory deadline for promulgation of rules to which this subsection applies which requires promulgation less than six months after date of proposal may be extended to not more than six months after date of proposal by the Administrator upon a determination that such extension is necessary to afford the public, and the agency, adequate opportunity to carry out the purposes of this subsection.

(11) The requirements of this subsection shall take effect with respect to any rule the proposal of which occurs after ninety days after August 7, 1977.

(e) Other methods of judicial review not authorized

Nothing in this chapter shall be construed to authorize judicial review of regulations or orders of the Administrator under this chapter, except as provided in this section.

(f) Costs

In any judicial proceeding under this section, the court may award costs of litigation (including reasonable attorney and expert witness fees) whenever it determines that such award is appropriate.

(g) Stay, injunction, or similar relief in proceedings relating to noncompliance penalties

In any action respecting the promulgation of regulations under [section 7420](#) of this title or the administration or enforcement of [section 7420](#) of this title no court shall grant any stay, injunctive, or similar relief before final judgment by such court in such action.

(h) Public participation

It is the intent of Congress that, consistent with the policy of subchapter II of chapter 5 of Title 5, the Administrator in promulgating any regulation under this chapter, including a regulation subject to a deadline, shall ensure a reasonable period for public participation of at least 30 days, except as otherwise expressly provided in [section 7407\(d\)](#), [7502\(a\)](#), [7511\(a\)](#) and [7512\(a\)](#) and [7512\(b\)](#) of this title.

Credits

(July 14, 1955, c. 360, Title III, § 307, as added Dec. 31, 1970, Pub.L. 91-604, § 12(a), 84 Stat. 1707; amended Nov. 18, 1971, Pub.L. 92-157, Title III, § 302(a), 85 Stat. 464; June 22, 1974, [Pub.L. 93-319](#), § 6(c), 88 Stat. 259; Aug. 7, 1977, [Pub.L. 95-95](#), Title III, §§ 303(d), 305(a), (c), (f)-(h), 91 Stat. 772, 776, 777; Nov. 16, 1977, [Pub.L. 95-190](#), § 14(a)(79), (80), 91 Stat. 1404; Nov. 15, 1990, [Pub.L. 101-549](#), Title I, §§ 108(p), 110(5), Title III, § 302(g), (h), Title VII, §§ 702(c), 703, 706, 707(h), 710(b), 104 Stat. 2469, 2470, 2574, 2681-2684.)

Notes of Decisions (279)

Footnotes

- 1 So in original. Probably should be “this”.
- 2 So in original.
- 3 So in original. The word “to” probably should not appear.
- 4 So in original. Probably should be “sections”.

42 U.S.C.A. § 7607, 42 USCA § 7607

Current through P.L. 112-139 approved 6-27-12

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Code of Federal Regulations

Title 40. Protection of Environment

Chapter I. Environmental Protection Agency (Refs & Annos)

Subchapter C. Air Programs

Part 60. Standards of Performance for New Stationary Sources (Refs & Annos)

Subpart LLLL. Standards of Performance for New Sewage Sludge Incineration Units (Refs & Annos)

Continuous Compliance Requirements

40 C.F.R. § 60.4885

§ 60.4885 How and when do I demonstrate continuous compliance with the emission limits and standards?

Effective: May 20, 2011

Currentness

To demonstrate continuous compliance with the emission limits and standards specified in Table 1 or 2 to this subpart, use the procedures specified in paragraph (a) of this section for particulate matter, hydrogen chloride, dioxins/furans (total mass basis or toxic equivalency basis), mercury, nitrogen oxides, sulfur dioxide, cadmium, lead, and fugitive emissions from ash handling, and follow the procedures specified in paragraph (b) of this section for carbon monoxide. In lieu of using the procedures specified in paragraph (a) of this section, you also have the option to demonstrate continuous compliance using the procedures specified in paragraph (b) of this section for particulate matter, hydrogen chloride, dioxins/furans (total mass basis or toxic equivalency basis), mercury, nitrogen oxides, sulfur dioxide, cadmium, and lead. You must meet the requirements of paragraphs (a) and (b) of this section, as applicable, and paragraphs (c) through (e) of this section, according to the performance testing, monitoring, and calibration requirements in § 60.4900(a) and (b). You may also petition the Administrator for alternative monitoring parameters as specified in paragraph (f) of this section.

(a) Demonstrate continuous compliance using a performance test. Except as provided in paragraphs (a)(3) and (e) of this section, following the date that the initial performance test for each pollutant in Table 1 or 2 to this subpart except carbon monoxide is completed, you must conduct a performance test for each such pollutant on an annual basis (between 11 and 13 calendar months following the previous performance test). The performance test must be conducted using the test methods, averaging methods, and minimum sampling volumes or durations specified in Table 1 or 2 to this subpart and according to the testing, monitoring, and calibration requirements specified in § 60.4900(a).

(1) You may conduct a repeat performance test at any time to establish new values for the operating limits to apply from that point forward. The Administrator may request a repeat performance test at any time.

(2) You must repeat the performance test within 60 days of a process change, as defined in § 60.4930.

(3) Except as specified in paragraphs (a)(1) and (2) of this section, you can conduct performance tests less often for a given pollutant, as specified in paragraphs (a)(3)(i) through (iii) of this section.

(i) You can conduct performance tests less often if your performance tests for the pollutant for at least 2 consecutive years show that your emissions are at or below 75 percent of the emission limit specified in Table 2 or 3 to this subpart, and there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions. In this case, you do not have to conduct a performance test for that pollutant for the next 2 years. You must conduct a performance test during the third year and no more than 37 months after the previous performance test.

(ii) If your SSI unit continues to meet the emission limit for the pollutant, you may choose to conduct performance tests for the pollutant every third year if your emissions are at or below 75 percent of the emission limit, and if there are no

changes in the operation of the affected source or air pollution control equipment that could increase emissions, but each such performance test must be conducted no more than 37 months after the previous performance test.

(iii) If a performance test shows emissions exceeded 75 percent of the emission limit for a pollutant, you must conduct annual performance tests for that pollutant until all performance tests over 2 consecutive years show compliance.

(b) Demonstrate continuous compliance using a continuous emissions monitoring system or continuous automated sampling system. The option to use a continuous emissions monitoring system for hydrogen chloride, dioxins/furans, cadmium, or lead takes effect on the date a final performance specification applicable to hydrogen chloride, dioxins/furans, cadmium, or lead is published in the Federal Register. The option to use a continuous automated sampling system for dioxins/furans takes effect on the date a final performance specification for such a continuous automated sampling system is published in the Federal Register. Collect data as specified in § 60.4900(b)(6) and use the following procedures:

(1) To demonstrate continuous compliance with the carbon monoxide emission limit, you must use the carbon monoxide continuous emissions monitoring system specified in § 60.4900(b). For determining compliance with the carbon monoxide concentration limit using carbon monoxide CEMS, the correction to 7 percent oxygen does not apply during periods of startup or shutdown. Use the measured carbon monoxide concentration without correcting for oxygen concentration in averaging with other carbon monoxide concentrations (corrected to 7 percent oxygen) to determine the 24-hour average value.

(2) To demonstrate continuous compliance with the emission limits for particulate matter, hydrogen chloride, dioxins/furans (total mass basis or toxic equivalency basis), mercury, nitrogen oxides, sulfur dioxide, cadmium, and lead, you may substitute the use of a continuous monitoring system in lieu of conducting the annual performance test required in paragraph (a) of this section, as follows:

(i) You may substitute the use of a continuous emissions monitoring system for any pollutant specified in paragraph (b) (2) of this section in lieu of conducting the annual performance test for that pollutant in paragraph (a) of this section.

(ii) You may substitute the use of a continuous automated sampling system for mercury or dioxins/furans in lieu of conducting the annual mercury or dioxin/furan performance test in paragraph (a) of this section.

(3) If you use a continuous emissions monitoring system to demonstrate compliance with an applicable emission limit in either paragraph (b)(1) or (b)(2) of this section, you must use the continuous emissions monitoring system and follow the requirements specified in § 60.4900(b). You must measure emissions according to § 60.13 to calculate 1-hour arithmetic averages, corrected to 7 percent oxygen (or carbon dioxide). You must demonstrate initial compliance using a 24-hour block average of these 1-hour arithmetic average emission concentrations, calculated using Equation 19-19 in section 12.4.1 of Method 19 of 40 CFR part 60, appendix A-7.

(4) If you use a continuous automated sampling system to demonstrate compliance with an applicable emission limit in paragraph (b)(2) of this section, you must:

(i) Use the continuous automated sampling system specified in § 60.58b(p) and (q), and measure and calculate average emissions corrected to 7 percent oxygen (or carbon dioxide) according to § 60.58b(p) and your monitoring plan.

(A) Use the procedures specified in § 60.58b(p) to calculate 24-hour averages to determine compliance with the mercury emission limit in Table 1 or 2 to this subpart.

(B) Use the procedures specified in § 60.58b(p) to calculate 2-week averages to determine compliance with the dioxin/furan emission limit (total mass basis or toxic equivalency basis) in Table 1 or 2 to this subpart.

(ii) Update your monitoring plan as specified in § 60.4880(e). For mercury continuous automated sampling systems, you must use Performance Specification 12B of appendix B of part 75 and Procedure 5 of appendix F of this part.

(5) Except as provided in paragraph (e) of this section, you must complete your periodic performance evaluations required under your monitoring plan for any continuous emissions monitoring system and continuous automated sampling systems, according to the schedule specified in your monitoring plan. If you were previously determining compliance by conducting an annual performance test (or according to the less frequent testing for a pollutant as provided in paragraph (a)(3) of this section), you must complete the initial performance evaluation required in your monitoring plan in § 60.4880 for the continuous monitoring system prior to using the continuous emissions monitoring system to demonstrate compliance or continuous automated sampling system. Your performance evaluation must be conducted using the procedures and acceptance criteria specified in § 60.4880(a)(3).

(c) To demonstrate compliance with the dioxins/furans toxic equivalency emission limit in paragraph (a) or (b) of this section, you must determine dioxins/furans toxic equivalency as follows:

(1) Measure the concentration of each dioxin/furan tetra- through octa-chlorinated isomer emitted using EPA Method 23.

(2) For each dioxin/furan (tetra- through octa-chlorinated) isomer measured in accordance with paragraph (c)(1) of this section, multiply the isomer concentration by its corresponding toxic equivalency factor specified in Table 4 to this subpart.

(3) Sum the products calculated in accordance with paragraph (c)(2) of this section to obtain the total concentration of dioxins/furans emitted in terms of toxic equivalency.

(d) You must submit the annual compliance report specified in § 60.4915(d). You must submit the deviation report specified in § 60.4915(e) for each instance that you did not meet each emission limit in Table 1 or 2 to this subpart.

(e) If you demonstrate continuous compliance using a performance test, as specified in paragraph (a) of this section, then the provisions of this paragraph (e) apply. If a force majeure is about to occur, occurs, or has occurred for which you intend to assert a claim of force majeure, you must notify the Administrator in writing as specified in § 60.4915(g). You must conduct the performance test as soon as practicable after the force majeure occurs. The Administrator will determine whether or not to grant the extension to the performance test deadline, and will notify you in writing of approval or disapproval of the request for an extension as soon as practicable. Until an extension of the performance test deadline has been approved by the Administrator, you remain strictly subject to the requirements of this subpart.

(f) After any initial requests in § 60.4880 for alternative monitoring requirements for initial compliance, you may subsequently petition the Administrator for alternative monitoring parameters as specified in §§ 60.13(i) and 60.4880(e).

SOURCE: 36 FR 24877, Dec. 23, 1971; 50 FR 36834, Sept. 9, 1985; 52 FR 37874, Oct. 9, 1987; 53 FR 2675, Jan. 29, 1988; 57 FR 32338, July 21, 1992; 58 FR 40591, July 29, 1993; 60 FR 65384, Dec. 19, 1995; 62 FR 8328, Feb. 24, 1997; 62 FR 48379, Sept. 15, 1997; 64 FR 7463, Feb. 12, 1999; 65 FR 78275, Dec. 14, 2000; 72 FR 59204, Oct. 19, 2007; 76 FR 15404, March 21, 2011, unless otherwise noted.

AUTHORITY: 42 U.S.C. 7401 et seq.

Current through July 19, 2012; 77 FR 42591.

End of Document

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DECLARATIONS

ORAL ARGUMENT NOT YET SCHEDULED**UNITED STATES COURT OF APPEALS****DISTRICT OF COLUMBIA CIRCUIT**

NATIONAL ASSOCIATION OF)
 CLEAN WATER AGENCIES,)

Petitioner,)

v.)

U.S. ENVIRONMENTAL)
 PROTECTION AGENCY,)

Respondent.)

Case No. 11-1311
 (and consolidated cases)

DECLARATION OF LAURA CALWELL

I, Laura Calwell, declare as follows:

1. I am a member of Sierra Club.
2. I live with my husband and two dogs at 5610 W. 61st Terrace, Mission, Kansas, 66202. I moved to the Kansas City area in 1973, and I have lived at my current home for thirty years.
3. The Kaw Point Treatment Plant, which contains two fluidized bed sewage sludge incinerators, is about 10 miles from my house.
4. I am aware that the sewage sludge incinerators at Kaw Point are subject to EPA's new regulation titled: Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Sewage Sludge Incineration Units: Final Rule (Sewage Sludge Incinerator Rule).
5. I am aware that sewage sludge incinerators, like those near my home at the Kaw Point Plant, emit hazardous air pollutants including PCBs, mercury, lead, dioxins, and

particulate matter. I am aware that these pollutants are extremely damaging to the environment. I also know that these toxins can cause serious human health problems, including cancer and developmental problems. I am very concerned about the health threats that these emissions pose to my family, my community, and myself.

6. I am exposed to the harmful pollutants emitted by the sewage sludge incinerators at Kaw Point through the air I breathe every day around my home.
7. In my position as Kansas Riverkeeper, a nonprofit advocate for the Kansas River, I monitor water quality and pollution on the river. Because of this, I spend much of my time on or near the River, taking pictures, looking for signs of illegal dumping, and testing water quality. I am on or around the Kaw Point section of the river at least once a month.
8. I am exposed to harmful emissions not only from the air I breathe during my work as Riverkeeper, but also from pollutants like mercury that are deposited in the water. Whenever I am on the river, I am forced to take precautions and wear gloves to minimize my exposure to harmful pollutants.
9. I enjoy keeping a garden some years, and I worry that emissions deposit in the soil and accumulate in the vegetables I grow, exposing me to harmful pollutants when I eat them.
10. I enjoy eating fish, but I do not currently eat locally caught fish because I know pollutant emissions can deposit in the water and accumulate in fish, making them dangerous to eat. I would like to eat local fish if the river were clean.
11. I often walk around Kaw Point Park, which is directly across the water from the Kaw Point Treatment Plant. On many occasions, I have smelled an unpleasant odor

coming from the incinerators at the plant. This odor detracts from my enjoyment of the park and makes me concerned about the health effects of visiting the park.

12. My husband is the president of the Friends of Kaw Point Park volunteer organization, and in his role he is frequently at the park. I worry about his exposure to harmful emissions while he is at the park and the possible health consequences he may suffer.
13. Many members of the community have told me they had to leave the park or stop riding their bicycles on the nearby trail because of the smell. I am concerned about the health effects of the sewage sludge incinerator emissions on my friends and neighbors who visit the park. I am also concerned that the pollution frequently noticeable at the park reduces its usefulness as a place of enjoyment and recreation for our community. This damage to the park and the community diminishes my enjoyment of the park. If the odor and harmful emissions from the sewage sludge incinerators were reduced, I would visit the park more frequently and enjoy my time there more.
14. Two of my stepchildren live in the Kansas City area as well. I worry that emissions from the Kaw Point incinerator may be harmful to their health.
15. I am aware that Sierra Club has challenged the EPA rule regarding sewage sludge incinerators to seek more protective standards on their emissions. I am aware that the standards EPA has promulgated are less protective than the Clean Air Act requires.
16. Because standards in the EPA rule are less protective than the Clean Air Act requires, my exposure and my family's exposure to continued emissions from sewage sludge incinerators will be prolonged and increased. We will be less able to enjoy activities like visiting Kaw Point Park and riding our bicycles near the river. If the standards

were as strong as the Clean Air Act mandates, my family and I would have lower risk of harmful health effects and would be better able to enjoy the recreation opportunities around Kaw Point.

17. I am also aware that two groups have challenged the same rule to have it weakened or vacated. I worry that if this happens, air quality near my home will remain dangerously poor or even become worse, increasing the harm to myself and my husband.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Executed on July 17, 2012

A handwritten signature in cursive script, reading "Laura Calwell", written over a horizontal line.

Laura Calwell

**UNITED STATES COURT OF APPEALS
DISTRICT OF COLUMBIA CIRCUIT**

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| NATIONAL ASSOCIATION OF |) | |
| CLEAN WATER AGENCIES, |) | |
| |) | |
| Petitioner, |) | |
| v. |) | Case No. 11-1311 |
| |) | (and consolidated cases) |
| U.S. ENVIRONMENTAL |) | |
| PROTECTION AGENCY, |) | |
| |) | |
| Respondent. |) | |

DECLARATION OF ANGEL GOBER

1. I, Angel Gober, declare as follows:
2. I am a member of the Sierra Club. I am also on the Executive Committee of the Allegheny Group of the Pennsylvania Chapter of the Sierra Club.
3. I live at 2324 Colorado Way, Pittsburgh, Pennsylvania, 15212. I have lived there for approximately four years. Before moving to this address, I lived in the same neighborhood, just down the street.
4. I am thirty years old, and I have lived in Pittsburgh since I was two.
5. My daughter, who is eleven, lives with me.
6. I am an organizer, and I advocate for fair and affordable housing in my community.
7. The Allegheny County Sanitary Authority Treatment Plant, which has two fluidized bed sewage sludge incinerators, is located less than one mile from my home.
8. I know that sewage sludge incinerators, like the ones near my home, emit many harmful pollutants, including mercury, lead, cadmium, particulate matter, sulfur dioxide, dioxins, nitrous oxides, and carbon monoxide. I know that these pollutants can cause many

serious health issues, including cancer, neurological disorders, respiratory problems, and developmental problems.

9. I am aware that EPA has issued new regulations for sewage sludge incinerators under § 129 of the Clean Air Act (Sewage Sludge Incinerator Rule) and that the incinerators at the Allegheny County facility are subject to this regulation.
10. I am exposed to these hazardous pollutants every day when I breathe around and in my home. As a community organizer, I am outside about forty percent of my day, walking door to door and throughout my neighborhood. I am harmed by the exposure to pollutants I receive by walking outdoors near my home and breathing.
11. I also occasionally smell an unpleasant burning odor from the incinerator while walking around or at my home. This smell reduces my enjoyment of the time I spend outside.
12. I occasionally walk around the park near my home. The sewage sludge incinerator odor and my concern about the toxic substances in the incinerator emissions diminish my enjoyment of the park, and if the pollution were reduced I would recreate in the park more often.
13. My daughter is exposed to pollutants from the incinerators by breathing the air in our neighborhood. She regularly complains of headaches, and I worry that the incinerator emissions are harming her health and will increase her risk of health problems in the future.
14. My daughter also notices the odor from the sewage sludge incinerator. The odor makes her less likely to go outside and reduces her enjoyment when she is outside at the nearby park.

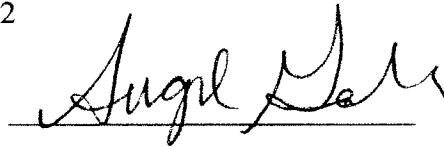
15. I am worried that my daughter does not spend enough time outdoors, but I do not want her to be exposed to greater amounts of pollution. If pollution from the sewage sludge incinerators were reduced, and if the odor was not present, I would encourage my daughter to play outdoors more often.
16. The pollution from the facility prevents me from eating local food because I am concerned about pollution emissions depositing in the soil and accumulating in fruits and vegetables or in plants eaten by livestock. I am also worried that pollutant emissions deposit in the nearby Ohio River and build up in fish, making local fish unsafe to eat. I know that Pennsylvania has issued a fish consumption advisory for PCBs for fish in the rivers near where I live, and that it suggests eating fish from these rivers rarely or not at all. I would like to eat local fruits, vegetables, meat, and fish if I thought they were safe, but I do not currently do so. If harmful emissions from the sewage sludge incinerators were reduced, I would eat local food and encourage my daughter to do so. I would also like to begin growing my own food.
17. The emissions of harmful pollutants from the incinerators near my home and elsewhere expose my daughter and me to toxic pollutants, harming our health and diminishing our ability to enjoy work, recreational activities, and everyday life in our own home and community.
18. I know that the Sierra Club has challenged the EPA regulation covering sewage sludge incinerators to strengthen its controls on emissions. Because these standards are less protective than the Clean Air Act requires, my daughter's exposure and my own exposure to hazardous pollutants from the sewage sludge incinerators in our neighborhood will be prolonged and increased as will the resulting harm to our health. Likewise, because these

standards are less protective than the Clean Air Act requires, the harm to our ability to enjoy work, recreational, and everyday activities in our home and community will be prolonged and increased. If the Court compelled EPA to set standards that complied with the Clean Air Act, it would reduce the harm to my daughter and me from incinerator emissions.

19. I am also aware that two industry groups have challenged the same rule to have it weakened or vacated. If they succeed, then my community, my daughter, and I will be exposed to even greater pollution emissions than we would be under EPA's rule, and the pollution will prolong or increase the risk to our health as well as the harm to our ability to enjoy work, recreational and everyday activities in our home and community.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Executed on July 19, 2012

A handwritten signature in cursive script, appearing to read "Angel Gober", written over a horizontal line.

Angel Gober

UNITED STATES COURT OF APPEALS
DISTRICT OF COLUMBIA CIRCUIT

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| NATIONAL ASSOCIATION OF |) | |
| CLEAN WATER AGENCIES, |) | |
| |) | |
| Petitioner, |) | |
| v. |) | Case No. 11-1311 |
| |) | (and consolidated cases) |
| U.S. ENVIRONMENTAL |) | |
| PROTECTION AGENCY, |) | |
| |) | |
| Respondent. |) | |
| |) | |

DECLARATION OF ROB LANG

1. I, Rob Lang, declare as follows:
2. I am a member of the Sierra Club.
3. I live at 15 Sachem Street, Apartment 3, Lynn, Massachusetts 01902. My partner, Lois, lives with me, as do our two dogs.
4. My partner and I have lived in Lynn for two years. I am 62 years old.
5. The Lynn Regional Water Pollution Control Facility contains two fluidized bed sewage sludge incinerators. The facility is located at 2 Circle Avenue in Lynn, just over a mile from my home.
6. I understand that sewage sludge incinerators emit several hazardous air pollutants, including particulate matter, cadmium, lead, mercury, sulfur dioxide, nitrous oxide, carbon monoxide, and dioxins. I know that these pollutants are serious hazards to human health and can cause cancer, neurological disorders, and other health problems.
7. I know that EPA has issued regulations of sewage sludge incinerators under the Clean Air Act, and I am aware that the two incinerators in Lynn are covered by these regulations.

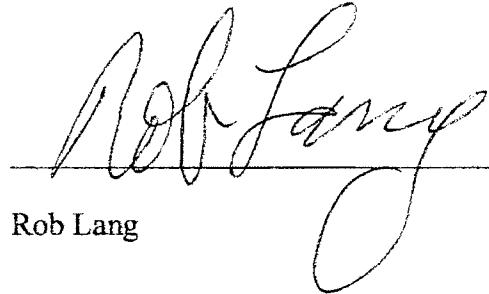
8. I am semi-retired, and I spend as much time outdoors as possible.
9. I am an avid gardener, and I garden at my own plot behind my apartment and at my nearby community garden plot.
10. In addition to my own gardening, I volunteer with a local urban gardening association that trains youth to garden and farm.
11. I am exposed to pollution from the sewage sludge incinerators by breathing while I am outside gardening or bicycling to nearby gardens to volunteer.
12. My partner is also harmed by the pollution she is exposed to when walking or gardening outside our apartment and in the neighborhood.
13. I am aware that air pollution can deposit in the soil and accumulate in fruits and vegetables. I frequently consume local food, often from my own garden, and eating this food increases my risk of health problems.
14. I eat local fish, and I am concerned that emissions of mercury and other harmful pollutants may deposit in the water and accumulate in fish, increasing my risk of health problems. This concern reduces how much I enjoy eating locally grown fruits, vegetables, and fish.
15. I ride my bicycle throughout my community several times a day, as it is my primary mode of transportation. I am harmed by the pollutants I breathe while out on my bicycle.
16. I am exposed to pollution from the sewage sludge incinerators when I take my dogs out for a walk twice a day. I am concerned about the impact this pollution may have on my pets.

17. I sometimes smell an unpleasant burning odor from my apartment or when I am out in the neighborhood. This smell reduces my enjoyment of the time I spend riding my bicycle, walking my dogs, and gardening.
18. I live three blocks from the beach, and I visit it almost every day. When I am at the beach, I am exposed to pollutants in the air. I also occasionally smell the burning odor when I am at the beach, and this makes me enjoy my time there less.
19. The pollutants I am exposed to from bicycling, gardening, eating and walking harm me by increasing my risk of health problems. I am also concerned about the harm to my partner from pollution exposure.
20. My partner Lois is currently undergoing chemotherapy treatment for ovarian cancer. I am concerned about the harm she faces from exposure to pollution from the sewage sludge incinerators.
21. I know the Sierra Club is challenging EPA's recent rule regulating sewage sludge incinerators like the ones in Lynn. I am aware that EPA's regulations are not as stringent as the Clean Air Act requires, and that strengthening the standard could reduce my partner's and my own risk of health problems. Unless the regulation is made more protective, my partner, my pets, and I will face prolonged and increased exposure to harmful emissions. We will also continue to be unable to fully enjoy bicycling, gardening, and visiting the beach.
22. I also know that two industry groups have challenged the same EPA regulation to have it weakened or vacated. I worry that if their challenge succeeds, the air quality in my community will remain inadequate or even deteriorate, further reducing our enjoyment of

outdoor recreation activities. Deteriorating air quality would increase the harm to my community, my partner, my pets, and myself.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Executed on 24 July, 2012



Rob Lang

ORAL ARGUMENT NOT YET SCHEDULED

**UNITED STATES COURT OF APPEALS
DISTRICT OF COLUMBIA CIRCUIT**

NATIONAL ASSOCIATION OF
CLEAN WATER AGENCIES,

Petitioner,

v.

U.S. ENVIRONMENTAL
PROTECTION AGENCY,

Respondent.

Case No. 11-1131
(and consolidated cases)

DECLARATION OF RICHARD E. QUIGGLE

I, Richard E. Quiggle, declare as follows:

1. I am a member of Sierra Club.
2. I reside at 220 Wallace Street, Erie PA 16507, with my daughter and several pets. I have lived at my present address for more than thirty years. I have lived in Erie area since I was one year old.
3. I regularly enjoy walking my dog, gardening, and, and, until recently, playing basketball at an outdoor court nearby.
4. The Erie Wastewater Treatment Plant facility, which contains a

sewage sludge incinerator, is located about half a mile from my home.

5. I am aware that the sewage sludge incinerator located near my home is subject to EPA's recently issued regulation titled: Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Sewage Sludge Incineration Units; Final Rule ("Sewage Sludge Incinerator Rule").

6. I am aware, based on EPA's Fact Sheet on the Sewage Sludge Incinerator Rule, and EPA's Notice of Proposed Rulemaking published in the Federal Register that sewage sludge incinerators, such as the one located near my home at the Erie Wastewater Treatment Plant, emits hazardous air pollutants including PCBs, mercury, lead, dioxins, and particulate matter. I am also aware that in addition to harming the environment and contaminating the food supply, these toxins can cause severe health problems including developmental disabilities and illnesses, such as cancer. I am very concerned about the health threats that these emissions pose to my family, my community and myself.

7. In 2004 I was diagnosed with prostate cancer. I am concerned that exposure to toxins from the sewage sludge incinerator endangers my own health, and that of my family, neighbors, and people who work in the

sewage sludge treatment facility or nearby.

8. For nearly twenty years my ex-wife lived with me at the house where I reside now; currently, she lives only a few miles away. She was diagnosed with thyroid cancer, and had to undergo intensive treatment. I am concerned that exposure to hazardous pollutants from the sewage sludge incinerator has endangered and continues to endanger her health, and the health of our children, all of whom lived in the house where I now reside as children, and two of whom still live nearby.

9. My daughter, who resides with me, spends time outdoors, and often reports smelling pollution. I am concerned that pollution from the sewage sludge incinerator is a danger to her health. I am concerned that she, and my other children, especially my son and daughter who still live in the Erie area, will develop serious diseases, such as cancer, later in life as a result of their exposure to emissions from the sewage sludge incinerator.

10. Many of my neighbors have small children and there are many schools and early education centers in the area. I am worried the children who live or attend school nearby will develop health conditions due to the harmful pollutants emitted from the sewage sludge incinerator.

11. I often walk my dog outside, and I often take him to a dog park

near the sewage sludge incinerator. I worry about the effects of the pollution that my dog and I are exposed to while taking these walks and visiting this dog park. The odors from the sewage sludge incinerator, as well as my concerns about the smells and the risks from other odorless pollution, diminish my enjoyment of these walks, and the time I spend at the dog park.

12. I have noticed and continue to notice strong foul odors in the air near the sewage sludge incinerator; and every few weeks the smell is particularly strong. When I played basketball at the outdoor court before it was removed, I could smell the sewage sludge plant, and this diminished my enjoyment of the court, as it diminishes my enjoyment of walks and gardening now.

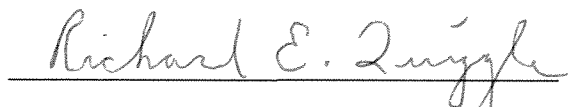
13. I avoid eating certain fish from nearby lakes and streams because the pollutants make them unsafe. I am aware that sewage sludge incinerators emit mercury and PCBs, and that these and other pollutants are then deposited in local waterways. I am also aware of public health warnings from state agencies that indicate that local fish are contaminated with mercury, and PCBs and caution against eating them frequently, or even against eating them altogether. I would enjoy eating local fish if doing so

were not a threat to my health.

14. I am aware that the EPA rules regulating sewage sludge incinerators have been challenged by two groups that seek to have the rules weakened or vacated. I am concerned that if these challenges are successful, air pollution standards for sewage sludge incinerators would be weakened or eliminated. This result would prolong and increase my exposure and my family's exposure to the pollution that the sewage sludge incinerator in Erie emits. Further, reducing or eliminating the protections provided by the sewage sludge incinerator rule would prolong and increase the harm to my ability to engage in and enjoy everyday activities such as gardening and walking my dog outside. I also am worried that if the sewage sludge incinerator rules were vacated or weakened, the harm to the health of my family, friends, neighbors, animals, would be prolonged and increased.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Executed on June 16, 2011


Richard E. Quiggle