

ORAL ARGUMENT NOT YET SCHEDULED

Case No. 17-1155 (consolidated with Case No. 17-1181)

United States Court of Appeals  
for the District of Columbia Circuit

AIR ALLIANCE HOUSTON, ET AL.,

*Petitioners,*

v.

ENVIRONMENTAL PROTECTION AGENCY, ET AL.,

*Respondents.*

PETITION FOR REVIEW OF FINAL ACTION BY THE  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

OPENING PROOF BRIEF FOR STATE PETITIONERS

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Dated: October 25, 2017

## CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES

Pursuant to Circuit Rule 28(a)(1), the undersigned counsel of record certifies as follows:

### **A. Parties**

#### Petitioners

The following parties appear in these consolidated cases as petitioners:

In case no. 17-1155, filed June 15, 2017, Air Alliance Houston, California Communities Against Toxics, Clean Air Counsel, Coalition for a Safe Environment, Community In-Power & Development Association, Del Amo Action Committee, Environmental Integrity Project, Louisiana Bucket Brigade, Ohio Valley Environmental Coalition, Sierra Club, Texas Environmental Justice Advocacy Services, Union of Concerned Scientists, Utah Physicians for a Healthy Environment (together with aligned intervenors, “Community Petitioners”).

In case no. 17-1181, filed July 24, 2017, the State of New York, State of Illinois, State of Iowa, State of Maine, State of Maryland, Commonwealth of Massachusetts, State of New Mexico, State of Oregon,

State of Rhode Island, State of Vermont, and State of Washington (“State Petitioners”).

### Respondents

The United States Environmental Protection Agency (“EPA”) and E. Scott Pruitt, EPA Administrator, are respondents in these consolidated cases.

### Intervenors

United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union, AFL-CIO-CLC has intervened for petitioners in case no. 17-1155.

The following parties have intervened for respondents in case no. 17-1155: American Chemistry Council, American Fuel & Petrochemical Manufacturers, American Petroleum Institute, Chamber of Commerce of the United States of America, Chemical Safety Advocacy Group, Commonwealth of Kentucky, State of Arizona, State of Arkansas, State of Florida, State of Kansas, State of Louisiana, State of Oklahoma, State of South Carolina, State of Texas, State of Utah, State of West Virginia, and State of Wisconsin.

**B. Ruling Under Review**

State Petitioners seek review of the following final action by EPA:

A rule entitled “Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act: Further Delay of Effective Date,” published at 82 Fed. Reg. 27,133 (June 14, 2017).

**C. Related Cases**

The rule at issue has not been previously reviewed in this or any other court. The challenged rule postpones the effective date of another EPA regulation, published at 82 Fed. Reg. 4,594 (Jan. 13, 2017), that is the subject of current litigation in this Court, *American Chemistry Council v. EPA*, D.C. Cir. No. 17-1085. That case is being held in abeyance pending agency reconsideration.

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## TABLE OF CONTENTS

CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES .....	i
TABLE OF AUTHORITIES.....	vii
GLOSSARY .....	xi
PRELIMINARY STATEMENT.....	1
JURISDICTIONAL STATEMENT .....	3
ISSUES PRESENTED .....	4
STATUTES AND REGULATIONS .....	4
STATEMENT OF THE CASE .....	5
A. EPA’s Risk Management Program.....	5
B. 2012 Administrative Petition and Executive Order 13,650.....	7
C. The Proposed Accident Prevention Amendments.....	8
D. Final Accident Prevention Amendments .....	12
E. The Proposed Delay Rule .....	15
F. The Final Delay Rule.....	16
G. This Proceeding .....	17
STANDARD OF REVIEW.....	18
SUMMARY OF ARGUMENT.....	19
STANDING .....	21
A. Injury to Quasi-Sovereign Interests .....	22
B. Proprietary Injury .....	25

ARGUMENT ..... 27

POINT I ..... 27

EPA LACKED STATUTORY AUTHORITY TO ISSUE THE DELAY RULE

A. Section 307(d) Authorizes Only a Single Three-Month Delay During Reconsideration, Which EPA Already Exhausted Here..... 28

1. The statute expressly prohibits delays for purposes of reconsideration outside of a single three-month period..... 28

2. EPA has no general authority to revise the effective date of a final rule during reconsideration. .... 30

B. Section 112(r)(7) Prohibits the Delay Rule..... 34

POINT II..... 39

THE DELAY RULE IS ARBITRARY AND CAPRICIOUS

A. EPA’s Decision to Effectively Rescind the Accident Prevention Amendments for Twenty Months Impermissibly Disregarded Its Findings about the Need for the Rule and the Rule’s Benefits. .... 40

B. EPA’s Stated Rationales for the Delay Rule Are Inadequate..... 47

1. The Bureau’s announcement on the cause of the West Fertilizer fire does not provide a reasoned basis to postpone the entire Accident Prevention Amendments for twenty months..... 47

2. EPA has not explained its blanket delay of every deadline in the Accident Prevention Amendments. .... 51

CONCLUSION ..... 53

CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME LIMIT ..... 57

CERTIFICATE OF SERVICE.....58

DECLARATIONS IN FURTHER SUPPORT OF STANDING

ADDENDUM

## TABLE OF AUTHORITIES

	Page(s)
<b>CASES</b>	
<i>Am. Wild Horse Pres. Campaign v. Purdue</i> , 2017 WL 4385259 (D.C. Cir. 2017).....	47
<i>Ashton v. Pierce</i> , 541 F. Supp. 635 (D.D.C. 1982) .....	34
<i>California v. BLM</i> , No. 3:17-cv-03804, 2017 WL 441609 (N. D. Cal., Oct. 4, 2017).....	42
<i>Chevron U.S.A., Inc. v. Natural Res. Def. Council</i> , 467 U.S. 837 (1984).....	18
<i>*Clean Air Council v. Pruitt</i> , 862 F. 3d 1 (D.C. Cir. 2017) .....	30, 32, 33, 42
<i>Columbia Broad Sys. v. FCC</i> , 454 F. 2d 1018 (D.C. Cir. 1971) .....	50
<i>Council of the Southern Mountains, Inc. v. Donovan</i> , 653 F. 2d 573 (D.C. Cir. 1981) .....	38
<i>Encino Motorcars LLC v. Navarro</i> , 136 S. Ct. 2117 (2016).....	39
<i>*FCC v. Fox Television Stations, Inc.</i> , 556 U.S. 502 (2009).....	19, 37, 39, 44, 45
<i>Greater Boston Television Corp. v. FCC</i> , 444 F. 2d 841 (D.C. Cir 1970) .....	47
<i>Hanford Challenge v. Moniz</i> , 218 F. Supp.3d 1171 (E.D. Wash. 2016).....	24
<i>Lujan v. Defenders of Wildlife</i> , 504 U.S. 555 (1992).....	21



<i>Massachusetts v. EPA</i> , 549 U.S. 497 (2007).....	24, 25
<i>Massachusetts v. Mellon</i> , 262 U.S. 447 (1923).....	24
<i>Md. People’s Counsel v. FERC</i> , 760 F.2d 318 (D.C. Cir. 1985) .....	25
<i>Morales v. Trans World Airlines, Inc.</i> , 504 U.S. 374 (1992).....	31
<i>*Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.</i> , 463 U.S. 29 (1983).....	39, 47, 53
<i>National Shooting Sports Found., Inc. v. Jones</i> , 716 F.3d 200 (D.C. Cir. 2013) .....	51
<i>NRDC v. Abraham</i> , 355 F.3d 179 (2d Cir. 2004) .....	38
<i>*NRDC v. Reilly</i> , 976 F.2d 36 (D.C. Cir. 1992) .....	31, 32, 33, 37
<i>Public Citizen v. Steed</i> , 733 F. 2d 93 (D.C. Cir. 1984) .....	40
<i>Ramaprakash v. FAA</i> , 346 F.3d 1121 (D.C. Cir. 2003) .....	50
<i>Shieldalloy Metallurgical Corp. v. Nuclear Regulatory Comm’n</i> , 707 F.3d 371 (D.C. Cir. 2013) .....	47
<i>West Virginia v. EPA</i> , 362 F.3d 861 (D.C. Cir. 2004) .....	26
<i>Whitman v. Amer. Trucking Ass’ns</i> , 531 U.S. 457 (2001).....	33

**STATUTES**

42 U.S.C. § 7412(r).....	5
42 U.S.C. § 7412(r)(3) .....	5
42 U.S.C. § 7412(r)(5) .....	5
*42 U.S.C. § 7412(r)(7).....	4, 20, 34, 51
42 U.S.C. § 7412(r)(7)(B)(i) .....	5
42 U.S.C. § 7412(r)(7)(B)(ii) .....	6
42 U.S.C. § 7607(b) .....	3
42 U.S.C. § 7607(b)(1) .....	28, 29
42 U.S.C. § 7607(d) .....	4, 28
*42 U.S.C. § 7607(d)(7)(B) .....	28
42 U.S.C. § 7607(d)(9)(A) .....	18
42 U.S.C. § 7607(d)(9)(C) .....	18
101 Public Law 549, 104 Stat. 2399 (1990).....	29, 30

**REGULATIONS**

## Code of Federal Regulations (“C.F.R”)

40 C.F.R. Part 68 .....	6
40 C.F.R. Part 68, subpart B-D .....	6, 7
40 C.F.R. § 68.3.....	6
40 C.F.R. § 68.10.....	6
40 C.F.R. § 68.10(a)(4) .....	17, 43
40 C.F.R. § 68.10(b).....	14, 17, 43
40 C.F.R. § 68.10(d) .....	14, 45
40 C.F.R. § 68.50.....	7
40 C.F.R. § 68.60.....	43
40 C.F.R. § 68.65(a).....	52
40 C.F.R. § 68.67.....	7
40 C.F.R. § 68.81 .....	43
40 C.F.R. § 68.93.....	44, 52
40 C.F.R. § 68.93(b).....	12
40 C.F.R. § 68.170.....	7
40 C.F.R. § 68.175.....	7

## Federal Register (“Fed. Reg.”)

59 Fed. Reg. 4,478 (Jan. 31, 1994).....	5
61 Fed. Reg. 31,668 (June 20, 1996).....	6

81 Fed. Reg. 13,638 (March 14, 2016) .....7, 9, 10, 11, 40, 44, 49

\*82 Fed. Reg. 4,594 (Jan. 13, 2017)..... 3, 12, 13, 14, 17, 23,  
36, 40, 42, 43, 44, 45, 51,53

82 Fed. Reg. 13,968 (March 16, 2017) ..... 15

82 Fed. Reg. 16,146 (Apr. 3, 2017)..... 16

82 Fed. Reg. 27,133 (June 14, 2017).....3, 16, 17, 27, 29, 31, 33,  
36, 37, 38, 42, 43, 44, 46,  
47, 52

**LEGISLATIVE HISTORY**

\*Senate Rep. No. 101-228 (101st Cong., 1st Sess.)..... 29, 35, 51

**MISCELLANEOUS AUTHORITIES**

Exec. Order No. 13,650 (Aug. 1, 2013)..... 7, 8, 22

EPA Activities Under EO 13,650: Risk Management  
Program (RMP) Final Rule Questions & Answers (June  
2017)  
available at: [https://www.epa.gov/sites/production/files/2017-06/documents/rmp\\_final\\_rule\\_qs\\_and\\_as\\_6-12-17\\_0.pdf](https://www.epa.gov/sites/production/files/2017-06/documents/rmp_final_rule_qs_and_as_6-12-17_0.pdf)..... 23

“Power plant deaths highlight chemical danger” (Greenwire,  
August 31, 2017)  
<https://www.eenews.net/greenwire/2017/08/31/stories/1060059479> ..... 24

“Explosions possible after ‘pops’ heard at storm-crippled  
Texas chemical plant, officials say” (Washington Post,  
August 2017) [https://www.washingtonpost.com/news/post-nation/wp/2017/08/30/texas-town-under-emergency-evacuation-as-flooded-chemical-plant-nears-explosion/?utm\\_term=.466bbbed55546](https://www.washingtonpost.com/news/post-nation/wp/2017/08/30/texas-town-under-emergency-evacuation-as-flooded-chemical-plant-nears-explosion/?utm_term=.466bbbed55546) ..... 24

\* Authorities upon which State Petitioners principally rely are marked with an asterisk.

## GLOSSARY

Accident Prevention Amendments	“Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act,” 82 Fed. Reg. 4,594 (Jan. 13, 2017)
Act	Clean Air Act
Bureau	Bureau of Alcohol, Tobacco, Firearms and Explosives
Community Petitioners	Air Alliance Houston, et al. and United Steelworkers, et al.
Delay Rule	“Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act; Further Delay of Effective Date,” 82 Fed. Reg. 27,133 (June 14, 2017)
Delay Rule Response to Comments	Response to Comments on the 2017 Proposed Rule Further Delaying the Effective Date of EPA’s Risk Management Program Amendments (June 8, 2017)
EPA	United States Environmental Protection Agency
Fact Sheet	EPA Activities Under EO 13,650: Risk Management Program Final Rule Questions & Answers (June 2017), available at: <a href="https://www.epa.gov/sites/production/files/2017-06/documents/rmp_final_rule_qs_and_as_6-12-17_0.pdf">https://www.epa.gov/sites/production/files/2017-06/documents/rmp_final_rule_qs_and_as_6-12-17_0.pdf</a>
J.A.	Joint Appendix
Response to Comments	EPA Response to Comments on the 2016 Proposed Rule Amending EPA’s Risk Management Program Regulations (Dec. 19, 2016)

State Petitioners

New York, Illinois, Iowa, Maine, Maryland,  
Massachusetts, New Mexico, Oregon, Rhode  
Island, Vermont, and Washington

## PRELIMINARY STATEMENT

At issue in this proceeding is the Environmental Protection Agency's authority to delay by nearly two years a critically important regulation under the Clean Air Act that was the product of a multiyear effort to prevent deaths and injuries from chemical accidents, such as the one that injured numerous first responders in Houston following Hurricane Harvey. EPA has justified the delay by asserting that it intends to reconsider the regulation, but it has never repudiated the policies or factual findings underlying the regulation. To the contrary, EPA has continued to endorse its earlier conclusion that enhanced safeguards are needed to prevent or mitigate the catastrophic harms caused by chemical accidents.

This Court should invalidate EPA's unlawful postponement of its chemical-accident regulation, for either of two independent reasons. First, EPA lacked the statutory authority to delay the rule pending reconsideration. The Clean Air Act expressly forbids reconsideration from delaying the effective date of a final rule, except for a single three-month period that EPA has already exhausted here. And EPA's delay further violates a separate provision of the Clean Air Act requiring that

regulations on chemical accidents in particular assure compliance by regulated entities as expeditiously as practicable—a mandate that EPA’s nearly two-year delay unlawfully disregards.

Second, EPA’s delay is arbitrary and capricious. Under black-letter law, an agency may not simply disregard its prior policies and factual findings without a detailed, reasoned justification. Yet EPA failed to offer any such justification here for effectively rescinding the benefits of its chemical-accident regulation for nearly two years. With the delay in place, regulated entities neither have to upgrade safety protections nor take steps to meet later compliance deadlines, which means that the delay affects the timing of *all* of the rule’s benefits. As recent accidents continue to demonstrate, at great cost both to people and to the States, there remains a pressing need to reform the processes for identifying, preventing, and responding to chemical accidents. EPA improperly disregarded these important interests here.

Because EPA’s delay of its chemical-accident rule is unlawful, this Court should vacate the delay so that the underlying rule—and its benefits to workers, first responders, and communities—may be implemented forthwith.

## JURISDICTIONAL STATEMENT

The Court has exclusive jurisdiction under section 307(b) of the Clean Air Act (the “Act”) to review any challenge to the Administrator’s promulgation of a rule under section 112 of the Act. 42 U.S.C. § 7607(b). New York, Illinois, Iowa, Maine, Maryland, Massachusetts, New Mexico, Oregon, Rhode Island, Vermont, and Washington (“State Petitioners”) challenge EPA’s rule, “Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act; Further Delay of Effective Date,” 82 Fed. Reg. 27,133 (June 14, 2017) (“Delay Rule”). The Delay Rule postpones by twenty months the effective date of EPA’s final rule, “Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act,” 82 Fed. Reg. 4,594 (Jan. 13, 2017) (“Accident Prevention Amendments”), which updated safety requirements for large industrial facilities that handle hazardous chemicals.<sup>1</sup> State Petitioners filed a petition for review of the Delay Rule within the sixty-day period provided in 42 U.S.C. § 7607(b).

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<sup>1</sup> This same rule has been referred to in the rulemaking and in this litigation as the “Chemical Disaster Rule.” *See generally* Brief of Community Petitioners.



## ISSUES PRESENTED

1. Whether EPA lacked authority to promulgate the Delay Rule (a) under section 307(d), 42 U.S.C. § 7607(d), which confines the Administrator's power to stay the effectiveness of a rule pending reconsideration to a single three-month period; and (b) under section 112(r)(7), 42 U.S.C. § 7412(r)(7), which provides that "[r]egulations promulgated pursuant to this subparagraph shall have an effective date . . . assuring compliance as expeditiously as practicable."

2. Whether EPA acted arbitrarily, capriciously, and contrary to law in promulgating the Delay Rule when it has offered no reasoned basis to effectively rescind the Accident Prevention Amendments for twenty months despite the agency's unchanged factual findings that the Amendments rule is necessary to protect public health and safety.

## STATUTES AND REGULATIONS

The relevant statutory and regulatory provisions and legislative history excerpts are contained in the Addendum at the end of this brief.

## STATEMENT OF THE CASE

### A. EPA's Risk Management Program

In 1990, Congress amended the Clean Air Act to add section 112(r), 42 U.S.C. § 7412(r), in response to several catastrophic chemical accidents, including the release of toxic gas from a pesticide plant in Bhopal, India, in 1984 that killed thousands of people. The new section, “Prevention of Accidental Releases,” directed EPA to list substances that could cause serious harm to human health or the environment if accidentally released. *Id.* § 7412(r)(3). For each listed substance, EPA was required to establish a threshold quantity at which an accidental release would cause injury or death. *Id.* § 7412(r)(5). In 1994, EPA published the list of regulated substances and the types of facilities subject to regulation under section 112(r). 59 Fed. Reg. 4,478 (Jan. 31, 1994).

Congress further directed EPA to “promulgate reasonable regulations . . . to provide, to the greatest extent practicable, for the prevention and detection of accidental releases of regulated substances.” 42 U.S.C. § 7412(r)(7)(B)(i). Such regulations must require facilities with listed substances present in excess of the threshold quantities to prepare

and implement risk management plans to prevent accidental releases. *Id.* § 7412(r)(7)(B)(ii). In 1996, EPA published these Risk Management Program regulations. 61 Fed. Reg. 31,668 (June 20, 1996), codified at 40 C.F.R. Part 68.

The Risk Management Program regulations cover industrial processes that involve the use, storage, manufacturing, or handling of listed substances. 40 C.F.R. 68.3. Facilities are divided by their industrial processes into three tiers: Programs 1, 2, and 3. *Id.* § 68.10. EPA assigns a tier based on the potential for offsite consequences associated with a worst-case accidental release, as well as on the facility's accident history and whether it is subject to Occupational Safety and Health Administration safety requirements. *Id.* Under this scaled approach, facilities subject to Program 1 have the least stringent requirements, while those covered by Program 3 have the most stringent.

Each regulated facility must submit to EPA a certified risk management plan that includes its accidental release prevention and emergency response policies, regulated substances handled, five-year accident history, emergency response program, planned changes to improve safety, worst-case release scenarios, and registration form. *See*

40 C.F.R. 68, subpart G. Facilities subject to Programs 2 and 3 must also include a hazard review or process hazard analysis, respectively, addressing the risks associated with those processes and the safeguards in place to control such hazards. *See id.* §§ 68.50, 68.67, 68.170, 68.175. Approximately 12,500 facilities have current risk management plans filed with EPA. 81 Fed. Reg. 13,638, 13,641 (Mar. 14, 2016).

### **B. 2012 Administrative Petition and Executive Order 13,650**

Despite the enhanced safety provided by the Risk Management Program regulations, chemical releases and disasters at facilities in the United States continued to pose a significant risk to workers and communities. For instance, in 2005, explosions at a British Petroleum refinery in Texas killed fifteen people and injured more than 170 individuals. 81 Fed. Reg. at 13,644. In 2010, an explosion and fire at the Tesoro Refinery in Washington killed seven people. *Id.* In 2012, a fire at the Chevron Refinery in California created a large plume of hazardous chemicals, forcing nearly 15,000 residents to seek medical treatment. *Id.* In April 2013, a fire and explosion at the West Fertilizer Facility in Texas killed fifteen people. *Id.* at 13,640.

To prevent similar disasters, over fifty organizations and individuals petitioned EPA in July 2012 to strengthen the existing regulations. *See* EPA-HQ-OEM-2015-0725-0249 (JA\_\_\_\_). Petitioners urged EPA to improve existing safeguards by, among other things, requiring safer technologies where feasible to reduce the need to use and store dangerous quantities of hazardous substances at facilities. *Id.* (JA\_\_\_\_).

In August 2013, President Obama issued an executive order directing federal agencies to improve safety and security at chemical facilities. Exec. Order No. 13,650 (Aug. 1, 2013) (JA\_\_\_\_). The Executive Order instructed federal agencies to ensure that state and local partners have access to key information to prevent, prepare for, and respond to chemical incidents. *Id.* (JA\_\_\_\_). The Order also directed federal agencies, including EPA, to improve chemical safety regulations and determine if additional chemicals should be covered by federal regulatory programs. *Id.* (JA\_\_\_\_).

### **C. The Proposed Accident Prevention Amendments**

After gathering information from the public regarding potential changes to the existing Risk Management Program regulations, EPA

published proposed amendments in March 2016. 81 Fed. Reg. 13,638. EPA found that although existing regulations had been effective in preventing and mitigating chemical accidents, “revisions could further protect human health and the environment from chemical hazards through advancement of process safety management based on lessons learned.” *Id.* at 13,640.

By reviewing past chemical accidents and investigation reports from the Chemical Safety Board and other entities, EPA identified four areas of poor performance that contributed to the severity of chemical accidents: (1) inadequate accident investigations; (2) flawed compliance audits; (3) insufficient coordination between chemical facilities and local emergency responders; and (4) lack of communication between facility personnel and first responders, and facility personnel and communities. 81 Fed. Reg. at 13,649, 13,654, 13,671, 13,678.

To strengthen accident prevention programs and auditing requirements, EPA proposed that Program 2 and 3 facilities conduct “root cause” analyses to determine the fundamental, system-related reasons for incidents that resulted in catastrophic releases (or near misses). *Id.* at 13,648. It also proposed that those facilities arrange for independent

third-party compliance audits after an accident or finding of significant non-compliance. *Id.* at 13,654. Auditors would determine if facilities were complying with the Risk Management Program regulations, and whether facilities' procedures and practices were adequate and being followed. Certain Program 3 facilities also would be required to analyze potential safer technology and alternatives and their feasibility. *Id.* at 13,667.

To improve emergency-response preparedness, EPA further proposed requiring that certain facilities coordinate annually with local response authorities to ensure that appropriate resources and capabilities are in place to respond to accidental releases, conduct emergency notification exercises annually, and regularly perform emergency field and tabletop exercises. 81 Fed. Reg. at 13,671-77.

Finally, to improve community awareness of potential risks, EPA proposed that each subject facility: provide certain basic information to the public; hold a public meeting after a reportable incident; and annually prepare a report containing a facility's chemical hazard information that would be provided to local officials upon request. Such reports would contain information on a facility's regulated substances, accident history, compliance audit reports, incident investigation reports,

inherently safer technology employed, and emergency exercises. 81 Fed. Reg. at 13,677-82.

Some commenters raised security concerns with the proposed requirements that owners and operators provide detailed chemical hazard information to local emergency response officials and share chemical hazard information with the public by posting that information on company websites. Response to Comments (Dec. 19, 2016) at 194 (JA\_\_\_\_\_).

Other commenters discussed the announcement of the Bureau of Alcohol, Tobacco, Firearms and Explosives (“Bureau”) near the end of the comment period that the 2013 fire and explosion at the West Fertilizer facility in Texas, was caused by arson, rather than by the issues addressed in the proposed rule. The commenters contended that a mistaken view of the cause of the incident was the basis for the Executive Order and asked EPA to reevaluate the need for the proposed amendments in light of the Bureau’s finding. Response to Comments at 247 (JA\_\_\_\_\_).



## D. Final Accident Prevention Amendments

EPA published the Accident Prevention Amendments in January 2017. 82 Fed. Reg. 4,594. EPA retained the major changes proposed to the existing regulations, and made some modifications in response to comments.

With respect to security concerns regarding the proposed information-sharing provisions, EPA eliminated the requirement that owners and operators prepare an annual summary of chemical hazard information for submission to local officials. 82 Fed. Reg. at 4,666. Instead, the final rule requires that, in addition to providing its emergency response plan, the facility provide “any other information that local emergency planning and response organizations identify as relevant to local emergency response planning.” *Id.* at 4,701 (40 C.F.R. § 68.93(b)). This approach, EPA explained, allows facility owners and emergency response officials “to identify information that may need to be maintained securely and discuss strategies to secure the information or to provide only information that is pertinent to emergency response planning without revealing security vulnerabilities.” *Id.* at 4,667. EPA also eliminated the requirement that facilities post chemical hazard

information on the internet. *Id.* The rule instead obligates facilities to make such information available upon request. *Id.*

EPA disagreed, however, with comments that the Bureau's finding that arson was the cause of the West Fertilizer incident required rethinking the proposed amendments. Because the Executive Order was also triggered by numerous other chemical facility incidents, including several that were indisputably caused by the issues addressed in the proposed rule, EPA concluded that "it would be inappropriate to suspend the rulemaking based on the outcomes of the incident investigation of the West Fertilizer explosion." Response to Comments at 248 (JA\_\_\_\_). Moreover, EPA found that, regardless of the *cause* of the incident, the problems that arose during the *response* to that incident still demonstrated "the importance of emergency responders being aware of the risks presented by chemicals on-site as well as the need to have drilled for response." *Id.* (JA\_\_\_\_).

EPA anticipated that implementation of the Accident Prevention Amendments "will result in a reduction of the frequency and magnitude of damages from releases." 82 Fed. Reg. at 4,683. It conservatively estimated the costs of chemical accidents at \$274.7 million annually, a

figure that did not reflect emergency response costs, property value impacts in surrounding communities, and environmental impacts. *Id.* at 4,684. EPA expected that “some portion of future damages would be prevented through implementation of this rule.” *Id.* at 4,683. Moreover, it found that “[r]educing the probability of chemical accidents and the severity of their impacts, and improving information disclosure by chemical facilities, as the provisions intend, would provide benefits to potentially affected members of society.” *Id.* at 4,684.

EPA determined that March 14, 2017, was an appropriate effective date for the rule: it was practicable for regulated entities to comply with some provisions immediately, while they would need additional time to prepare to comply with others. 82 Fed. Reg. at 4,675-76. For the latter category, compliance was phased in from March 14, 2018, to March 14, 2022. *Id.* at 4,696 (40 C.F.R. 68.10(b)-(e)). In setting dates for the different requirements, EPA explained that it had considered the time needed for facility operators to understand the new rules, train personnel, arrange responses, research technologies, and provide for public notification. *Id.* at 4,676.

### **E. The Proposed Delay Rule**

In March 2017, EPA issued a three-month administrative stay of the effective date of the Accident Prevention Amendments, pending reconsideration, until June 2017. 82 Fed. Reg. 13,968 (Mar. 16, 2017). The stay was in response to three petitions filed with the agency, including one by a coalition of industry groups called the RMP Coalition. EPA-HQ-OEM-2015-0725-0759 (JA\_\_\_\_). The Coalition argued EPA should reconsider the entire rule based on the finding of the cause of the West Fertilizer incident alone. *Id.* at 15-16 (JA\_\_\_\_-\_\_\_\_). Administrator Pruitt found that the petition met the requirements for reconsideration under section 307(d)(7)(B) of the Act. EPA-HQ-OEM-2015-0725-0763. (JA\_\_\_\_). He stated that the timing of the finding on the West Fertilizer incident “made it impracticable for many commenters to meaningfully address the significance of this finding in their comments,” *id.* at 2 (JA\_\_\_\_)—even though it is undisputed that multiple commenters did address the finding, and that EPA responded to those comments. Administrator Pruitt also asserted that “the prominence of the incident in the policy decisions underlying the rule makes the [Bureau’s] finding

regarding the cause of the incident of central relevance to the [Accident Prevention Amendments].” *Id.* (JA\_\_\_\_).<sup>2</sup>

In April 2017, EPA issued a proposed rule to further delay the effective date of the Accident Prevention Amendments to February 19, 2019. 82 Fed. Reg. 16,146 (Apr. 3, 2017). EPA stated that “[t]his timeframe would allow the EPA time to evaluate the objections raised by the various petitions for reconsideration of the [Accident Prevention Amendments], consider other issues that may benefit from additional comment, and take further regulatory action.” *Id.* at 16,148-49.

#### **F. The Final Delay Rule**

On June 14, 2017, EPA published the Delay Rule, which postpones the effective date of the Accident Prevention Amendments for twenty months, until February 2019. 82 Fed. Reg. 27,133 (June 14, 2017). EPA cited sections 307(d) and 112(r)(7) of the Act as authority for the Delay Rule. *Id.* at 27,135.

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<sup>2</sup> EPA received two additional petitions for reconsideration of the Accident Prevention Amendments on March 13 and 14. EPA-HQ-OEM-2015-0725-0766, EPA-HQ-OEM-2015-0725-0762 (JA\_\_\_\_, JA\_\_\_\_).

EPA found the delay to be “reasonable and practicable” because it did not want to make the regulated community comply with requirements that might be changed following reconsideration. 82 Fed. Reg. at 27,139. It selected a twenty-month delay because it expected its reconsideration to take that long to complete. *Id.* at 27,136. EPA further announced that “[c]ompliance with all of the rule provisions is not required as long as the rule does not become effective.” *Id.* at 27,142.

The Delay Rule had an immediate effect on the regulated community and the public because some of the Accident Prevention Amendments were triggered upon the Rule’s effective date. *See* 82 Fed. Reg. at 4,696 (40 C.F.R. 68.10(a)(4)). Other requirements pertaining to emergency response coordination were designed to come into effect within the twenty-month delay period, and so were also necessarily put off by the Delay Rule. *See id.* (40 C.F.R. 68.10(b)).

### **G. This Proceeding**

Community Petitioners and State Petitioners filed petitions challenging the Delay Rule, which this Court consolidated. Community Petitioners moved for a stay and expedited consideration of the Delay Rule or, in the alternative, for summary vacatur. *See* Doc. No. 1680887

(filed June 22, 2017). State Petitioners joined that motion. *See* Doc. No. 1686931 (filed Aug. 2, 2017). On August 30, the Court denied the motion to stay or summarily vacate, but granted expedition. Doc. No. 1690788.

### STANDARD OF REVIEW

An EPA action may be reversed if it is “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law; . . . [or] in excess of statutory jurisdiction, authority, or limitations, or short of statutory right.” 42 U.S.C. §§ 7607(d)(9)(A) & (C).

This challenge involves EPA’s construction of the Act. Where the statute speaks directly to the question at issue, a court “must give effect to the unambiguously expressed intent of Congress.” *Chevron U.S.A., Inc. v. Natural Res. Def. Council*, 467 U.S. 837, 842-43 (1984). Where the statute does “not directly address[ ] the precise question at issue, . . . the question for the court is whether the agency’s answer is based on a permissible construction of the statute,” and the court will reverse the agency’s determination if it is “arbitrary, capricious, or manifestly contrary to the statute.” *Id.* at 843-44.

This case also involves a change in policy by EPA. In changing course, an agency must display “awareness that it *is* changing position”

and provide a reasoned basis for its conclusion “that the new policy is permissible under the statute, that there are good reasons for it, and that the agency *believes* it to be better.” *FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 515 (2009) (emphasis original). If a “new policy rests upon factual findings that contradict those which underlay [an agency’s] prior policy,” the agency must “provide a more detailed justification” for its action. *Id.*

## SUMMARY OF ARGUMENT

I. EPA lacked the statutory authority to promulgate the Delay Rule. The express purpose of the Delay Rule is to give EPA additional time to reconsider the Accident Prevention Amendments. But section 307(d) limits EPA’s authority to delay a rule on that ground: EPA may postpone the effective date of a rule only once during reconsideration, and only for three months. Here, EPA already exercised its limited power under section 307(d) when it delayed the Accident Prevention Amendments for three months pending reconsideration. Its attempt to use reconsideration as a tool for further delay is barred by section 307(d)’s plain terms, as confirmed by that provision’s legislative history and this Court’s precedent.



The Delay Rule also violates section 112(r)(7), which requires that EPA set “an effective date . . . assuring compliance as expeditiously as practicable.” 42 U.S.C. § 7412(r)(7)(A). EPA satisfied this statutory mandate when it promulgated the Accident Prevention Amendments and set both the effective date and subsequent compliance dates based on its careful consideration of the amount of time that facilities would need to comply with each new requirement. Section 112(r)(7) forbids EPA from suspending this schedule for the purpose of excusing, rather than assuring, the industry’s compliance with promulgated safety rules. And the statute further forbids EPA from relying on burdens it faces while reconsidering a rule to justify delaying the rule’s effective date, since alleviating the agency of such burdens has nothing to do with assuring industry compliance with safety standards as expeditiously as practicable.

**II.** Even if this Court were to determine that EPA had statutory authority to postpone the Accident Prevention Amendments’ effective date, it should nonetheless invalidate the Delay Rule as arbitrary and capricious. In promulgating the underlying rule, EPA found that its enhanced safeguards are necessary to protect public health and safety,

and that its effective date and subsequent compliance dates assure industry compliance with these safeguards as expeditiously as practicable. The Delay Rule effectively rescinds these critical protections for twenty months but provides no adequate justification for doing so. Indeed, EPA made no attempt to justify the Delay Rule on public health and safety grounds, and has failed to discuss—let alone dispute—the findings and policies underlying the Amendments. And the grounds that EPA has invoked for the Delay Rule—including its asserted need to assess the implications of the arson finding regarding the West Fertilizer fire—fail to provide a reasoned basis for the Delay Rule.

### STANDING

State Petitioners have Article III standing to challenge the Delay Rule. *See Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560-61 (1992). The Delay Rule causes two distinct injuries to State Petitioners: it injures their quasi-sovereign interests in protecting the health and safety of their residents from chemical accidents; and it injures the States' proprietary interests, including increased costs to respond to and investigate accidents, and harm to state-owned natural resources that timely

implementation of Accident Prevention Amendments would likely avoid or mitigate.

#### **A. Injury to Quasi-Sovereign Interests**

EPA's decision to delay effectiveness of the Accident Prevention Amendments for nearly two years will result in concrete harms to the health and safety of our residents who work in the subject facilities and who live in nearby communities. There are hundreds of industrial facilities in our States subject to the Amendments' increased safety requirements. *See* EPA-HQ-OEM-2015-0725-0311 (EPA database listing subject facilities) (JA\_\_\_\_). Approximately 150 chemical accidents in which facility owners reported health harms or property damage occurred annually in the ten-year period of 2004-13. *See* EPA Technical Background Document (Jan. 27, 2016), EPA-HQ-OEM-2015-0725-0039, at 2-3 (JA\_\_\_\_-\_\_\_\_). Accidents over that period resulted in 58 deaths, over 17,000 injuries, almost 500,000 people evacuated or sheltered in place, and over \$2 billion in property damages. EPA Activities Under EO 13,650: Risk Management Program Final Rule Questions & Answers (June 2017) ("Fact Sheet") at 1, available at: <https://www.epa.gov/sites/production/files/2017->

06/documents/rmp\_final\_rule\_qs\_and\_as\_6-12-17\_0.pdf (JA\_\_\_\_); *see also* attached Declaration of Agata McIntyre, Northwest Clean Air Agency, ¶¶ 6-13 (explaining risks to human health from pollution emitted during chemical accidents).

The Accident Prevention Amendments were designed to decrease the number and severity of chemical accidents, lessening these harms. *See* 82 Fed. Reg. at 4,597; *see also* Fact Sheet at 1 (“EPA’s changes to the RMP rule will help protect local first responders, community members and employees from death or injury due to chemical facility accidents”) (JA\_\_\_\_).

The Delay Rule postpones implementation of these measures and will thus increase the number and severity of chemical accidents. Based on EPA’s findings discussed above, approximately 250 accidents causing harm or damage would be expected to occur during the twenty months the Delay Rule is in effect. Indeed, several notable accidents have already occurred while the Delay Rule has been in place, such as the explosion at the Arkema chemical facility near Houston and an accident at a coal-fired power plant in Pennsylvania in August in which two workers died and

four others were injured.<sup>3</sup> The delay in implementing the Accident Prevention Amendments will thus likely harm the health and safety of State Petitioners' residents, who live near and work at subject facilities, and damage natural resources nearby.

State Petitioners have standing to assert their quasi-sovereign interests in protecting their residents and their environments from such harms. *See, e.g., Massachusetts v. EPA*, 549 U.S. 497, 519-21 (2007); *Hanford Challenge v. Moniz*, 218 F. Supp.3d 1171, 1182 (E.D. Wash. 2016). The doctrine that States may lack *parens patriae* standing to sue the federal government, *see Massachusetts v. Mellon*, 262 U.S. 447 (1923), is inapplicable here for two reasons. First, *Mellon's* limit on *parens patriae* actions is only a prudential limitation on Article III standing that can be—and has been here—overridden by Congress. The Act expressly confers a procedural right on States (and other parties) to challenge EPA regulatory action under section 307(b)(1). *See Massachusetts v. EPA*, 549

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<sup>3</sup> *See* [https://www.washingtonpost.com/news/post-nation/wp/2017/08/30/texas-town-under-emergency-evacuation-as-flooded-chemical-plant-nears-explosion/?utm\\_term=.466bbed55546](https://www.washingtonpost.com/news/post-nation/wp/2017/08/30/texas-town-under-emergency-evacuation-as-flooded-chemical-plant-nears-explosion/?utm_term=.466bbed55546) (Arkema chemical accident); <https://www.eenews.net/greenwire/2017/08/31/stories/1060059479> (Bruce Mansfield power plant accident).

U.S. at 520 (citing concomitant procedural right to challenge denial of rulemaking petition under section 307(b)(1)); *Md. People's Counsel v. FERC*, 760 F.2d 318, 322 (D.C. Cir. 1985) (“where the subject of challenge is Executive compliance with statutory requirements in a field where the federal government and states have long shared regulatory responsibility, we have no doubt that congressional elimination of the rule of *Massachusetts v. Mellon* is effective”). Second, State Petitioners are asserting rights conferred on them by federal law—here, the Act’s guarantee of adequate safeguards to protect their communities and workers from harm caused by chemical accidents. *See Massachusetts v. EPA*, 549 U.S. at 520 n.17 (State has quasi-sovereign standing “to assert its rights under federal law,” including the Act).

### **B. Proprietary Injury**

The Delay Rule also will likely cause State Petitioners to incur direct injury to proprietary interests. State Petitioners will bear increased costs to respond to and investigate chemical accidents that likely would have been prevented or mitigated had the Accident Prevention Amendments gone into effect as scheduled. For example, Washington conservatively spent \$370,000 in non-recoverable funds

responding to and investigating the Tesoro Refinery explosion, an accident cited by EPA as demonstrating the need to strengthen the existing regulations. *See* Declaration of Christian Bannick, Washington Department of Labor & Industries, ¶¶ 10-12 (describing staff time and expense from Tesoro Refinery investigation as a “unanticipated and heavy blow to the Department’s budget”). As discussed above, postponement of the Accident Prevention Amendments means that the rate and severity of chemical accidents will likely continue, rather than decline. As with prior accidents, including those in Washington, State Petitioners will incur costs responding to and investigating these accidents. Compelling facilities to adopt these safeguards without further delay will therefore likely lessen the direct financial burdens on State Petitioners. Chemical accidents also cause injury to state resources, including impacts to airsheds and air quality. McIntyre Decl. ¶¶ 10-12. These injuries provide additional, independent grounds for standing. *See West Virginia v. EPA*, 362 F.3d 861, 868 (D.C. Cir. 2004) (EPA action that makes it more onerous for State to address pollution causes cognizable injury for State to assert Article III standing).

## ARGUMENT

### POINT I

#### **EPA LACKED STATUTORY AUTHORITY TO ISSUE THE DELAY RULE**

In the Delay Rule, EPA cited two provisions of the Act as providing it authority to postpone the effective date of the Accident Prevention Amendments pending reconsideration: section 307(d) and section 112(r)(7). 82 Fed. Reg. at 27,135. EPA asserted that it has general authority under section 307(d) to set effective dates of its choosing, and that its Delay Rule was also authorized by language in section 112(r)(7) granting the Administrator discretion to set effective dates. Neither section authorizes the Delay Rule. To the contrary, the plain terms of both provisions prohibit EPA from postponing the effective date of a final rule promulgated under section 112(r)—and thereby excusing industry compliance—simply because EPA wishes to reconsider the underlying rule.



**A. Section 307(d) Authorizes Only a Single Three-Month Delay During Reconsideration, Which EPA Already Exhausted Here.**

**1. The statute expressly prohibits delays for purposes of reconsideration outside of a single three-month period.**

EPA's twenty-month postponement of the effective date of the Accident Prevention Amendments violates the plain language of section 307(d), 42 U.S.C. § 7607(d). Once a rule is promulgated, section 307(d) expressly provides that the rule remains effective even if it is being challenged in court, and the "filing of a petition for reconsideration . . . shall not affect the finality" of a rule and "*shall not postpone the effectiveness of such rule.*" 42 U.S.C. § 7607(b)(1) (emphasis added). Similarly, if EPA convenes a proceeding for reconsideration based on late-arising objections that are central to a rule's relevance, section 307(d) again reiterates that "[s]uch reconsideration shall not postpone the effectiveness of the rule." *Id.* § 7607(d)(7)(B). Although Congress provided a narrow exception to this principle in section 307(d)(7)(B), which allows a stay of final rules pending reconsideration, that exception is expressly limited "for a period *not to exceed three months.*" *Id.* (emphasis added).

The Delay Rule’s twenty-month postponement of the effective date of the Accident Prevention Amendments for purposes of reconsideration violates this clear statutory language. EPA concedes that the purpose of the Delay Rule is to “allow the EPA time to evaluate the objections raised by the various petitions for reconsideration of the Amendments, consider other issues that may benefit from additional comment, and take further regulatory action.” 82 Fed. Reg. at 27,140. But EPA already delayed the Amendments for three months for reconsideration, *see id.* at 27,135, and section 307(d)(7)(B) prohibits any further delay on that ground.

The limitation on EPA’s authority to stay a promulgated Clean Air Act rule—only for three months and only when certain reconsideration factors are met—aligns with the statute’s primary purpose of protecting public health and welfare by ensuring that promulgated rules take effect and remain effective even if the agency revisits its reasoning. *See id.* § 7401(b)(1). Indeed, Congress amended 307(b)(1) in 1990 specifically “to assure that the pendency of a petition for reconsideration does not delay [judicial] review *or limit the effectiveness or enforceability of EPA’s action pending reconsideration or judicial review.*” Senate Rep. No. 101-228 (101st Cong., 1st Sess.) at 372 (emphasis added) (ADD-116); *see* 104 Stat.

2399, 2682 (1990). Congress further emphasized that reconsideration does not postpone the finality or effectiveness of a rule: “[T]his amendment reaffirms what both the language and legislative history of section 307(b) demonstrate, that is, that Congress intended EPA rulemaking action to be final upon final promulgation, not upon a decision on reconsideration.” *Id.* at 372 (ADD-116).

Here, the Delay Rule frustrates Congress’s intent that, beyond a three-month period, reconsideration not postpone a rule’s effectiveness. EPA’s use of reconsideration of the Accident Prevention Amendments as effectively a placeholder stay—so that it can decide whether to change anything—violates the statute’s plain terms and undermines Congress’s desire to ensure that reconsideration does not undercut “efficient implementation of the Act’s regulatory program.” *Id.* at 372 (ADD-116).

**2. EPA has no general authority to revise the effective date of a final rule during reconsideration.**

EPA’s attempt to cite its general rulemaking authority to circumvent the plain language of the statute is foreclosed by this Court’s precedent. The agency cannot use a general grant of authority in the Act to avoid more specific limits on its power in the statute. *See Clean Air Council v. Pruitt*, 862 F.3d 1, 9 (D.C. Cir. 2017) (rejecting EPA argument

that it possesses authority under section 307 to stay rules under reconsideration beyond the express authority contained in section 307(d)(7)(B)); *NRDC v. Reilly*, 976 F.2d 36, 40-41 (D.C. Cir. 1992) (invalidating stay of emission standards under section 112 where agency relied in part on general rulemaking authority).

In this case, EPA seeks to avoid the three-month limitation in section 307(d)(7)(B) by asserting it has authority under section 307(d) “to set effective dates unless other provisions of the [Act] control,” 82 Fed. Reg. at 27,135, and to “revis[e]” existing rules, *id.* at 27,136. Under the agency’s theory, there is no time limit on delaying rules under reconsideration provided it follows notice-and-comment procedures. *See id.* at 27,135. But EPA’s general rulemaking authority does not allow the agency to disregard the specific limitations that Congress placed on delaying the effective date of a final rule pending reconsideration. *Morales v. Trans World Airlines, Inc.*, 504 U.S. 374, 384 (1992) (“[I]t is a commonplace of statutory construction that the specific governs the general.”).

EPA’s reliance on section 307(d) to issue the Delay Rule is no different from the agency’s unsuccessful attempts to rely on its general

rulemaking authority in *Clean Air Council* and in *Reilly* to suspend final rules. In *Clean Air Council*, EPA contended it had broad authority under section 307(d) to reconsider rules—and, correspondingly, to stay them during the reconsideration process. EPA cited section 307(d)'s “revision” language as evidence that Congress intended EPA to have discretion to issue stays for reconsiderations beyond the circumstances described in section 307(d)(7)(B). See EPA Opp. in *Clean Air Council v. Pruitt*, Case No. 17-1145, Doc. No. 1679831 (filed June 15, 2017) at 12. This Court disagreed, finding that section 307(d)(7)(B) plainly limited EPA's authority to stay rules to situations where EPA could demonstrate that the provision's reconsideration criteria were satisfied. *Clean Air Council*, 862 F.3d at 9.

Similarly, in *Reilly*, the Court struck down an attempt by EPA to delay emission standards it had promulgated under section 112 beyond the three-month reconsideration period provided for in section 307(d)(7)(B). EPA justified the delay rule in that case, which it had issued after notice and comment, on the need to avoid compliance costs for industry while the agency decided whether to change the underlying rule. 976 F.2d at 39. EPA in *Reilly* relied in part on its general rulemaking

authority under section 301 of the Act, which states that the Administrator may issue rules as necessary to carry out his functions under the Act. *Id.* at 40. The Court rejected EPA’s argument, finding that the Administrator’s authority under section 301 to stay promulgated standards was limited by the three-month limit prescribed in section 307(d)(7)(B), and that nothing in section 112 authorized that delay rule. *Id.* at 41.

EPA’s attempt here to invoke its general rulemaking authority for the Delay Rule is thus unavailing. *See Clean Air Council*, 862 F.3d at 9; *Reilly*, 976 F.2d at 40;<sup>4</sup> *see generally Whitman v. Am. Trucking Ass’ns*, 531 U.S. 457, 485 (2001) (EPA “may not construe [a] statute in a way that completely nullifies textually applicable provisions meant to limit its discretion”).

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<sup>4</sup> EPA contends *Reilly* is inapposite because, unlike in that case, the Accident Prevention Amendments “were not promulgated to comply with a court order enforcing a mandatory duty.” 82 Fed. Reg. at 27,137. But that argument is beside the point. The question in this case is not whether EPA must regulate as a threshold matter—it already decided to do so in promulgating the Amendments. Rather, the question is whether EPA has authority under sections 307(d) or 112(r)(7) to postpone the effective date of that rule. As explained above, and below, *see Point I.B, infra*, it does not.

## B. Section 112(r)(7) Prohibits the Delay Rule

The Delay Rule also separately violates section 112(r)(7), which authorizes EPA to set an effective date solely for purposes of “assuring compliance *as expeditiously as practicable*” with a rule’s standards “for the prevention and detection of accidental releases of regulated substances and for response to such releases.” 42 U.S.C. § 7412(r)(7)(A), (B) (emphasis added). The statutory language reflects Congress’s intent that EPA ensure adequate safeguards are promptly put in place to protect workers and surrounding communities from releases of dangerous chemicals from accidents.

The Delay Rule violates this statutory mandate by excusing rather than assuring industry compliance with the Accident Prevention Amendments for nearly two years, and by doing so based on the agency’s timeline for completing reconsideration rather than regulated entities’ ability to implement new safeguards. A rule “assur[es] compliance as expeditiously as practicable” when it directs *regulated entities* to comply with the rule as soon as those entities are able to “put into practice” their obligations. *See Ashton v. Pierce*, 541 F. Supp. 635, 641 (D.D.C. 1982) (defining “practicable”). The legislative history of section 112(r)(7)

confirms that Congress intended EPA to set effective dates based on the time necessary for facilities to implement required measures.<sup>5</sup>

In the Accident Prevention Amendments, EPA adhered to Congress' intent by establishing deadlines that assured industry compliance based on what was practicable for facilities to achieve. EPA set a March 14, 2017, effective date (sixty days after the rule was published), when initial requirements would come into effect, and considered an array of factors in setting later compliance deadlines. For each of the main compliance obligations under the Amendments, EPA

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<sup>5</sup> For example, in describing the EPA Administrator's obligation to "establish an effective date for each regulation at the time it is promulgated," Congress repeatedly referred to regulated facilities' ability to comply with such effective dates:

The effective date may be different for new and existing facilities and requirements for new facilities may be applicable to facilities which begin construction at any time after the requirement is first proposed. Generally, requirements which only mandate changes in procedure can be implemented by new and existing facilities almost immediately. However, other changes which involve capital investment or the development of specialized programs may require more time to implement at existing facilities.

S. Rep. No. 101-228 at 245 (ADD-111).



explained why the respective compliance deadlines were achievable by regulated facilities. *See* 82 Fed. Reg. at 4,676-78. For example, regarding emergency response coordination requirements, EPA found that one year would be “sufficient to arrange for and document coordination activities.” *Id.* at 4,677. By contrast, for the obligation that facilities adopt “root cause” analysis to ascertain the cause of an incident that could have resulted in a catastrophic release, EPA explained that a four-year compliance date was necessary “to allow facility owners and operators sufficient time to establish training and program development activities.” *Id.* at 4,676.

In the Delay Rule, however, EPA abandoned any effort to assure expeditious compliance with the Accident Prevention Amendments, and indeed specifically noted that “[c]ompliance with all of the rule provisions is not required” during the entire twenty-month delay. 82 Fed. Reg. at 27,142. Moreover, to justify this delay, EPA improperly focused on what timing was “practicable” for *the agency* to reconsider and take further comments on the Amendments, rather than on what would have been practicable for regulated facilities to accomplish. *See, e.g., id.* at 27,135 (“three months was insufficient to complete the necessary steps in the

reconsideration process”) and 27,136 (“A delay of 20 months is a reasonable length of time to engage in the process of revisiting issues in the underlying Risk Management Program Amendments”). But agencies cannot “depart from a prior policy *sub silentio*.” *See FCC*, 556 U.S. at 516. And EPA did not rebut (or even propose to rebut) any of the findings of practicability for facilities in the underlying rule. Nor did EPA determine that compliance based on the initial effective date was impracticable or that a later effective date would further the statute’s risk-reduction aims. Section 112(r)(7) forbids EPA from deferring the effective date of a final rule under these circumstances.

EPA contends that it has significant discretion in setting (or re-setting) effective dates because section 112(r)(7) “does not contain any language limiting ‘as expeditiously as practicable’ to an outside date (*e.g.*, ‘in no case later than date X’),” 82 Fed. Reg. at 27,136. But this argument misses the point because the agency did not tie its finding of “practicability” to relevant factors in the statute—namely, the ability of regulated facilities to achieve compliance as expeditiously as practicable. *See Reilly*, 976 F.2d at 44 (Silberman, J. concurring) (rejecting as unreasonable EPA’s interpretation that section 112(d)(9) of the Act

authorized delaying emission standards because EPA sought “to exploit the ambiguity rather than to resolve it, and to advance its own policy objectives rather than Congress”).

EPA further contends that, in determining the practicability of a rule’s effective date, it may consider “confusion” that might ensue if the March 2017 effective date remained in place while the agency considers whether to change the Accident Prevention Amendments. 82 Fed. Reg. at 27,139. But to the extent there would be “confusion” if facilities implemented the rule’s safeguards, only to have EPA change them later, such a scenario would be of EPA’s own making, not the product of circumstances beyond its control. This “confusion” justification for postponing the underlying rule to accommodate EPA’s policy changes is not a reasoned basis for its delay action. *See NRDC v. Abraham*, 355 F.3d 179, 204-05 (2d Cir. 2004) (rejecting application of “good cause” exception to Administrative Procedure Act’s notice-and-comment requirement based on “an emergency of DOE’s own making”); *compare Council of the Southern Mountains, Inc. v. Donovan*, 653 F. 2d 573, 582 (D.C. Cir. 1981) (upholding six-month stay of regulatory deadline for mining companies to comply with requirement to upgrade portable respirators based on

circumstances beyond the agency's control—i.e., failure of manufacturer to complete field testing of the safety equipment).

## POINT II

### THE DELAY RULE IS ARBITRARY AND CAPRICIOUS

Even if EPA were authorized to suspend the Accident Prevention Amendments pending reconsideration, the agency must further show that it has satisfied its obligation to consider all relevant factors and “give adequate reasons for its decisions.” *Encino Motorcars LLC v. Navarro*, 136 S. Ct. 2117, 2125 (2016); see *Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (agency must “examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made” (internal quotation and citation omitted)). Furthermore, when, as here, an agency has reversed course from a prior rule in a way that contradicts the factual findings that “underlay its prior policy,” it must provide “a reasoned explanation . . . for disregarding facts and circumstances that underlay or were engendered by the prior policy.” *FCC v. Fox*, 556 U.S. at 515-16. Here, the Delay Rule fails to satisfy either criteria.

**A. EPA's Decision to Effectively Rescind the Accident Prevention Amendments for Twenty Months Impermissibly Disregarded Its Findings about the Need for the Rule and the Rule's Benefits.**

EPA issued the Accident Prevention Amendments after a series of catastrophic chemical incidents underscored the pressing need for improved safeguards. *See* 81 Fed. Reg. at 13,644. The agency concluded it needed to do more to “further protect human health and the environment from chemical hazards,” 82 Fed. Reg. at 4,595, and that specific regulatory improvements could reduce the probability and severity of chemical accidents, 81 Fed. Reg. at 13,643. The Delay Rule effectively rescinds these regulatory protections for twenty months during EPA's reconsideration. *See Public Citizen v. Steed*, 733 F.2d 93, 98 (D.C. Cir. 1984) (concluding that interim suspension that eliminated regulatory obligations “should be treated as a revocation”). But EPA lacks any legitimate rationale for disregarding its prior findings and issuing a blanket postponement of the Amendments.

In promulgating the Delay Rule, EPA did not find that the Amendments are deficient or that, if left in place pending reconsideration, will fail to protect the public and the environment from chemical accidents. In fact, in its response to comments on the Delay

Rule, EPA stated that it “does not now concede that it should make the particular regulatory changes [to the Amendments] that these commenters have recommended, or that the Agency made errors in its regulatory impact analysis or rulemaking procedures.” See Delay Rule Response to Comments (June 8, 2017) at 24 (JA\_\_\_\_\_).

Indeed, the current EPA continues to stand behind the policies and findings that led to the Accident Prevention Amendments. When EPA finalized the Delay Rule, it issued a fact sheet emphasizing the costs and harms of reportable accidents, as well as the continued need for the Amendments to “help protect local first responders, community members and employees from death or injury due to chemical facility accidents.” Fact Sheet at 1 (JA\_\_\_\_\_). And EPA adhered to its view that changes to the original regulations are necessary because over the last ten years “there have been more than 1,517 reportable accidents,” which “were responsible for 58 deaths . . . and over \$2 billion in property damages.” *Id.*

Furthermore, the findings EPA made when promulgating the Accident Prevention Amendments remain the agency’s only position on those issues. For example, EPA found that the rule would improve

existing safeguards to protect workers and communities from chemical accidents in light of “lessons learned.” *See* 82 Fed. Reg. at 4,595. And it found the rule would reduce fatalities, injuries and property damage, and avoid emergency response costs and environmental impacts from the chemical accidents that occur roughly every other day. *Id.* at 4,597, 4,684.

EPA provided no reasonable justification for eliminating these benefits for the twenty-month period of the Delay Rule. EPA suggests that its twenty-month delay “simply maintains the status quo.” 82 Fed. Reg. at 27,138. But as this Court recently recognized, suspending a rule’s effective date amounts to a substantive change in law that alters “rights and obligations” of affected parties during that period. *Clean Air Council*, 862 F.3d at 6-7; *see also California v. BLM*, No. 3:17-cv—03804, 2017 WL 441609 (N. D. Cal., Oct. 4, 2017) (rejecting agency’s argument that postponing future compliance dates preserved the status quo, where their purpose of the dates was to provide industry time to adjust operations to come into compliance).

EPA’s further argues that freezing the Accident Prevention Amendments while it decides whether to change them is reasonable because the benefits of complying with the rule’s near-term deadlines are

“speculative” and the benefits of compliance with post-Delay Rule deadlines would not be affected. 82 Fed. Reg. at 27,139. These arguments are meritless and, indeed, directly rebutted by EPA’s own determinations. *See id.* at 4,598, Tbl. 4.

First, compliance with several provisions of the Accident Prevention Amendments was required either upon the March 2017 effective date or within a year later—both within the Delay Rule’s postponement period. The Delay Rule thus has the immediate effect of postponing these measures and deferring the Amendments’ important safety benefits. For example, the rule improved the process of investigating incidents by specifying the types of individuals that must be on certain investigation teams, requiring completion of investigation reports within twelve months, and specifying additional topics to be included in such reports. *See* 82 Fed. Reg. at 4,699, 4,701 (40 C.F.R. 68.60, 68.81). These provisions, now delayed, would have applied to the investigation of certain incidents starting in March 2017. *See id.* at 4,696 (40 C.F.R. 68.10(a)(4)).

In addition, facilities were to comply with the emergency response coordination requirements of 40 C.F.R. 68.93 by March 2018. *See* 82 Fed.



Reg. 4,696 (40 C.F.R. § 68.10(b)). In other words, between March 2017 and March 2018, facilities would have had to improve coordination with local emergency planning and response organizations. EPA had explained the need for these new requirements by finding that “poor coordination between chemical facilities and local emergency responders has been identified as a factor contributing to the severity of chemical accidents,” including at West Fertilizer. 81 Fed. Reg. at 13,671. Now, because of the Delay Rule, facilities and emergency responders will be less safe. For example, facility owners will not have to determine if response organizations’ emergency plans address their facilities, nor will owners need to ensure that emergency response organizations are aware of the existence, quantities, and risks posed by regulated substances at their facilities. 82 Fed. Reg. at 4,701 (40 C.F.R. § 68.93).

EPA’s attempt in the Delay Rule to write off the benefits of these initial and near-term obligations as “speculative but likely minimal,” 82 Fed. Reg. 27,139, is not supported by any factual findings, much less the “more detailed justification” necessary for EPA to establish that its previous findings to the contrary should be disregarded. *See FCC v. Fox*, 556 U.S. at 515. “[A]n agency’s decision to change course may be arbitrary

and capricious if the agency ignores or countermands its earlier factual findings without reasoned explanation for doing so.” *Id.* at 537 (Kennedy, J., concurring).

Second, for several provisions, EPA set compliance dates several years after the initial effective date because EPA found that owners and operators would need that time to prepare. *See* 82 Fed. Reg. at 4,696 (40 C.F.R. 68.10(d)). For these provisions, facility owners were supposed to use the intervening years to “understand the revised rule; train facility personnel on the revised provisions, learn new investigation techniques, as appropriate; research safer technologies; arrange for emergency response resources and response training; incorporate change into their risk management programs; and establish a strategy to notify the public that certain information is available upon request.” *Id.* at 4,676. Under the Delay Rule, facility owners have no reason to begin such preparations. As EPA itself explained in issuing the Delay Rule, the purpose of its postponement is to ensure that the regulated community does not have “to prepare to comply with . . . rule provisions that might be changed.” *Id.* at 27,139; *see also* Delay Rule Response to Comments at 19 (JA\_\_\_\_\_) (“without such a delay, regulated parties would need to

expend resources to prepare for compliance with the [Accident Prevention Amendments'] provisions”).

EPA contends, nonetheless, that because most provisions have a compliance date of 2021, “any benefits from compliance would not be impacted,” 82 Fed. Reg. at 27,139; *see also id.* at 27,140 (Delay Rule would have “minimal effect on the benefits” of complying with 2021 deadline). But because regulated entities do not have to take these preparatory steps while the Accident Prevention Amendments are delayed, they may not be ready to meet these later compliance deadlines, even if EPA concludes after reconsideration that the rule was appropriate in all respects. If a facility needs four years of lead time to meet a particular obligation (as EPA determined for many of the rule’s provisions), the facility’s owner will surely argue at the end of any reconsideration that it needs at least the same four years from that point. In other words, the Delay Rule affects the timing of *all* of the Amendments’ substantive provisions. EPA was not entitled to ignore the obvious consequences of its decision when issuing the Delay Rule.

In short, EPA’s abandonment of the benefits of the Accident Prevention Amendments for a period of twenty months is “the sort of

‘swerve’ from prior policy that requires explanation.” *Shieldalloy Metallurgical Corp. v. Nuclear Regulatory Comm’n*, 707 F.3d 371, 381–82 (D.C. Cir. 2013) (quoting *Greater Boston Television v. FCC*, 444 F.2d 841, 852 (D.C. Cir. 1970)). Yet EPA fails to show a recognition that the Delay Rule directly undermines the underlying safeguards it continues to tout, and has failed to conduct any serious analysis that would justify a twenty-month rescission of the critical safeguards it justified with comprehensive findings. *See Am. Wild Horse Pres. Campaign v. Purdue*, 2017 WL 4385259, at \*5-\*6; (agency acted arbitrarily when it failed to acknowledge it was changing boundaries of protected lands); *State Farm*, 463 U.S. at 57.

**B. EPA’s Stated Rationales for the Delay Rule Are Inadequate.**

**1. The Bureau’s announcement on the cause of the West Fertilizer fire does not provide a reasoned basis to postpone the entire Accident Prevention Amendments for twenty months.**

The only finding EPA made in issuing the Delay Rule was that the Bureau’s announcement of the cause of the West Fertilizer fire requires reconsideration of the Accident Prevention Amendments. 82 Fed. Reg. at 27,134-35. But even if reconsideration of a rule could provide a basis to

delay its effective date for more than three months—which it cannot (see Point I.A, *supra*)—EPA has failed to reasonably explain why consideration of the finding warrants a twenty-month delay of the entire rule.

First, EPA already considered the cause of the West Fertilizer fire in promulgating the Accident Prevention Amendments. EPA was aware of the finding when it issued the final Amendments. In fact, EPA responded to four sets of comments that discussed the Bureau’s finding, and ultimately concluded that it did not warrant any changes. Response to Comments at 247-49 (JA\_\_\_\_-\_\_\_\_). And the possibility the West Fertilizer fire was caused by arson was in the public domain even prior to EPA’s *proposal* of the Amendments. The Chemical Safety Board’s report, issued in January 2016, listed arson as one of three potential causes of the fire. CSB Investigation Report 2013-02-I-TX at 15 (JA\_\_\_\_).

Second, the West Fertilizer incident was only one of several high-profile incidents EPA cited in the Accident Prevention Amendments as warranting improvements to the 1996 regulations. As the preamble of the proposed Amendments and the 2012 petition to strengthen the existing rule reflected, numerous explosions, fires, and chemical releases

that occurred prior to the West Fertilizer incident spurred the amendments. 81 Fed. Reg. at 13,644. And in fact, EPA made this point in response to comments on the Bureau's finding. Response to Comments at 248 (JA\_\_\_\_\_).

Third, EPA's attempt to use the Bureau's finding to justify a delay to further consider security concerns is unavailing. EPA extensively considered security issues, explained its reasoning, and also revised the proposed Accident Prevention Amendments to address commenters' concerns, including making changes to the information sharing provisions. *See* Response to Comments at 53-54, 143, 190-91, 195-197, 199-200, 202-203, 247, 251 (JA-\_\_\_\_-\_\_\_\_, \_\_\_\_-\_\_\_\_, \_\_\_\_, \_\_\_\_-\_\_\_\_, \_\_\_\_-\_\_\_\_, \_\_\_\_-\_\_\_\_, \_\_\_\_, \_\_\_\_). Moreover, the Bureau did not find that the West Fertilizer fire was caused by a security breach related to disclosures made by the facility—the principal types of disclosures required by the Amendments.

Finally, whatever dispute there may be about the cause of the West Fertilizer fire, there is no dispute, as the Chemical Safety Board found, that a subsequent failure to communicate hazard information to first responders to the fire resulted in a number of avoidable deaths. CSB

Investigation Report 2013-02-I-TX at 112-115 (JA\_\_\_\_-\_\_\_\_). Thus, there was no basis for EPA's decision to postpone *all* of the provisions of the Accident Prevention Amendments—including those that improve coordination with emergency responders and that would accordingly help avoid one of the problems exemplified by the West Fertilizer fire. Indeed, EPA itself has noted that, regardless of the cause of the West Fertilizer incident, emergency responders like those responding to that incident need additional training on how to respond to incidents at chemical facilities. Response to Comments at 248 (JA\_\_\_\_\_).

For these reasons, EPA has not given a reasoned justification for delaying the effective date of the Accident Prevention Amendments. EPA's current position on the West Fertilizer incident stands in complete contrast to its prior position. EPA's "failure to come to grips with conflicting precedent constitutes 'an inexcusable departure from the essential requirement of reasoned decision making.'" *Ramaprakash v. FAA*, 346 F.3d 1121, 1124–25 (D.C. Cir. 2003) (citing *Columbia Broad. Sys. v. FCC*, 454 F.2d 1018, 1027 (D.C. Cir. 1971)).

**2. EPA has not explained its blanket delay of every deadline in the Accident Prevention Amendments.**

Even if delay of some portion of the Accident Prevention Amendments were justifiable (the case for which is entirely absent here), EPA has not reasonably explained its decision to issue a blanket delay of the entire rule. Congress directed EPA to compel regulated entities to comply “as expeditiously as practicable,” and Congress has explained that “requirements which only mandate changes in procedure” can be implemented “almost immediately.” 42 U.S.C. § 7412(r)(7); S. Rep. 101-228 at 245 (ADD-111). Given these directions, and in light of an agency’s duty to consider and explain its rejection of any “reasonably obvious alternatives” to a proposed rule, it was incumbent on EPA to justify why it chose a blanket delay instead of a more tailored postponement. *See National Shooting Sports Found., Inc. v. Jones*, 716 F.3d 200, 215 (D.C. Cir. 2013). Most glaringly, EPA has not explained why it was necessary to postpone the changes in procedure that were to become effective within the twenty-month delay period.

For changes that were to become effective immediately in March 2017, such as requiring that process safety information be kept up to date, *see* 82 Fed. Reg. 4,699 (40 C.F.R. § 68.65(a)); *see also* Point II.A.1,



*supra* (discussing other provisions that would immediately take effect), EPA offered no explanation for a twenty-month delay other than citing general concerns about “confusion” that EPA’s delay may have created. *See id.* at 27,139. As explained above, the agency cannot cite “confusion” it may have caused by freezing the Accident Prevention Amendments as grounds to delay it. And of course, there would be no confusion if EPA had decided to clearly direct facilities to comply with these obligations.

For the emergency response coordination improvements required by 40 C.F.R. 68.93, EPA justified the delay based on the concern raised by reconsideration petitioners with language in § 68.93(b) about additional information facilities must provide to local emergency planning and response organizations upon request. Delay Rule Response to Comments at 34-35 (JA\_\_\_\_\_-\_\_\_\_\_). But EPA did not propose to grant reconsideration on this issue, and regardless, the agency failed to explain why other enhanced safeguards in § 68.93—such as coordinating with emergency response officials “to determine how the stationary source is addressed in the community emergency response plan and to ensure that local response organizations are aware of the regulated substances at the [facility],” 82 Fed. Reg. at 4,701 (40 C.F.R. 68.93)—could

not be implemented on schedule. EPA's failures to reasonably explain the blanket suspension of the entire Accident Prevention Amendments renders the Delay Rule arbitrary and capricious. *See State Farm*, 463 U.S. at 48 ("At the very least this alternative way of achieving the objectives of the Act should have been addressed and adequate reasons given for its abandonment.").

### CONCLUSION

For the reasons set forth above, the Petition should be granted and the Delay Rule vacated.

Dated: October 25, 2017  
Albany, New York

Respectfully submitted,

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**CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME LIMIT**

The undersigned attorney, Michael J. Myers, hereby certifies:

1. This document complies with the type-volume limitations of Fed. R. App. P. 32(a)(7)(B)(i) and this Court's briefing schedule order dated September 26, 2017. According to the word processing system used in this office, this document, exclusive of the sections excluded by Fed. R. App. P. 32(f) and Circuit Rule 32(e)(1), contains 9,750 words. Because Community Petitioners are filing an opening brief of less than 12,000 words, the combined word amount of the two briefs is less than 22,000 words.

2. This document complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type-style requirements of Fed. R. App. P. 32(a)(6) because this document has been prepared in a proportionally spaced typeface in 14-point Century Schoolbook.

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**CERTIFICATE OF SERVICE**

I certify that on October 25, 2017, the foregoing Opening Proof Brief of State Petitioners was electronically filed with the Clerk of the Court for the United States Court of Appeals for the District of Columbia Circuit through the Court's CM/ECF system, which effected service upon counsel of record through the Court's system.

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

**Air Alliance Houston, et al.,**

Petitioners,

v.

**U.S. Environmental Protection Agency, et al.,**

Respondents.

Case No. 17-1155  
(consolidated with  
Case No. 17-1181)

**DECLARATIONS PROVIDING ADDITIONAL SUPPORT for  
STATE PETITIONERS' STANDING**



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Case No. 17-1181)

**DECLARATION OF AGATA MCINTYRE**

## DECLARATION OF AGATA MCINTYRE

I, AGATA MCINTYRE, declare under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct:

1. I am the Engineering Manager at the Northwest Clean Air Agency in Mount Vernon, Washington, a position I have held for more than 2 years.
2. I have a Bachelor's of Science in Chemical Engineering from Montana State University – Bozeman. I have been licensed as a Professional Engineer - Chemical Engineering in the State of Washington since 2004.
3. I have 18 years of experience with permitting and evaluating air emissions from industrial sources. I have spent 16 years as a permit writer, inspector, senior engineer, and engineering manager at the Puget Sound Clean Air Agency in Seattle, Washington, and the Northwest Clean Air Agency in Mount Vernon, Washington. My experience includes estimating air emissions from the operation of industrial equipment and evaluating the ambient air quality impacts from equipment operation.
4. The Northwest Clean Air Agency (NWCAA) is tasked with protecting air quality in Whatcom, Skagit, and Island Counties of Washington State and enforcing federal, state, and local air quality regulations for stationary sources in these counties. Stationary sources include buildings, structures, facilities, and installations that emit, or may emit, air contaminants. One such facility is the Tesoro Refining and Marketing Company (Tesoro) oil refinery located in Anacortes, Skagit County, Washington.
5. The NWCAA monitors outdoor air quality for a group of air pollutants known as "criteria air pollutants", for which the United States Environmental Protection Agency (US EPA) has set National Ambient Air Quality Standards (NAAQS). The US EPA set NAAQS under the

authority of the federal Clean Air Act to protect public health, welfare, and the environment.

NAAQS apply to outdoor air throughout the United States.

6. The burning of hydrocarbons like natural gas, diesel, and others produces combustion products and byproducts. The list of potential combustion products and byproducts is large, but in general, the following are commonly present from the burning of hydrocarbons: carbon dioxide (CO<sub>2</sub>), water (H<sub>2</sub>O), carbon monoxide (CO), nitrogen oxides (including nitrogen dioxide, NO<sub>2</sub>), particulate matter (PM), sulfur dioxide (SO<sub>2</sub>), and unburned hydrocarbons.

7. In addition, smaller quantities of air toxics identified by US EPA as Hazardous Air Pollutants that may cause cancer or other serious health effects, are frequently released during the burning of hydrocarbons. The amount and type of Hazardous Air Pollutants released is dependent on a host of factors, including the type of hydrocarbons burned and the impurities present with the hydrocarbons.<sup>1</sup>

8. The US EPA has set NAAQS for the following criteria air pollutants, which are also combustion products and byproducts: carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), particulate matter (PM), and sulfur dioxide (SO<sub>2</sub>). In addition, unburned hydrocarbons and nitrogen oxides from combustion can combine in the atmosphere to form ozone. The US EPA has also set a NAAQS for ozone.

9. As noted in the May 1, 2014, U.S. Chemical Safety Board investigation report, on April 2, 2010, Tesoro experienced a catastrophic failure of a heat exchanger, releasing heated hydrogen and naphtha into the atmosphere. These chemicals ignited upon release, causing an explosion and a fire that continued to burn for more than three hours.

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<sup>1</sup> Chapter 1 of US EPA Air Emission Factors and Quantification website, <https://www3.epa.gov/ttn/chief/ap42/ch01/index.html>.

10. As stated above, when hydrocarbons, including naphtha, are burned, they release combustion products and byproducts. The April 2, 2010, Tesoro fire released criteria air pollutants including, but not limited to, carbon monoxide, nitrogen dioxide, particulate matter, and likely also released Hazardous Air Pollutants.

11. Criteria air pollutants are regulated because of their potential to cause adverse health impacts, especially with regard to sensitive populations such as people with asthma, children, and the elderly. They are also regulated to protect against damage to animals, crops, vegetation, and buildings.<sup>2</sup>

12. Hazardous Air Pollutants are regulated because they are known to cause cancer and other serious health impacts, including damage to the immune system, as well as neurological, reproductive, developmental, and respiratory damage.<sup>3</sup>

13. Industrial accidents can also result in the release of air plumes containing Criteria Air Pollutants and Hazardous Air Pollutants that may drift into populated or residential areas. For example, the City of Anacortes lies approximately one and a half miles northwest of two petroleum refining facilities, including the Tesoro facility. Because of their proximity, industrial accidents can result in evacuations, "shelter-in-place" orders, and other emergency response measures for cities like Anacortes.

Dated this 12<sup>th</sup> day of October, 2017, at Mount Vernon, Washington.



AGATA MCINTYRE

<sup>2</sup> [https://19january2017snapshot.epa.gov/air-emissions-inventories/air-emissions-sources\\_.html](https://19january2017snapshot.epa.gov/air-emissions-inventories/air-emissions-sources_.html)

<sup>3</sup> <https://www.epa.gov/haps/health-and-environmental-effects-hazardous-air-pollutants>

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**DECLARATION OF CHRISTIAN BANNICK**

### DECLARATION OF CHRISTIAN BANNICK

I, CHRISTIAN BANNICK, declare as follows:

1. The following is based upon my personal knowledge, and if called and sworn as a witness, I could competently testify thereto.

2. I am an Industrial Hygienist at the Washington State Department of Labor & Industries, Division of Occupational Safety and Health, a position I have held for 26 years. I have a Bachelor of Science in Biology from Central Washington University and have 30 years' experience with industrial and occupational safety in a variety of industrial settings, including facilities that handle hazardous chemicals. I have specialized training in process safety, and served as the Process Safety Specialist for the Division of Occupational Safety and Health since 1998. Process safety encompasses engineering and management safety practices specific to preventing catastrophic accidents involving highly hazardous chemicals. I have been a Certified Industrial Hygienist since 1997.

3. Washington's Division of Occupational Safety and Health is tasked with enforcing the Washington Industrial Safety and Health Act, Chapter 49.17 RCW. Pursuant to the Act, the Department of Labor and Industries has adopted specific requirements for employers who use, store, or manufacture highly hazardous chemicals, with the goal of preventing or minimizing the consequences of catastrophic releases of toxic, reactive, flammable, or explosive chemicals. The facilities subject to these rules, known as the Process Safety Management Code, are in large part the same facilities subject to the U.S. Environmental Protection Agency's (EPA's) Risk Management Program.

4. In addition to its regulatory functions, the Department of Labor & Industries also has a statutory mandate to investigate and analyze industrial catastrophes, serious injuries, and/or

fatalities that occur in the workplace, including facilities subject to the Process Safety Management code and EPA's Risk Management Program. We also investigate other non-fatality or non-injury incidents on our own initiative or following incident reports submitted by third parties. My duties include conducting such investigations on behalf of the State. Statewide, Washington employs approximately 175 full-time industrial hygienists and safety specialists to conduct these investigations across all industries with four full-time inspectors dedicated solely to facilities covered by the Process Safety Management code. So far in 2017, there have been 28 workplace fatalities in Washington.

5. Investigations into workplace accidents also often involve outside, specialized expertise in various fields. For example, investigations involving petroleum refining facilities often require experts knowledgeable on the refining process as well as the engineering associated with the injury-causing agent or agents. In those cases, the Department of Labor and Industries will contract out for this work at market rates.

6. There have been two major disasters with multiple fatalities at Washington petroleum refineries in the last 19 years. In 1998, six workers were killed in an explosion at the Equalon Puget Sound Refining Co. facility in Anacortes, Washington.

7. More recently, in the early morning hours of April 2, 2010, a heat exchanger in the Catalytic Reformer/Naphtha Hydrotreater unit at the Tesoro Refining and Marketing Co. refinery (also in Anacortes, Washington) catastrophically failed during startup activities. The failure caused a large volume of extremely hot hydrogen and naphtha to escape and auto-ignite upon release to the atmosphere. Seven workers were caught in the resulting fireball and badly burned. All succumbed to their injuries within 22 days from the incident. To my knowledge, all of the workers killed were Washington residents.



8. In addition to the human casualties, the Tesoro fire burned for 3 hours until it was finally brought under control. The fire caused extensive damage to the facility and resulted in the Tesoro refinery being shut down for seven months.

9. I was assigned as the lead investigator on the 2010 Tesoro explosion, with three and sometimes four investigators working under my supervision during the course of the investigation. Our investigation began the same day as the incident, with my team mobilizing to the site to formally open the investigation with the facility owner after determining it was safe to be on-site. During the course of the investigation, and as with other investigations, we identified and interviewed witnesses, negotiated early evidence preservation with the facility operators, and began working on an evidence security plan to ensure key pieces of evidence were not destroyed in the response to the incident. As the investigation progressed, we conducted site visits to obtain photo and video evidence, constructed a detailed timeline of events, and obtained and reviewed an enormous volume of documentation from the facility operator. In all, the investigation took the full time (a minimum of 40 hours per week) of both myself and the members of my team for the entire six months it took to complete the investigation.

10. Because the incident involved a detailed understanding of the refining process, I was also required to retain an outside consulting firm with expertise in this field. Although I had one point of contact with the consultant, the consulting work was performed by a team with expertise in multiple subject areas, including the refining process, failure mechanisms, etc.

11. During the course of the investigation, and during issuance of the resulting penalty, I also obtained substantial assistance from Washington Labor and Industries attorneys and the Washington Attorney General's Office. Those attorney costs are billed back to the Department of Labor and Industries and comes out of the Department's legal services budget.



Because Tesoro appealed the penalty, legal assistance continued long after the investigation concluded and is, in fact, ongoing.

12. As the investigation lead, I was involved in developing the staffing and budgeting needs necessary to complete the investigation within the statutorily mandated timeframe. Although it is difficult to arrive at an exact sum expended during the course of the investigation, the six-month period during which I and my team worked exclusively on the Tesoro investigation cost the State *at least* \$289,000. This is combined with expert expenses of approximately \$81,000. This does not include legal support for the investigation, which I understand was another significant expense. In total, the investigation constituted an unanticipated and heavy blow to the Department's budget. None of these costs to the State are recoverable.

13. Concurrent with the State's investigation into the Tesoro disaster, the United States Chemical Safety and Hazard Investigation Board (the "Chemical Safety Board") conducted its own investigation into the event. Per its usual process following such events, the Chemical Safety Board included a number of recommendations to the facility operator and state and federal regulators—including EPA—arising from the lessons learned from the event. It is my understanding that the amendments to EPA's Risk Management Program Rule, delayed by the action subject to the current Petition for Review in this case, were made in part to prevent incidents like the Tesoro disaster, with the Tesoro disaster mentioned specifically in the final Rule.

14. As noted, Washington also contains regulatory authority over facilities covered by EPA's Risk Management Program, and the State attempts to work cooperatively with the federal program.

15. Where, however, the federal government fails to adequately regulate worker safety, the State is often compelled to step up to fill any gaps. The Department of Labor and Industries is currently working on amendments to its regulatory scheme to increase safety standards in Washington. That said, uncertainty at the federal level also makes it more difficult for the state to coordinate and harmonize its rulemaking efforts.

16. In my experience at the Department of Labor and Industries, and as a trained industrial hygienist, lax regulation of work environments leads to an increase in workplace accidents, with a corresponding increase in State investigations. These investigations, especially those involving the complex and often devastating results of incidents at facilities that handle hazardous chemicals, such as the Tesoro and former Equalon facilities, consume a significant amount of State resources.

I certify under penalty of perjury that the foregoing is true and correct.

Dated this 19<sup>TH</sup> day of October, 2017, in FELLSINGHAM, Washington.

By   
Christian Bannick

**IN THE UNITED STATES COURT OF APPEALS  
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**ADDENDUM TO STATE PETITIONERS' OPENING BRIEF**

## ADDENDUM – TABLE OF CONTENTS

<u>Title</u>	<u>Page #</u>
<u>Statutory Provisions</u>	
42 U.S.C. § 7401	ADD-1
42 U.S.C. § 7412	ADD-6
<u>Regulatory Provisions</u>	
40 C.F.R. Part 68	ADD-37
82 Fed. Reg. 4,696 (Jan. 13, 2017) (amendments to Part 68)	ADD-89
<u>Legislative History</u>	
Senate Rep. 101-228 (excerpts)	ADD-99

# **STATUTORY PROVISIONS**

§ 7401

TITLE 42—THE PUBLIC HEALTH AND WELFARE

Page 698

7372 Enforcement of standards.  
 7373 State standards and controls.  
 7374 Definitions.

PART C—CLEAN FUEL VEHICLES

7381 Definitions.  
 7382 Requirements applicable to diesel fuel vehicles.  
 7383 Standards for light duty clean fuel vehicles.  
 7384 Administration and enforcement as per California standards.  
 7385 Standards for heavy-duty clean-fuel vehicles (DTRR above 8,500 up to 28,500 lbs.).  
 7386 Centrally fueled fleets.  
 7387 Vehicle conversions.  
 7388 Federal agency fleets.  
 7389 California pilot test program.  
 7390 General provisions.

SUBCHAPTER VII—GENERAL PROVISIONS

7500 Administration.  
 7501 Definitions.  
 7502 Emergency powers.  
 7503 Filing suits.  
 7504 Representation in litigation.  
 7505 Federal procurement.  
 7506 Administrative proceedings and judicial review.  
 7507 Mandatory labeling.  
 7508 Other review.  
 7509 Other authority.  
 7510 Records and audit.  
 7511 Economic impact analyses.  
 7512 Repealed.  
 7513 Labor standards.  
 7514 Feasibility.  
 7515 Sewage treatment grants.  
 7516 Economic impact assessment.  
 7517 Repealed.  
 7518 Air quality monitoring.  
 7519 Standards for air quality monitoring.  
 7520 Employment effects.  
 7521 Employee protection.  
 7522 Repealed.  
 7523 Cost of vapor recovery equipment.  
 7524 Vapor recovery for small business marketers of petroleum products.  
 7525 Exemptions for certain territories.  
 7526 Statutory construction.  
 7527 Authorization of appropriations.  
 7528 Air pollution San Joaquin Continental Shelf activities.  
 7529 Demonstration grant program for local governments.

SUBCHAPTER IV—NOISE POLLUTION

7541 Noise abatement.  
 7542 Authorization of appropriations.

SUBCHAPTER IV-A—ACID DEPOSITION CONTROL

7561 Findings and purposes.  
 7562 Definitions.  
 7563 sulfur dioxide allowance program for existing and new units.  
 7564 Phase I sulfur dioxide requirements.  
 7565 Phase II sulfur dioxide requirements.  
 7566 Allowances for States with emissions rates at or below 0.80 pounds per day.  
 7567 Nitrogen oxides emission reduction program.  
 7568 Penalties and compliance plans.  
 7569 Inspected sources.  
 7570 Election for additional sources.  
 7571 Excess emissions penalty.  
 7572 Monitoring, reporting, and recordkeeping requirements.  
 7573 General compliance with other provisions.  
 7574 Enforcement.  
 7575 Clean coal technology regulatory incentives.  
 7576 Contingency guarantee. REPEALED.

SUBCHAPTER V PERMITS

7581 Definitions.  
 7582 Permit programs.  
 7583 Permit applications.  
 7584 Permit requirements and conditions.  
 7585 Notification to Administrator and contiguous States.  
 7586 Other authority.  
 7587 Small business stationary source technical and environmental compliance assistance program.

SUBCHAPTER VI—STRATOSPHERIC OZONE PROTECTION

7671 Definitions.  
 7672 Listing of class I and class II substances.  
 7673 Monitoring and reporting requirements.  
 7674 Phase-out of production and consumption of class I substances.  
 7675 Phase out of production and consumption of class II substances.  
 7676 Accelerated schedule.  
 7677 Exchange authority.  
 7678 National recycling and emission reduction program.  
 7679 Servicing of motor vehicle air conditioners.  
 7680 Nonessential products containing chlorofluorocarbons.  
 7681 Labeling.  
 7682 Safe alternatives policy.  
 7683 Federal procurement.  
 7684 Relationship to other laws.  
 7685 Authority of Administrator.  
 7686 Transfers among Parties to Montreal Protocol.  
 7687 International cooperation.  
 7688 Miscellaneous provisions.

COOPERATION

Act July 14, 1965, ch. 360, § 301, 312, as amended, known as the Clean Air Act, which was formerly classified to Chapter 15F (§ 1851 et seq.) of this title, was completely revised by Pub. L. 95-95, Aug. 7, 1977, 91 Stat. 565, and was reclassified to this chapter.

SUBCHAPTER I—PROGRAMS AND ACTIVITIES

PART A—AIR QUALITY AND EMISSION LIMITATIONS

REPEALED

1977—Pub. L. 95-95, title 1, § 117(a), Aug. 7, 1977, 91 Stat. 513, designated sections 7601 to 7628 of this title as part A.

§ 7401. Congressional findings and declaration of purpose

(a) Findings

The Congress finds

(1) that the predominant part of the Nation's population is located in the rapidly expanding metropolitan and other urban areas, which generally cross the boundary lines of local jurisdictions and often extend into two or more States;

(2) that the growth in the amount and complexity of air pollution brought about by urbanization, industrial development, and the increasing use of motor vehicles, has resulted in mounting dangers to the public health and welfare, including injury to agricultural crops and livestock, damage to and the deterioration of property, and hazards to air and ground transportation.

(3) that air pollution prevention (that is, the reduction or elimination, through any measures, of the amount of pollutants produced or created at the source) and air pollution control at its source is the primary responsibility of States and local governments; and

(4) that Federal financial assistance and leadership is essential for the development of cooperative Federal, State, regional, and local programs to prevent and control air pollution.

(b) Declaration

The purposes of this subchapter are—

(1) to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population;

(2) to initiate and accelerate a national research and development program to achieve the prevention and control of air pollution;

(3) to provide technical and financial assistance to State and local governments in connection with the development and execution of their air pollution prevention and control programs; and

(4) to encourage and assist the development and operation of regional air pollution prevention and control programs.

(c) Pollution prevention

A primary goal of this chapter is to encourage or otherwise promote reasonable Federal, State, and local governmental actions, consistent with the provisions of this chapter, for pollution prevention.

(July 14, 1955, ch. 360, title I, §101, formerly §1, as added Pub. L. 84-206, §1, Dec. 17, 1965, 77 Stat. 372, renumbered §101 and amended Pub. L. 89-272, title I, §101(c), (3) Oct. 20, 1965, 79 Stat. 952; Pub. L. 90-140, §2, Nov. 21, 1967, 81 Stat. 485; Pub. L. 101-549, title I, §102(c), Nov. 13, 1990, 104 Stat. 2400.)

COPIATION

Section was formerly classified to section 1257 of this title.

STATE PENALTIES

Provisions similar to those in this section were contained in a prior section 1257 of this title, set of July 14, 1955, ch. 360, §1, 69 Stat. 322, prior to the general amendment of this chapter by Pub. L. 84-206.

AMENDMENTS

1990—Subsec. (c)(3): Pub. L. 101-549, §102(k)(3), amended par. (3) generally. Prior to amendment, par. (3) read as follows: "that the prevention and control of air pollution at its source is the primary responsibility of States and local governments, and"

Subsec. (d)(4): Pub. L. 101-549, §102(k)(4), inserted "prevention and" after "pollution".

Subsec. (e): Pub. L. 101-549, §102(k)(5), added subsec. (e).

1967—Subsec. (b)(1): Pub. L. 90-140 inserted "and to enhance the quality of" after "to protect".

1965—Subsec. (b): Pub. L. 89-272 substituted "this title" for "this Act" which for purposes of codification has been changed to "this subchapter".

EFFECTIVE DATE OF 1990 AMENDMENT:

Pub. L. 101-549, title VII, §111(b), Nov. 16 1990, 104 Stat. 2884 provided that:

"(1) Except as otherwise expressly provided, the amendments made by this Act [see Tables for class-

ification] shall be effective on the date of enactment of this Act (Nov. 13, 1990).

"(2) The Administrator's authority to assess civil penalties under section 201(a) of the Clean Air Act (42 U.S.C. 7401(a)), as amended by this Act, shall apply to violations that occur on or after the date of enactment of this Act. Civil penalties for violations that occur prior to such date and do not continue after such date shall be assessed in accordance with the provisions of the Clean Air Act (42 U.S.C. 7401 et seq.) in effect immediately prior to the date of enactment of this Act.

"(3) The civil penalties prescribed under sections 201(a) and 201(c)(1) of the Clean Air Act (42 U.S.C. 7401(a), 7415(c)(1)), as amended by this Act, shall apply to violations that occur on or after the date of enactment of this Act. Violations that occur prior to such date shall be subject to the civil penalty provisions prescribed in sections 201(a) and 201(c) of the Clean Air Act in effect immediately prior to the enactment of this Act. The injunctive authority prescribed under section 201(d)(2) of the Clean Air Act, as amended by this Act, shall apply to violations that occur on or after the date of enactment of this Act.

"(4) For purposes of paragraphs (2) and (3), where the date of a violation cannot be determined it will be assumed to be the date on which the violation is discovered."

EFFECTIVE DATE OF 1977 AMENDMENT: FEDERAL AGENCIES; CONTRACTORS OF RULES, CONTRACTS, AUTHORITY; LABOR, RITE; INFORMATION; STATE

Pub. L. 95-95, title IV, §406, Aug. 1, 1977, 91 Stat. 195, as amended by Pub. L. 95-192, §12(b)(8), Nov. 16, 1977, 91 Stat. 146, provided that:

"(A) No suit, action, or other proceeding lawfully commenced by or against the Administrator or any other officer or employee of the United States in his official capacity or in relation to the discharge of his official duties under the Clean Air Act (this chapter), as in effect immediately prior to the date of enactment of this Act (Aug. 1, 1977) shall be stayed by reason of the taking effect of the amendments made by this Act [see Short Title of 1977 Amendment note below]. The court may, on its own motion or that of any party made at any time within twelve months after such taking effect, allow the same to be maintained by or against the Administrator or such officer or employee.

"(B) All rules, regulations, orders, determinations, contracts, certifications, authorizations, delegations, or other notices duly issued, made, or taken by or pursuant to the Clean Air Act (this chapter), as in effect immediately prior to the date of enactment of this Act (Aug. 1, 1977), and pertaining to any functions, powers, requirements, and duties under the Clean Air Act, as in effect immediately prior to the date of enactment of this Act, and not suspended by the Administrator or the courts, shall continue in full force and effect after the date of enactment of this Act until modified or repealed in accordance with the Clean Air Act as amended by this Act [see Short Title of 1977 Amendment note below].

"(C) Nothing in this Act [see Short Title of 1977 Amendment note below] nor any action taken pursuant to this Act shall in any way affect any requirement of an approved implementation plan in effect under section 110 of the Clean Air Act (section 7410 of this title) or any other provision of the Act in effect under the Clean Air Act before the date of enactment of this section (Aug. 1, 1977) until modified or rescinded in accordance with the Clean Air Act (this chapter) as amended by this Act [see Short Title of 1977 Amendment note below].

"(D) Except as otherwise expressly provided the amendments made by this Act [see Short Title of 1977 Amendment note below] shall be effective on date of enactment (Aug. 1, 1977).

"(E) Except as otherwise expressly provided, each State required to develop its applicable implementation plan by reason of any amendment made by this Act [see



Short Title of 1977 Amendment (see below) shall apply and subject to the Administrator of the Environmental Protection Administration such plan revision before the date of this date.

"(A) one year after the date of enactment of this Act (Aug. 7, 1977), or

"(B) one month after the date of promulgation by the Administrator of the Environmental Protection Administration of any regulations under an amendment made by this Act, which are necessary for the approval of such plan revision."

#### SHORT TITLE OF 1988 AMENDMENT

Pub. L. 100-40, §1, Aug. 3, 1988, 113 Stat. 235, provided that "This Act (amending section 7418 of this title and enacting provisions set out as notes under section 7418 of this title) may be cited as the 'Chemical Safety Information, Site Security and Funds Regulatory Reform Act'."

#### SHORT TITLE OF 1998 AMENDMENT

Pub. L. 110-288, §1, Oct. 27, 1998, 112 Stat. 2793, provided that "This Act (amending section 7418 of this title and enacting provisions set out as a note under section 7418 of this title) may be cited as the 'Border Smog Reduction Act of 1998'."

#### SHORT TITLE OF 1990 AMENDMENT

Pub. L. 101-549, Nov. 15, 1990, 104 Stat. 2550, is popularly known as the "Clean Air Act Amendments of 1990". See Tables for Classification.

#### SHORT TITLE OF 1981 AMENDMENT

Pub. L. 97-85, §1, July 17, 1981, 95 Stat. 135, provided that this Act (amending sections 7418 and 7419 of this title) may be cited as the "Steel Industry Compliance Extension Act of 1981."

#### SHORT TITLE OF 1977 AMENDMENT

Pub. L. 95-25, §1, Aug. 7, 1977, 91 Stat. 985, provided that "This Act (enacting sections 4305, 7423 to 7425, 7450 to 7459, 7470 to 7478, 7481, 7501 to 7508, 7446, 7449, 7461, 7611 to 7628, and 7629 of this title, amending sections 7423, 7446, 7467 to 7475, 7477, 7478, 7521 to 7525, 7541, 7617, 7644, 7645, 7625, 7511, 7601 to 7506, 7507, 7612, 7518, and 7616 of this title, repealing sections 1870a-10 of this title, and enacting provisions set out as notes under this section, sections 7408, 7422, 7476, 7479, 7479, 7511, 7540, and 7618 of this title, and section 102 of Title 15, Commerce and Trade) may be cited as the 'Clean Air Act Amendments of 1977'."

#### SHORT TITLE OF 1970 AMENDMENT

Pub. L. 91-604, §1, Dec. 31, 1970, 84 Stat. 1076, provided that "This Act (amending this chapter generally) may be cited as the 'Clean Air Amendments of 1970'."

#### SHORT TITLE OF 1967 AMENDMENT

Pub. L. 90-140, §1, Nov. 31, 1967, 81 Stat. 435, provided that "This Act (amending this chapter generally) may be cited as the 'Air Quality Act of 1967'."

#### SHORT TITLE OF 1965 AMENDMENT

Pub. L. 89-679, §1, Oct. 15, 1966, 80 Stat. 169, provided that "This Act (amending sections 7403 and 7416 of this title and repealing section 1870a-8 of this title) may be cited as the 'Clean Air Act Amendments of 1966'."

#### SHORT TITLES

Act July 14, 1955, ch. 305, title (II) §107, formerly §15, as added by Pub. L. 83-206, §1, Dec. 17, 1961, 75 Stat. 401, renumbered §807 by Pub. L. 89-292, title I, §130(4), Oct. 20, 1966, 79 Stat. 893; renumbered §430 by Pub. L. 90-246, §2, Nov. 21, 1967, 81 Stat. 492; renumbered §810 by Pub. L. 91-604, §1(2)(4), Dec. 31, 1970, 84 Stat. 1076, provided that "This Act (amending this chapter) may be cited as the 'Clean Air Act'."

Act July 14, 1955, ch. 350, title II, §103, as added by Pub. L. 83-206, title I, §101(8), Oct. 20, 1961, 75 Stat. 422,

and amended by Pub. L. 91-143, §2, Nov. 21, 1969, 83 Stat. 495, provided that "This title (including subchapter II of this chapter) may be cited as the 'National Emission Standards Act'." Prior to its amendment by Pub. L. 90-160, title II of act June 14, 1955, was known as the "Motor Vehicle Air Pollution Control Act'."

Act July 14, 1955, ch. 350, title IV, §103, as added by Dec. 31, 1970, Pub. L. 91-604, §1(4) 84 Stat. 1090, provided that "This title (including subchapter IV of this chapter) may be cited as the 'Poles Pollution and Abatement Act of 1955'."

#### SAVINGS PROVISION

Pub. L. 101-549, title VII, §1101a, Nov. 15, 1990, 104 Stat. 2884, provided that "Except as otherwise expressly provided in this Act (see Tables for Classification), no suit, action, or other proceeding lawfully commenced by the Administrator or any other officer or employee of the United States in his official capacity at or in relation to the discharge of his official duties under the Clean Air Act (49 U.S.C. 1901 et seq.), as in effect immediately prior to the date of enactment of this Act (Nov. 15, 1990), shall abate by reason of the taking effect of the amendments made by this Act."

#### TRANSFER OF FUNCTIONS

Reorg. Plan No. 8 of 1970, §700(3), 31C, Dec. 2, 1970, 35 F.R. 19625, 81 Stat. 2088, transferred to Administrator of Environmental Protection Agency functions vested by law in Secretary of Health, Education, and Welfare or in Department of Health, Education, and Welfare which are administered through Environmental Health Service, including functions exercised by National Air Pollution Control Administration, and Environmental Control Administration's Bureau of Solid Waste Management, Bureau of Water Hygiene, and Bureau of Radiological Health, except insofar as functions carried out by Bureau of Radiological Health pertain to regulation of radiation from consumer products, including electronic product radiation, radiation as used in heating arts, occupational exposure to radiation, and research, technical assistance, and training related to radiation from consumer products, radiation as used in heating arts, and occupational exposure to radiation.

#### DIRECT ON SMALL COMMUNITIES

Pub. L. 101-218, title VIII, §810, Nov. 15, 1990, 104 Stat. 2691, provided that "Before implementing a provision of this Act (see Tables for Classification), the Administrator of the Environmental Protection Agency shall consult with the Small Communities Coordinator of the Environmental Protection Agency to determine the impact of such provision on small communities, (including the estimated cost of compliance with such provision."

#### RADON ASSESSMENT AND MITIGATION

Pub. L. 98-495, title I, §1101(a), Oct. 1, 1984, 100 Stat. 1628, as amended by Pub. L. 105-362, title V, §501(i) Nov. 29, 1998, 112 Stat. 694, provided that:

"(1) NATIONAL ASSESSMENT OF RADON RISK. No later than one year after the enactment of this Act (Oct. 1, 1984), the Administrator shall submit to the Congress a report which shall, to the extent possible—

"(A) identify the locations in the United States where radon is found in structures where people normally live or work, including educational institutions;

"(B) assess the levels of radon gas that are present in such structures;

"(C) determine the level of radon gas and radon daughters which poses a threat to human health and assess for each location identified under subparagraph (A) the extent of the threat to human health;

"(D) determine methods of reducing or eliminating the threat to human health of radon gas and radon daughters; and

"(E) include guidance and public information materials based on the findings or research of mitigating radon."



**RADON MITIGATION DEMONSTRATION PROGRAM —**

"(A) **DEMONSTRATION PURPOSES.** The Administrator shall conduct a demonstration program to test methods and technologies of reducing or eliminating radon gas and radon daughters where it poses a threat to human health. The Administrator shall take into consideration any demonstration program underway in the Reading Prong of Pennsylvania, New Jersey, and New York and at other sites prior to enactment. The demonstration program under this section shall be conducted in the Reading Prong, and at such other sites as the Administrator considers appropriate.

"(B) **LIABILITY.**—Liability, if any, for personal injury or property damage sustained by any person participating in the demonstration program authorized under this subsection shall be determined under principles of State law.

"(C) **CONSTRUCTION OF SECTION.**—Nothing in this subsection shall be construed to authorize the Administrator to carry out any regulatory program or any activity other than research, development, and related reporting, information dissemination, and coordination activities specified in this subsection. Nothing in paragraph (1) or (2) shall be construed to limit the authority of the Administrator or of any other agency or instrumentality of the United States under any other authority of law."

**SPILL CONTROL TECHNOLOGY**

Pub. L. 99-498, Title I, § 1001, Oct. 17, 1986, 100 Stat. 1580, provided that:

"(1) **OPERATIONALIZATION OF PROGRAM.** Within 180 days of enactment of this subsection (Oct. 17, 1986), the Secretary of the United States Department of Energy is directed to carry out a program of testing and evaluation of technologies which may be utilized in responding to liquidated gasoils and other hazardous substance spills at the Liquidated Gasoils Pools Spill Test Facility that threaten public health or the environment.

"(2) **TECHNOLOGY TRANSFER.** In carrying out the program established under this subsection, the Secretary shall conduct a technology transfer program that, at a minimum—

"(A) documents and archives spill control technology;

"(B) investigates and analyzes significant hazardous spill incidents;

"(C) develops and provides generic emergency action plans;

"(D) documents and archives spill cost results;

"(E) develops emergency action plans to respond to spills;

"(F) conducts training of spill response personnel; and

"(G) establishes safety standards for personnel engaged in spill response activities.

"(3) **CONTRACTS AND GRANTS.**—The Secretary is directed to enter into contracts and grants with a nonprofit organization in Albany County, Wyoming, that is capable of providing the necessary technical support and which is involved in environmental activities related to such hazardous substance related emergencies.

"(4) **DEVELOPMENT.**—The Secretary shall arrange for the use of the Liquidated Gasoils Pools Spill Test Facility to carry out the provisions of this subsection."

**RADON GAS AND INDOOR AIR QUALITY RESEARCH**

Pub. L. 99-498, Title IV, Oct. 17, 1986, 100 Stat. 1586, provided that:

**SEC. 401. SHORT TITLE.**

"This title may be cited as the 'Radon Gas and Indoor Air Quality Research Act of 1986'."

**SEC. 402. FINDINGS.**

"The Congress finds that:

"(1) High levels of radon gas pose a serious health threat in structures in certain areas of the country.

"(2) Various scientific studies have suggested that exposure to radon, including exposure to naturally

occurring radon and indoor air pollutants, poses a public health risk.

"(3) Existing Federal radon and indoor air pollutant research programs are fragmented and underfunded.

"(4) An adequate information base concerning exposure to radon and indoor air pollutants should be developed by the appropriate Federal agencies.

**SECTION 403. RADON GAS AND INDOOR AIR QUALITY RESEARCH PROGRAM.**

"(A) **DESIGN OF PROGRAM.**—The Administrator of the Environmental Protection Agency shall establish a research program with respect to radon gas and indoor air quality. Such program shall be designed to—

"(1) gather data and information on all aspects of indoor air quality in order to contribute to the understanding of health problems associated with the presence of air pollutants in the indoor environment;

"(2) coordinate Federal, State, local, and private research and development efforts relating to the improvement of indoor air quality; and

"(3) assess appropriate Federal Government actions to mitigate the environmental and health risks associated with indoor air quality problems.

"(b) **PROGRAM REQUIREMENTS.**—The research program authorized under this section shall include—

"(1) research and development concerning the identification, characterization, and monitoring of the sources and levels of indoor air pollution, including radon, which includes research and development relating to—

"(A) the measurement of various pollutant concentrations and their origins and sources;

"(B) high-risk building types; and

"(C) instruments for indoor air quality data collection;

"(2) research relating to the effects of indoor air pollution and radon on human health;

"(3) research and development relating to control techniques or other mitigation measures to prevent or abate indoor air pollution (including the development, evaluation, and testing of individual and generic control devices and systems);

"(4) identification of methods for reducing or eliminating indoor air pollution and radon, including sealing, venting, and other methods into the Administrator determines may be effective;

"(5) research to be carried out in conjunction with the Secretary of Housing and Urban Development, for the purpose of developing—

"(A) methods for assessing the potential for radon contamination of new construction, including but not limited to consideration of the moisture content of soil, porosity of soil, and radon content of soil; and

"(B) design measures to avoid indoor air pollution; and

"(6) the dissemination of information to assure the public availability of the findings of the activities under this section.

"(c) **ADVISORY COMMITTEES.** The Administrator shall establish a committee composed of individuals representing Federal agencies concerned with various aspects of indoor air quality and an advisory group composed of individuals representing the States, the academic community, industry, and public interest organizations to assist him in carrying out the research program for radon gas and indoor air quality.

"(d) **IMPLEMENTATION PLAN.** Not later than 90 days after the enactment of this Act (Oct. 17, 1986), the Administrator shall submit to the Congress a plan for implementation of the research program under this section. Such plan shall also be submitted to the EPA Science Advisory Board, which shall, within a reasonable period of time, submit its comments on such plan to Congress.

"(e) **REPORT.**—Not later than 2 years after the enactment of this Act (Oct. 17, 1986), the Administrator shall submit to Congress a report respecting his activities under this section and making such recommendations as appropriate.

17402

TITLE 42—THE PUBLIC HEALTH AND WELFARE

Page 6428

**§ 421 CONSTRUCTION OF TITLE**

"Nothing in this title shall be construed to authorize the Administrator to carry out any regulatory program for any activity other than research, development, and related reporting, information dissemination, and coordination activities specified in this title. Nothing in this title shall be construed to limit the authority of the Administrator or of any other agency or instrumentality of the United States under any other act or title of law.

**§ 422 AUTHORIZATION:**

"There are authorized to be appropriated to carry out the activities under this title and under section 1187(a) of the Superfund Amendments and Reauthorization Act of 1980 (relating to radon gas assessment and concentration program) (section 1187(a) of Pub. L. 96-499, set out as a note above) not to exceed \$5,000,000 for each of the fiscal years 1987, 1988, and 1989. Of such sums appropriated in fiscal years 1987 and 1988, two-thirds shall be reserved for the implementation of section 1187(a)."

**STUDY OF URBAN AND OTHER SMOG AREAS**

Pub. L. 95-95, title IV, § 408(b), Aug. 7, 1977, 91 Stat. 792. Directed Administrator of Environmental Protection Agency to conduct a study and report to Congress not later than Jan. 1, 1979, on effects of public health and welfare of urban and other smog areas, source of such emissions, technology or other measures available for control of such emissions and costs of such technology or measures, and costs and benefits of alternative measures or strategies to abate such emissions.

**LIST OF CHEMICAL CONTAMINANTS FROM ENVIRONMENTAL POLLUTION FOUND IN HUMAN TISSUE**

Pub. L. 95-95, title IV, § 408(c), Aug. 7, 1977, 91 Stat. 792. Directed Administrator of EPA, not later than twelve months after Aug. 7, 1977, to publish throughout the United States a list of all known chemical contaminants resulting from environmental pollution which have been found in human tissue including blood, urine, breast milk, and all other human tissue, such list to be prepared for the United States and to indicate approximate number of cases, range of levels found, and (a) levels found, directed Administrator, not later than eighteen months after Aug. 7, 1977, to publish in some manner an explanation of what is known about the manner in which chemicals entered the environment and thereafter human tissue, and disabled children, in consultation with National Institutes of Health, the National Center for Health Statistics, and the National Center for Health Services Research and Development, to, if feasible, conduct an epidemiological study to demonstrate the relationship between levels of chemicals in the environment and in human tissue, such study to be made in appropriate regions or areas of the United States in order to determine any different results in such regions or areas, and the results of such study to be reported as soon as practicable, to appropriate committee of Congress.

**STUDY ON REGIONAL AIR QUALITY**

Pub. L. 95-94, title IV, § 405(d), Aug. 7, 1977, 91 Stat. 780. Directed Administrator of EPA to conduct a study of air quality in various areas throughout the country including the gulf coast region, such study to include analysis of types and valid sources and other like particulate matter and contribution of such substances to visibility and public health problems in such areas, with Administrator to use environmental health reports from the National Institutes of Health and other outside agencies and organizations.

**RAILROAD EMISSION STUDY**

Pub. L. 95-55, title IV, § 434, Aug. 7, 1977, 91 Stat. 793, as amended by H. Res. 949, Mar. 25, 1980. Directed Administrator of EPA to conduct a study and investigation of emissions of air pollutants from railroad loco-

motives, locomotive engines, and secondary power sources on railroad loading racks, in order to determine extent to which such emissions affect air quality in air quality control regions throughout the United States, technological feasibility and current state of technology for controlling such emissions, and status and effect of current and proposed State and local regulations affecting such emissions, and within one hundred and eighty days after commencing such study and investigation, Administrator to submit a report of such study and investigation, together with recommendations for appropriate legislation, to Senate Committee on Environment and Public Works and House Committee on Energy and Commerce.

**STUDY AND RESEARCH CONCERNING ECONOMIC APPROACHES TO CONTROLLING AIR POLLUTION**

Pub. L. 95-95, title IV, § 406, Aug. 7, 1977, 91 Stat. 794. Directed Administrator, in consultation with Council of Economic Advisors, to undertake a study and assessment of economic measures for control of air pollution which would strengthen effectiveness of existing methods of controlling air pollution, provide incentives to abate air pollution greater than that required by Clean Air Act, and serve as primary incentive for controlling air pollution problems not addressed by Clean Air Act, and directed that, not later than 3 years after Aug. 7, 1977, Administrator and Council conclude study and submit a report to President and Congress.

**NATIONAL INDUSTRIAL POLLUTION CONTROL COUNCIL**

For provisions relating to establishment of National Industrial Pollution Control Council, see Ex. Ord. No. 11881, Apr. 8, 1970, 35 F.R. 5488, set out as a note under section 432 of this title.

**FEDERAL COMPLIANCE WITH POLLUTION CONTROL STANDARDS**

For provisions relating to responsibility of head of each Executive agency for compliance with applicable pollution control standards, see Ex. Ord. No. 12008, Oct. 13, 1976, 41 F.R. 47107, set out as a note under section 432 of this title.

**EXECUTIVE ORDER NO. 12179**

Ex. Ord. No. 12179, Aug. 31, 1983, 48 F.R. 5881 which related to cooperation of Federal agencies with State and local authorities, was superseded by Ex. Ord. No. 11880, May 26, 1985, 50 F.R. 1985, formerly set out under section 702 of this title.

**EXECUTIVE ORDER NO. 11507**

Ex. Ord. No. 11507, Feb. 4, 1970, 35 F.R. 3903, which provided for prevention, control, and abatement of air pollution at Federal facilities, was superseded by Ex. Ord. No. 11884, Dec. 17, 1979, 44 F.R. 8758, formerly set out as a note under section 432 of this title.

**§ 4302. Cooperative activities**

(a) Interstate cooperation: uniform State laws; State compacts

The Administrator shall encourage cooperative activities by the States and local governments for the prevention and control of air pollution; encourage the enactment of improved and, so far as practicable in the light of varying conditions and needs, uniform State and local laws relating to the prevention and control of air pollution, and encourage the making of agreements and compacts between States for the prevention and control of air pollution.

(b) Federal cooperation

The Administrator shall cooperate with and encourage cooperative activities by all Federal departments and agencies having functions re-

ADD-005

1976—Subsec. (1)(G)(II)(A) (4249b): Pub. L. 94-25, §131(a)(2), substituted "under this section" for "under subsection (b) of this section".

Subsec. (2)(A): Pub. L. 95-629, §138(a)(1), added par. (5). Subsec. (j): Pub. L. 95-629, §138(a)(3), substituted in par. (1)(A) and (2)(A) "standards under this section" and "under this section" for "standards under subsection (b) of this section" and "under subsection (b) of this section", respectively.

1977—Subsec. (k)(1): Pub. L. 95-95, §109(c)(1)(A), added subpara. (A), (B), and (C); substituted "For the purpose of subparagraphs (A)(i) and (i) and (B), a standard of performance shall reflect" for "a standard for emissions of air pollutants which reflects", "and the percentage reduction achievable" for "achievable", and "technological system of continuous emission reduction which (taking into consideration the cost of achieving such emission reduction, and any other quality health and environment impact and energy requirements) for "system of emission reduction which (taking into account the cost of achieving such reduction)" in existing provisions, and inserted provision that, for the purpose of subparagraph (1)(A)(ii), any cleaning of the fuel or reduction in the pollution characteristics of the fuel after extraction and prior to combustion may be credited, as determined under regulations promulgated by the Administrator, to a source which burns such fuel.

Subsec. (k)(7): Pub. L. 95-95, §109(c)(1)(B), added par. (7) defining "technological system of continuous emission reduction".

Pub. L. 95-95, §109(f), added par. (7) directing that, under certain circumstances a conversion to coal not be deemed a modification for purposes of par. (2) and (4).

Subsec. (k)(7), (8): Pub. L. 95-140, §142(a)(7), redesignated par. (7) as (8).

Subsec. (k)(1)(A): Pub. L. 95-95, §109(b), substituted "such list if in his judgment it causes or contributes significantly to air pollution which may reasonably be anticipated in the area" for "such list if he determines it may contribute significantly to air pollution which causes or contributes to the enhancement of".

Subsec. (k)(7)(B): Pub. L. 95-95, §109(c)(2) substituted "shall, at least every four years, review and, if appropriate, fix" for "may from time to time".

Subsec. (1)(C), (D): Pub. L. 95-95, §109(c)(3), added pars. (C) and (D).

Subsec. (1)(C)(1): Pub. L. 95-95, §109(c)(1), struck out "except with respect to new sources owned or operated by the United States" after "important and enforce such standards".

Subsec. (1)(1): Pub. L. 95-95, §109(d)(1), substituted "standards of performance" for "emission standards" and inserted provisions directing that regulations of the Administrator permit the State in applying a standard of performance to any particular source under a submitted plan to take into consideration, among other factors, the remaining useful life of any existing source to which the standard applies.

Subsec. (1)(2): Pub. L. 95-95, §109(d)(2), provided that in promulgating a standard of performance under a plan, the Administrator take into consideration, among other factors, the remaining useful life of the sources in the category of sources to which the standard applies.

Subsec. (1)(3) of (2): Pub. L. 95-95, §109(d), added subsec. (3) to (1).

Subsec. (1)(1), (2): Pub. L. 95-140, §142(a)(6), (5), redesignated subsec. (2) as (3) and, as so redesignated, substituted "(B)" for "(8)" as designation for second sub-para. in par. (3). Former subsec. (3) added by Pub. L. 95-95, §109(e), which related to compliance with applicable standards of performance, was struck out.

Pub. L. 95-95, §109(f), added subsec. (4).

1971—Subsec. (1)(k)(3): Pub. L. 92-157 substituted in first sentence "publish proposed" for "propose".

EXPIRING DATE OF 1977 AMENDMENT

Amendment by Pub. L. 95-95 effective Aug. 1, 1977, except as otherwise expressly provided, see section 1001

of Pub. L. 95-16, set out as a note under section 190 of this title.

REGULATIONS

Section 409(b), (c) of Pub. L. 101-548 provided that: "The REGULATORY PROVISIONS.—Not later than three years after the date of enactment of the Clean Air Act Amendments of 1990 [Nov. 15, 1990], the Administrator shall promulgate revised regulations for standards of performance for new fossil-fired electric utility units commencing construction after the date on which such regulations are proposed that, at a minimum, require any source subject to such revised standards to emit sulfur dioxide at a rate not greater than would have resulted from compliance by such source with the applicable standards of performance under this section [amending sections 7411 and 7419 of this title] prior to such revision.

(1) APPLICABILITY.—The provisions of subsections (a) [amending this section] and (b) apply only so long as the provisions of section 102(c) of the Clean Air Act (42 U.S.C. 1921(c)) remain in effect."

TRANSFER OF FUNCTIONS

Enforcement functions of Administrator or other official in Environmental Protection Agency related to compliance with new source performance standards under this section with respect to gas-construction, construction, and initial operation of transportation system for Canadian and Alaskan natural gas transferred to Federal Inspector, Office of Federal Inspector for the Alaska Natural Gas Transportation System, until first anniversary of date of initial operation of Alaska Natural Gas Transportation System, see Exec. Plan No. 1, 1974, eff. July 1, 1973, §102(a), 80 Stat. 44 P.R. 31223, 1966, 58 Stat. 1175, 1176, set out in the Appendix to Title 5, Government Organization and Employees, Office of Federal Inspector for the Alaska Natural Gas Transportation System established and functions and authority vested in Inspector transferred to Secretary of Energy by section 302(b) of Pub. L. 95-486, set out as an Abolition of Office of Federal Inspector note under section 7194 of Title 15, Commerce and Trade, Functions and authority vested in Secretary of Energy subsequently transferred to Federal Coordinator for Alaska Natural Gas Transportation Projects by section 722(d) of Title 15.

FORMER ADMIN. AND PROCEDURES

Suits, actions, and other proceedings lawfully commenced by or against the Administrator or any other officer or employee of the United States in his official capacity or in relation to the discharge of his official duties under act July 14, 1955, the Clean Air Act, as in effect immediately prior to the enactment of Pub. L. 95-95 [Aug. 7, 1977], not to state by reason of the taking effect of Pub. L. 95-95, see section 409(a) of Pub. L. 95-95, set out as an Effective Date of 1977 Amendment note under section 1901 of this title.

Modification or Rescission of Rules, Regulations, Orders, Determinations, Decisions, Grants, Notices, Administrative Determinations, Delegations, and Other Actions.

All rules, regulations, orders, determinations, contracts, certifications, authorizations, delegations or other actions duly issued, made, or taken by or pursuant to act July 14, 1955, the Clean Air Act, as in effect immediately prior to the date of enactment of Pub. L. 95-95 [Aug. 7, 1977] to continue in full force and effect until modified or rescinded in accordance with act July 14, 1955, as amended by Pub. L. 95-95 (this chapter), see section 106(b) of Pub. L. 95-95, set out as an Effective Date of 1977 Amendment note under section 1901 of this title.

§ 7412. Hazardous air pollutants

(a) Definitions

For purposes of this section, except subsection (1) 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 7011(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
60316	Acetic anhydride
75050	Acetonitrile
98583	Acetone
92569	2-Acetylaminofluorene
107160	Acrolein
75001	Acrylamide
79107	Acrylic acid
107131	Acrylonitrile
107131	Allyl chloride
92811	o-Aminobiphenyl
62553	Aniline
90740	n-Asphatene
139733	Asbestos
71452	Benzene (including benzene from gasoline)
94575	Benzidine
82577	Benzyl chloride
100447	Benzyl chloride
92428	Biphenyl
117417	1,1,1-Trichloroethylene (TCE)
542851	Bis(2-chloroethyl) ether
78253	Bromoform
107390	1,2-Dibromobenzene
106687	Calcium cyanide
105810	Caproic acid
123012	Carbon
18352	Carbonal
75152	Carbon dioxide
97415	Carbon tetrachloride
46831	Carbon monoxide
126825	Catechol
107804	Chloroacetylene
57745	Chloroform
778263	Chlorine
10113	Chloroacetic acid
49274	2-Chloroethanol
146901	Chlorobenzene
51056	Chlorobenzidine
50824	Chloroethane
197911	Chloromethyl methyl ether
12093	Chloroquine
181973	Cresols (o-cresol, m-cresol, and p-cresol)
9567	c-Cresol

See References in Text note below.

§7412

TITLE 42—THE PUBLIC HEALTH AND WELFARE

Page 6365

CAS number	Chemical name	CAS number	Chemical name
108304	m-Cresol	4260	4-Nitrophenyl
109145	p-Cresol	10207	4-Nitrophenol
98388	Toluene	79489	2-Nitropropane
94757	2,4-D, salts and esters	84565	N-Nitroso-N-methylurea
1547044	DDE	62158	N-Nitrosodimethylamine
29483	Diazomethane	75862	N-Nitrosomorpholine
13849	Dibenzofuran	36882	Psoralen
96138	1,3-Dibromo-7-chloropropane	8-980	1-Propylpyrrolidone (N-propylpyrrolidone)
84742	Dibutylphthalate	37505	Parathion
108481	1,4-Dichlorobenzene(p)	103262	Phenol
54943	2,3-Dichlorobutadiene	102503	p-Phenylenediamine
111444	Dichloromethyl ether (Bis(2-chloroethyl)ether)	2542	Phosgene
542756	1,2-Dichloropropane	100512	Phosphine
62727	Dichloroac	172130	Phosphorus
211423	Dichloroethane	8540	Phthalic anhydride
181697	N,N-Diethyl urethra (N,N-Diethylurethane)	186362	Polychlorinated biphenyls (Aroclors)
43675	Dicetyl sulfate	112616	1,2-Propanediol
112604	2,3-Dimethoxybenzidine	37570	para-Propylparacetamol
80117	Dimethyl amine	123386	Propionaldehyde
119907	2,2'-Dimethyl benzidine	114361	Propylene Glycol
7947	Dimethyl carbonate chloride	78875	Propylene dichloride (1,2-Dichloropropane)
68122	Dimethyl formamide	75880	Propylene oxide
57147	1,1-Dimethyl hydrazine	75230	1,2-Propylenediamine (2-Methyl aziridine)
181113	Dimethyl phthalate	91223	Quinoline
77761	Dimethyl sulfate	109319	Quinone
684581	1,6-Dinitro-o-cresol, and salts	100073	Styrene
51285	2,4-Dinitrophenol	96168	Styrene oxide
121142	2,4-Dinitrotoluene	174506	1,1,1,2-Tetrahydrocyclohexane-p-oliferin
12811	1,4-Dioxane (1,4-Dioxolane)	75545	1,1,2,2-Tetrahydrocortezane
182967	1,2-Diphenylhydrazine	131084	Tetrahydro-2H-pyran (Tetrahydrofuran)
106389	Epichlorohydrin (1-Chloro-2,3-epoxypropane)	755060	Thallium tetrachloride
106387	1,2-Epoxybutane	103883	Toluene
98066	Ethyl acetate	35907	2,4-Toluene diisocyanate
10414	Ethyl benzene	38488	2,4-Toluene dithiocyanate
51796	Ethyl carbamate (Orthoam)	96834	o-Toluidine
73009	Ethyl chloride (Chloroethane)	801354	1-Chloro-2-chloromethylbenzene
106954	Ethylene dibromide (Dibromoethane)	12682	1,2,4-Trichlorobenzene
107363	Ethylene dichloride (1,2-Dichloroethane)	75005	1,1,2-Trichloroethane
107211	Ethylene glycol	75009	Trichloroethylene
161504	Ethyleneimine (Aziridine)	96664	2,4,5-Trichlorophenol
75218	Ethylene oxide	38002	2,4,6-Trichlorophenol
36437	Ethylene thiourea	12448	Triethylamine
73443	Ethylene-2-thiochloride (1,2-Dichloroethane)	156388	Triethyltin
50000	Formaldehyde	56284	2,2,4-Trinitrophenol
78348	Formaldehyde	10924	Vinyl acetate
118741	Hexachlorocyclopentadiene	68360	Vinyl bromide
17683	Hexachlorocyclopentadiene	7504	Vinyl chloride
77774	Hexachlorocyclopentadiene	75354	Vinylidene chloride (1,1-Dichloroethylene)
8772	Hexachlorocyclopentadiene	189007	Xylenes (mixture of isomers)
88900	Hexamethylene-1,2-dithiocarbamate	83176	o-Xylenes
56031P	Hexamethylphosphoramide	108388	m-Xylenes
110512	Hexane	10423	p-Xylenes
502018	Hydrazine	0	Acetylene Compounds
947012	Hydrochloric acid	0	Aromatic Compounds (Heterocyclic including benzene)
756336	Hydrogen fluoride (Hydrofluoric acid)	0	Barbiturate Compounds
128019	Hydroquinone	0	Cadmium Compounds
1054	Isopentane	0	Chromium Compounds
58323	Isoprene (2-Methyl-2-butene)	0	Cobalt Compounds
108318	Kalium chloride	0	Coke Oven Emissions
6760	Kathanol	0	Cyanide Compounds
7835	Ketoxystyrene	0	Glass Compounds
13338	Methyl bromide (Bromomethane)	0	Lead Compounds
78878	Methyl chloride (Chloromethane)	0	Manganese Compounds
11566	Methyl chloride (1,1,1-Trichloroethane)	0	Mercury Compounds
78833	Methyl ethyl ketone (2-Butanone)	0	Fine mineral fibers
6844	Methyl hydrazine	0	Nickel Compounds
74824	Methyl iodide (Iodomethane)	0	Polycyclic Organic Matter
39101	Methyl isobutyl ketone (Hexane)	0	Radioisotopes (including radon)
68439	Methyl isopropyl ketone	0	Aluminum Compounds
60028	Methyl methacrylate	0	
154041	Methyl n-butyl ether	0	
121144	2,4-Methylhexa-2,3-dithiocarbamate	0	
15922	Methylene chloride (Dichloromethane)	0	
121015	Methylene diphenyl diisocyanate (MDI)	0	
121775	2,2-Methylpropane	0	
51205	Naphthalene	0	
9441	Nitrobenzene	0	

NOTE: For all listings above which contain the word "mixture", and for 82901 esters, the following applies: Unless otherwise specified, these listings are defined as including any unique chemical substance that contains the named chemical (e.g., acetone, arsenic, etc.) as part of that chemical's infrastructure.

\*XCN where X = H or any other group where a formal dissociation may occur. For example KCN is excluded.

\*Includes mono- and di-ethers of ethylene glycol, diethylene glycol, and triethylene glycol  $R_1-CO-O-CH_2-CH_2-O-R_2$  where

n = 1, 2, or 3

R = alkyl or aryl groups

R = H, Cl, or groups which, when removed, yield glycol ethers with the structure  $H-CO-O-CH_2-CH_2-OH$ . GCF Polymers are excluded from the glycol category.

\*Includes mineral fiber emissions from insulation manufacturing or processing glass, rock, or slag fibers for other mineral derived fibers of average diameter 1 micrometer or less.

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

\*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 (1) of this section as a result of emissions to the air. No air pollutant which is listed under section 7402(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 7402(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 effects 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 or 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 (4) 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) Particular 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 18 months after November 15, 1990, the Administrator shall publish, and

<sup>226</sup> In original, probably should be "effects".

shall from time to time, but no less often than every 3 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 (1) 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.

**(18) 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.

**(19) 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 3 years after November 15, 1990, and pursuant to subsection (18)(2)(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.

**(14) 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.

**(15) 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.

**(16) Specific pollutants**

With respect to allylated lead compounds, polycyclic organic matter, hexachlorobenzene,

mercury, polychlorinated biphenyls, 2,3,7,8-tetrachlorodibenzofuran and 2,3,7,8-tetrachlorodibenz-p-dioxin, the Administrator shall, not later than 3 years after November 15, 1990, list categories and subcategories of sources issuing that sources accounting for not less than 30 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 subparagraph (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:

(1) In the case of hazardous air pollutants emitted by sources in one 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).

(2) 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 (or any standard applicable to any source under subsection (1) of this section as the result of the authority provided by this sentence.

**(2) Standards and methods**

Emission 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 in which such emission standard applies, through application of processes, 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 pollutant when released from a process, stack, storage or fugitive emissions point;

(D) use 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 7411(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 (1) 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 5 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 for equipment sealing 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 life 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 as a minimum that coke oven batteries will not exceed 8 per centum leaking doors, 1 per centum leaking lids, 5 per centum leaking offtakes, and 18 seconds visible emissions per charge, with no extension for emissions during the period after the closing of self-sealing oven doors. Notwithstanding subsection (c) 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, an appropriate—

(i) the use of sodium silicate for equipment sealing 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 clearing practices.

Notwithstanding subsection (j) of this section, the compliance date for such work practice regulations for coke oven batteries shall be not later than the date 8 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 (2) of this section in accordance with subsection (1)(B) of this section, the emission standards under this subsection for coke oven batteries shall require that coke oven batteries not exceed 6 per centum leaking doors, 1 per centum leaking lids, 5 per centum leaking offtakes, and 16 seconds visible emissions per charge, with no extension for emissions during the period after the closing of self-sealing doors.

Notwithstanding subsection (j) 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 5 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 for 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. 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.

**(c) 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 (a)(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 706 of this title.

**(4) Judicial review**

Notwithstanding section 7601 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 7601 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. 1261 et seq.) not later than 5 years after November 15, 1990.

**(b) Standard to protect health and environment**

**(1) Report**

Not later than 4 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 economically 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 techniques, 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 such 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, in 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 are 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, 1969 (34 Federal Register 3004).

(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 8 years after November 15, 1990, the Administrator shall have 4 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.

**(E) 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

(E) 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 sub-section (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 to 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 pollutant 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 pollutants.

#### (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 emission 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.

#### (b) 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 limita-

tion 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.

**(5) Schedule for compliance**

**(1) Preconstruction and operating requirements**

After the effective date of any emission standard, limitation, or regulation under subsection (b), (c) 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 source**

(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 installa-

tion 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 (a) 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 such 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 3 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, 1991, 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 each source, received by the Administrator prior to November 15, 1990, pursuant to an information request issued under section 7416 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 dioxin 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 80 per centum reduction in such high-risk pollutants qualifying for an alternative emissions limitation under this paragraph.

**(G) Other reductions**

Notwithstanding the requirements of this section, an existing source that has installed—

- (A) best available control technology (as defined in section 7472(2) 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 pollutant) 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 3 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.

**(I) 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.

**(k) Coke ovens**

(A) Any coke oven battery that complies with the emission limitations established under subsection (d)(1)(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.

(D)(i) Not later than December 31, 2014, the Administrator shall promulgate emission limitations for coke oven emissions from coke oven batteries. Notwithstanding paragraph (B) of this subsection, the compliance date for such emission limitations for existing coke oven batteries shall be January 1, 2006. 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) 8 per centum leaking doors (5 per centum leaking doors for six meter batteries);
- (II) 1 per centum leaking lids;
- (III) 4 per centum leaking off-takes; and
- (IV) 6 seconds visible emissions per charge.

with an exclusion for emissions during the period after the closing of self-sealing oven doors for 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.

(B) 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 off-takes; 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, 2010. If no such emission limitations have been promulgated for such coke oven battery, the Administrator shall promulgate such emission limitations in accordance with subsection (c) 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, 2010, 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 scrubbers qualifying for an extension under this paragraph shall not subject such source to emission limitations under subsection (c) of this section more stringent than those established under subparagraphs (H) and (I) 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 or 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 (6) and (8).

##### (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 (3), 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 766id 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 (h)(5) of this section. For purposes of the preceding sentence, the reduction required by subsection (h)(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 Admin-

Administrator for the State) shall revise such permit upon the next renewal to reflect the standard promulgated by the Administrator permitting such source a reasonable time to comply, but no longer than 6 years after such standard is promulgated or 3 years after the date on which the source is first required to comply with the emissions limitation established by paragraph (b), 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 carcinogens 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, neurotoxicity, 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 Fumes Substances Control Act (36 U.S.C. 2601 et seq.), the Federal Insecticide, Fungicide and Rodenticide Act (7 U.S.C. 136 et seq.) and the Resource Conservation and Recovery Act (42 U.S.C. 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 3 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) Area-wide activities**

In addition to the national urban air toxics strategy authorized by paragraph (3), the Administrator shall also encourage and support area-wide strategies developed by States 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 area-wide 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.

#### (15) 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.

### (10) State programs

#### (A) 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 (1) 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 or set standards less stringent than those promulgated by the Administrator under this chapter.

#### (B) Guidance

Not later than 18 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 (c) 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 1988 for the review of high-risk point sources of air pollutants including, but not limited to, hazardous air pollutants listed pursuant to subsection (c) of this section.

#### (C) 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 4003 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 (3) and support for the development and implementation of area-wide area source programs pursuant to subsection (k) of this section.

#### (5) Approval or disapproval

Not later than 100 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 or assure compliance by all sources within the State with such 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 (B) 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 criterion 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 of the State under subchapter V of this chapter.

**(a) 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. 1251 et seq.) and Federal

water standards established pursuant to the Safe Drinking Water Act (42 U.S.C. 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 21, 2001, 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 to 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 300(a)(2)(A) of the Federal Water Pollution Control Act (33 U.S.C. 1300(a)(2)(A)) or listed pursuant to section 300(a)(2)(B) of such Act (33 U.S.C. 1300(a)(2)(B)) or estuarine research reserves designated pursuant to section 1461 of title 16.

(K) 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, as a minimum, an assessment of—

(A) the contribution of atmospheric deposition to pollutant loadings to 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 pollutant loadings to the Great Lakes, the Chesapeake Bay, Lake Champlain or coastal waters cause or contribute to exceedances of drinking water standards pursuant to the Safe Drinking Water Act (42 U.S.C. 300f et seq.) or water quality standards pursuant to the Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.) or, with respect to the Great Lakes, exceedances 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.

(B) 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 ecologic 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.

(c) 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 (a) 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 3-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 signifi-

cant emissions reductions of hazardous air pollutants provided that Federal funds shall not exceed 50 per centum of the cost of any project approved 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 treatment 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 wells, whether or not such wells are in a contiguous area or under common control, to determine whether such wells or groups 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 an 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 sul-

fide 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 3002(m) of the Solid Waste Disposal Act (42 U.S.C. 6962(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 sections 7 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. 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 coordinated.

**(8) National Academy of Sciences study**

**(i) Request of the Academy**

Within 9 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.

**(ii) 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

\*So inserted. Probably should be "source".



(B) the techniques used for estimating exposure to hazardous air pollutants (by 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 dysfunction.

**(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 302 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 7007 of this title.

**(g) 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 cancer 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 12 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.

**(g) 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 (November 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 (3), 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 phosphorus plants, (B) grade calcination elemental phosphorus 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 (November 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 (c)(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.

**(e) 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 (2)

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 604 of title 49 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 (2).

(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. 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, selenium dicyanate, phosgene, bromine, anhydrous hydrogen chloride, hydrogen fluoride, antimony sulfur dioxide and sulfur dioxide. The initial list shall include at least 100 substances which pose the greatest risk of causing death,

<sup>1</sup>So in italics. Probably should be "Right-to-Know".

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 or the Administrator's own action 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

recognition, safety engineering, human factors, toxicology, or air pollution regulation. The terms of office of members of the Board shall be 3 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. 651 et seq.), to prevent or minimize the consequences of any release of substance 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 engage 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 release 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 (B)(3) 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;<sup>2</sup>

(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 100 days after receipt thereof. The response to the Board's recommendation by the Administrator<sup>3</sup> 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;<sup>4</sup>

(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 (B) 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. 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 (B)(3).

(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

<sup>2</sup>As in original. Probably should be paragraph (F)(3).  
<sup>3</sup>As in original. The word "or" possibly should appear.

<sup>4</sup>As in original. The word "Administrator" probably should be "Secretary".

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

(H) upon presenting appropriate evidence 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 subsection (C) and inspect all reasonable times records, files, papers, processes, contents, 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. 851 et seq.).

(I) 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 7071a(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 6011 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)(ii), 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)(ii) using the authorities of sections 7423 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, 7503, 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) and section 74.9(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 (either that 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 505 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, recommendations 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, or 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.

\* So in original. Probably should be "subsection".



**(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, ensuring 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 Secretary 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 activities 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 2 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 410(c) of this title. The Administration shall establish, by rule, an auditing system to regularly review and, if necessary, require revision, of 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 pro-

poses 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 7412, 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 act, for purposes of section 552(b)(1) of title 28, 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;

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

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

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

(ae) 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;

(af) an officer or employee of an agent or contractor of an entity described in item (ae); and

(ag) a qualified researcher under clause (vi).

(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 (iii).

(ii) REGULATIONS.—Not later than 1 year after August 5, 1999, 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

(ab) 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;

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

(ac) allows access for official use by a covered person described in any of items (aa) through (af) of clause (i);

(ad) 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;

(ae) 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

(af) allows a State or local covered person to obtain, for official use, as requested to the Administrator, off-site consequence analysis information that is not available to the person under item (ac).

(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 August 5, 1999.

(II) AFTER FIRST YEAR.—If the regulations under clause (i) 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 backing 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 August 5, 1999.

(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 (ce) of clause (iii)(i), 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 August 5, 1999; and
- (ii) ending on the earlier of the date of promulgation of the regulations under clause (i) or the date that is 1 year after August 5, 1999.

(v) PROHIBITION ON UNAUTHORIZED DISCLOSURE OF INFORMATION BY COVERED PERSONS.—

(i) IN GENERAL.—Beginning on August 5, 1999, 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 August 5, 1999, if regulations have not been promulgated under clause (ii), the preceding sentence shall not apply.

(ii) CRIMINAL PENALTIES.—Notwithstanding section 743 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 (not 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—

(a) subclauses (i) and (ii) shall not apply with respect to the information; and

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

(V) LIST.—The Administrator shall maintain and make publicly available a list of all stationary sources that have provided notification under subclause (ii)(b).

(vi) NOTICE.—The Administrator shall provide notice of the definition of official use as provided in clause (i)(ii) 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 chapter 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 August 5, 1999, 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.

(iii) REAL-TIME 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.

(iv) 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 (i).

(v) EXCEPT 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

\* See 42 CFR 1.600. Penalty should be "(c)(1)".

State or local law that is inconsistent with this subparagraph (including the regulations).

**III. 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.

**(A) REPORT.**—

(i) **In general.**—Not later than 8 years after August 5, 1990, 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, customs 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 August 5, 1990, 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 subsection (i);
- (ab) the methods used to develop the findings; and
- (ac) an explanation of the activities expected to occur that could cause the findings of the report under subsection (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 conduct-

ing the review under subsections (i) and (ii) shall be exempt from disclosure under section 552 of title 5 if such information would pose a threat to national security.

**(2) 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.

**(3) 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 (iii)), to remain available until expended.

**(B) 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 (2). 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.

**(C) 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 nuisance, and the district court of the United States in the district in which the direct source 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 3006 of this title, sections 321(c), 308, 309, and 504(a) of the Federal Water Pollution Control Act (33 U.S.C. 1321(c), 1318, 1319,



1064(a)], sections 3007, 3008, 3012, and 7003 of the Solid Waste Disposal Act [42 U.S.C. 6907, 6908, 6954, 6959], sections 1443 and 1431 of the Safe Drinking Water Act [42 U.S.C. 3003-1, 3002], sections 5 and 7 of the Toxic Substances Control Act [15 U.S.C. 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 ensure 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 20 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 rescind release prevention, mitigation or response authorities otherwise established by law.

#### (11) State authority

Nothing in this subsection shall preclude, deny or limit in any way of a State or political subdivision thereof to adopt or enforce any regulation, requirement, limitation or standard (including any procedural requirements) 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.

#### (c) Periodic report

Not later than January 15, 1983 and every 5 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 or 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 clean air toxics program; and
- (4) recommendations of the Chemical Safety and Hazard Investigation Board with respect to the prevention and mitigation of accidental releases.

(Pub. L. 95-55, title I, § 112, as added Pub. L. 91-604, § 4(a), Dec. 31, 1970, 84 Stat. 3885, amended Pub. L. 95-95, title I, § 102(d)(2), 110 Stat. 411, Aug. 7, 1977, 91 Stat. 701, 702, 792.

Pub. L. 95-623, § 12(b), Nov. 9, 1978, 92 Stat. 3958; Pub. L. 101-549, title III, § 501, Nov. 25, 1990, 104 Stat. 3581; Pub. L. 102-187, Dec. 4, 1991, 105 Stat. 1285; Pub. L. 105-362, title IV, § 402(b), Nov. 10, 1998, 112 Stat. 3203; Pub. L. 106-40, § 2, (a), Aug. 5, 1999, 113 Stat. 207, 208.)

#### REFERENCES IN TEXT

The date of enactment referred to in subsec. (a)(11), probably means the date of enactment of Pub. L. 101-545 which amended this section generally and was approved Nov. 25, 1990.

The Atomic Energy Act, referred to in subsec. (d)(5), probably means the Atomic Energy Act of 1954, act Aug. 1, 1954, ch. 724, as added by act Aug. 30, 1954, ch. 1075 § 1, 68 Stat. 921, and amended, which is classified generally to chapter 20 (§ 2001 et seq.) of this title. For complete classification of this act to the Code, see Short Title note set out under section 201 of this title and Tables.

The Federal Water Pollution Control Act, referred to in subsec. (d)(3) and (d)(10)(A), (10)(B), is act June 10, 1948, ch. 100, as amended generally by Pub. L. 85-500, 12, Oct. 18, 1978, 92 Stat. 818, which is classified generally to chapter 20 (§ 1251 et seq.) of Title 33, Navigation and Navigable Waters. Title 33 of the Act is classified generally to subchapter II (§ 1201 et seq.) of chapter 25 of Title 33. For complete classification of this Act to the Code, see Short Title note set out under section 1251 of Title 33 and Tables.

The Toxic Substances Control Act, referred to in subsec. (d)(7)(C), is Pub. L. 94-460, Oct. 11, 1976, 90 Stat. 2038, as amended, which is classified generally to chapter 52 (§ 2601 et seq.) of Title 15, Commerce and Trade. For complete classification of this Act to the Code, see Short Title note set out under section 2601 of Title 15 and Tables.

The Federal Insecticide, Fungicide and Rodenticide Act, referred to in subsec. (d)(8)(C), probably means the Federal Insecticide, Fungicide, and Rodenticide Act, act June 25, 1947, ch. 125, as amended generally by Pub. L. 85-615, Oct. 21, 1978, 92 Stat. 919, which is classified generally to subchapter II (§ 130 et seq.) of chapter 5 of Title 7, Agriculture. For complete classification of this Act to the Code, see Short Title note set out under section 135 of Title 7 and Tables.

The Resource Conservation and Recovery Act, referred to in subsec. (d)(9)(C), probably means the Resource Conservation and Recovery Act of 1976, Pub. L. 94-580, Oct. 21, 1976, 90 Stat. 2796, as amended, which is classified generally to chapter 52 (§ 2901 et seq.) of this title. For complete classification of this Act to the Code, see Short Title of 1976 Amendment note set out under section 2901 of this title and Tables.

The Safe Drinking Water Act, referred to in subsec. (d)(10)(B), (10)(D), is title XIV of act July 1, 1954, ch. 407, as amended, Pub. L. 86-328, § 2(a), 85 Stat. 1030, as amended, which is classified generally to subchapter XII (§ 3001 et seq.) of chapter 62 of this title. For complete classification of this Act to the Code, see Short Title note set out under section 201 of this title and Tables.

The Solid Waste Disposal Act, referred to in subsec. (d)(1), is title II of Pub. L. 85-523, Oct. 20, 1978, 92 Stat. 267, as amended generally by Pub. L. 94-501, § 2, (a), (b), 1976, 90 Stat. 2106. Subtitle C of the Act is classified generally to subchapter III (§ 621 et seq.) of chapter 12 of this title. For complete classification of this Act to the Code, see Short Title note set out under section 201 of this title and Tables.

Section 308 of the Clean Air Act Amendments of 1990, referred to in subsec. (c)(4), probably means section 308 of Pub. L. 101-549, which is set out below.

The Clean Air Act Amendments of 1990, referred to in subsec. (d)(11)-(13), probably means Pub. L. 101-549, Nov. 15, 1990, 104 Stat. 3895. For complete classification of this Act to the Code, see Short Title note set out under section 7901 of this title and Tables.

The Emergency Planning and Community Right-To-Know Act of 1986, referred to in subsec. (f)(3), is title III

of Pub. L. 93-493, Oct. 17, 1974, 88 Stat. 1728, which is classified generally to chapter 118 (§11001 et seq.) of this title. For complete classification of this Act to the Code, see Short Title note set out under section 13001 of this title and Tables.

The Occupational Safety and Health Act, referred to in subject (C)(3)(C)(ii) (E), (L), primarily means the Occupational Safety and Health Act of 1970, Pub. L. 91-494, Dec. 29, 1970, 84 Stat. 1580, as amended, which is classified principally to chapter 13 (§661 et seq.) of Title 29, Labor. For complete classification of this Act to the Code, see Short Title note set out under section 651 of Title 29 and Tables.

COOPERATION

In subject (C)(3)(H), "section 6101 of title 41" substituted for "section 5 of title 21 of the United States Code" of authority of Pub. L. 111-350, §6(c), Apr. 4, 2010, 124 Stat. 3454, which Act amended Title 41, Public Contracts.

Section was formerly classified to section 1831e-7 of this title.

AMENDMENTS

1995—Subsec. (C)(3)(D) Pub. L. 104-40, §215, added subject (D).

Subsec. (C)(3)(E) Pub. L. 108-46, §2 substituted "Administrator" —

"(A) shall consider—"  
for "Administrators shall consider each of the following criteria—" in introductory provisions redesignated subject (A) to (C) as (A) to (D), respectively, of subject (A); and added subject (E).

Subsec. (C)(3)(F) Pub. L. 106-46, §3(a), added subject (F).

1998—Subsec. (C)(2)(C) Pub. L. 105-502 substituted "On completion of the study, the secretary shall submit to Congress a report on the results of the study and" for "The Secretary shall prepare annual reports to Congress on the status of the research program and at the completion of the study".

1998—Subsec. (C)(3) Pub. L. 105-502 struck out "(1998) For greater flexibility" from list of pollutants.

2000—Pub. L. 106-549 amended section generally, substituting present provisions for provisions which related to in subject (a), definitions in subject (b); list of hazardous air pollutants, emission standards, and pollution control techniques in subject (c); prohibited acts and exemptions in subject (d); State implementation and enforcement; and in subject (e), testing, equipment, work practices, and operational standards.

1974—Subsec. (a)(1) Pub. L. 93-493 added par. (1).

1977—Subsec. (a)(1) Pub. L. 95-85, §501(c), substituted "source, as contributor to air pollution which may reasonably be anticipated to result in an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness" for "may cause, or contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness".

Subsec. (a)(1) Pub. L. 95-85, §109(c)(2) struck out "except with respect to stationary sources owned or operated by the United States" after "implement and enforce such standards".

Subsec. (e) Pub. L. 95-85, §110, added subject (e).

CHANGES OF NAME

Committee on Energy and Commerce of House of Representatives treated as referring to Committee on Commerce of House of Representatives by section 1(a) of Pub. L. 104-19, set out as a note preceding section 2 of Title 1. The Congress Committee on Commerce of House of Representatives changed to Committee on Energy and Commerce of House of Representatives, and jurisdiction over matters relating to securities and exchanges and insurance generally transferred to Committee on Financial Services of House of Representatives by House Resolution No. 6, One Hundred Seventh Congress, Jan. 3, 2001.

EFFECTIVE DATE OF 1977 AMENDMENT

Amendment by Pub. L. 95-85 effective Aug. 7, 1977, except as otherwise expressly provided, see section 406(a) of Pub. L. 95-85, set out as a note under section 4011 of this title.

TERMINATION OF REPORTING REQUIREMENTS

For termination, effective May 15, 2005, of provisions of law requiring submittal to Congress of any annual, semiannual, or other regular periodic report listed in House Document No. 105-7 (in which reports expound under subject (m)(3), (n)(6)(C)(b), and (o) of this section are listed, respectively, as the 3rd item on page 168, the 9th item on page 190, and the 5th item on page 184), see section 3003 of Pub. L. 104-66, as amended, set out as a note under section 1111 of Title 31, Money and Finance.

FEDERAL ACTIONS AND PROCEEDINGS

Suits, actions, and other proceedings lawfully commenced by or against the Administrator or any other officer or employee of the United States in his official capacity or in relation to the discharge of his official duties under, see July 14, 1965, the Clean Air Act, as in effect immediately prior to the enactment of Pub. L. 95-85 (Aug. 7, 1977), not to abate by reason of the taking effect of Pub. L. 95-46, see section 406(a) of Pub. L. 95-85, set out as an Effective Date of 1977 Amendment note under section 4011 of this title.

MAINTENANCE OR REASSESSMENT OF RULES, REGULATIONS, ORDERS, DETERMINATIONS, CONTRACTS, CONCURRENCES, ASSIGNMENTS, DISCONTINUES, AND OTHER ACTIONS

All rules, regulations, orders, determinations, contracts, qualifications, authorizations, delegations, or other actions duly issued, made, or taken by or pursuant to on July 14, 1965, the Clean Air Act, as in effect immediately prior to the date of enactment of Pub. L. 95-85 (Aug. 7, 1977) to continue in full force and effect until modified or rescinded in accordance with, not July 14, 1965, as amended by Pub. L. 95-85 (this chapter), see section 406(b) of Pub. L. 95-85, set out as an Effective Date of 1977 Amendment note under section 4011 of this title.

DELEGATION OF AUTHORITY

Memorandum of President of the United States, Aug. 19, 1968, 58 F.R. 6237, provided:

Memorandum for the Administrator of the Environmental Protection Agency

WHEREAS, the Environmental Protection Agency, its agencies and departments that are members of the National Response Team authorized under Executive Order No. 12580, 52 Fed. Reg. 2828 (1987) (42 U.S.C. 9612 note), 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 1131(a)(1) of the Clean Air Act (the "Act") (section 4121(a)(1) of title 42 of the United States Code) and section 901 of title 3 of the United States Code, and in order to provide for the delegation of certain functions under the Act (42 U.S.C. 750, 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 assess 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(c)(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 de-

partments, 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 110(g)(3) of the Act.

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

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

WILLIAM J. CLINTON

Memorandum of President of the United States, Jan. 27, 2000, 66 F.R. 3681, provided:

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 120(g)(3) of the Clean Air Act (Act) (42 U.S.C. 7410(g)(3)), as added by section 3 of the Chemical Safety Information, Site Security, and Hazard Regulatory Relief Act (Public Law 106-40), and section 301 of title 1, United States Code, I hereby delegate to:

(1) the Attorney General the authority vested in the President under section 112(r)(8)(B)(iii) of the Act 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)(8)(B)(ii) of the Act 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)(8)(B)(ii) of the Act 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

REPORTS

Pub. L. 105-91, § 201, Aug. 5, 1988, 103 Stat. 233, provided that:

(1) DEFINITION OF ACCIDENTAL RELEASE.—In this subsection, the term "accidental release" has the meaning given the term in section 112(r)(2) of the Clean Air Act (42 U.S.C. 7410(r)(2)).

(2) REPORT ON STATUS OF CERTAIN AMENDMENTS.—Not later than 3 years after the date of enactment of this Act (Aug. 6, 1988), the Comptroller General of the United States shall submit to Congress a report on the status of the development of amendments to the National Fire Protection Association Code for Liquefied Petroleum Gas that will result in the provision of information to local emergency response personnel concerning the off-site effects of accidental releases of substances exempted from listing under section 112(r)(2) of the Clean Air Act (as added by section 3).

(3) REPORT ON COMPLIANCE WITH CERTAIN INFORMATION DISCLOSURE REQUIREMENTS.—Not later than 3 years after the date of enactment of this Act, the Comptroller General of the United States shall submit to Congress a report that:

(A) describes the level of compliance with Federal and State requirements relating to the submission to local emergency response personnel of information intended to help the local emergency response personnel respond to chemical accidents or related environmental or public health threats; and

(B) contains an analysis of the adequacy of the information required to be submitted and the efficacy

of the methods for delivering the information to local emergency response personnel."

EVALUATION OF REGULATIONS

Pub. L. 106-40, § 202, Aug. 5, 1989, 113 Stat. 213, provided that: "The President shall, periodically the regulations promulgated under this section within 6 years after the enactment of this Act [Aug. 5, 1989] if the President determines not to amend such regulations, the President shall publish a notice in the Federal Register stating that such reevaluation has been completed and that a determination has been made not to modify the regulations. Such notice shall include an explanation of the basis of such decision."

PUBLIC MEETING DURING RETRACTION PERIOD

Pub. L. 106-40, § 4, Aug. 5, 1989, 113 Stat. 214, provided that:

(1) IN GENERAL.—Not later than 180 days after the date of enactment of this Act (Aug. 5, 1989), each owner or operator of a stationary source covered by section 112(r)(1)(A)(i) of the Clean Air Act (42 U.S.C. 7410(r)(1)(A)(i)) shall convene a public meeting, after reasonable public notice, in order to describe and discuss the local implications of the risk management plan submitted by the stationary source pursuant to section 112(r)(1)(A)(ii) of the Clean Air Act, including a summary of the off-site consequence analysis portion of the plan. Two or more stationary sources may conduct a joint meeting. In lieu of conducting such a meeting, small business stationary sources as defined in section 112(r)(1)(A)(ii) of the Clean Air Act (42 U.S.C. 7410(r)(1)(A)(ii)) may comply with this section by publicly posting a summary of the off-site consequence analysis information for their facility not later than 180 days after the enactment of this Act. Not later than 18 months after the date of enactment of this Act, each such owner or operator shall send a certification to the Director of the Federal Bureau of Investigation stating that such meeting has been held, or that such meeting has been posted, within 1 year prior to, or within 6 months after the date of the assessment of this Act. This section shall not apply to sources that employ only Program 1 processes within the meaning of regulations promulgated under section 112(r)(1)(A)(ii) of the Clean Air Act.

(2) ENFORCEMENT.—The Administrator of the Environmental Protection Agency may bring an action in the appropriate United States district court against any person who fails or refuses to comply with the requirements of this section, and such court may issue such orders, and take such other actions as may be necessary to require compliance with such requirements."

RISK ASSESSMENT AND MANAGEMENT COMMISSION

Section 308 of Pub. L. 101-549 provided that:

(1) ESTABLISHMENT.—There is hereby established a Risk Assessment and Management Commission hereafter referred to in this section as the "Commission", which shall commence proceedings not later than 18 months after the date of enactment of the Clean Air Act Amendments of 1990 (Nov. 16, 1990) and which shall make a full investigation of the policy implications and appropriate uses of risk assessment and risk management in regulatory programs under various Federal laws to prevent cancer and other chronic human health effects which may result from exposure to hazardous substances.

(2) CHARGE.—The Commission shall consider—

(A) the report of the National Academy of Sciences authorized by section 117(c) of the Clean Air Act (42 U.S.C. 7417(c)), the use and limitations of risk assessment in establishing emission or effluent standards, ambient standards, exposure standards, acceptable concentration levels, tolerance or other environmental criteria for hazardous substances that present a risk of carcinogenic effects or other chronic health effects and the suitability of risk assessment for such purposes;



(1) the most appropriate methods for measuring and describing cancer risks or risks of other chronic health effects from exposure to hazardous substances, considering such alternative approaches as the lifetime risk of cancer or other effects to the individual or individuals most exposed to substances from a source or sources on both an actual and worst case basis, the range of such risks, the total number of health effects caused by exposure reductions, effluent standards, ambient standards, exposure standards, and acceptable concentration levels, interagency and other non-concurrent efforts, reductions in the number of persons exposed at various levels of risk, the incidence of cancer, and other public health issues;

(2) methods to reflect uncertainties in measurement and calculation techniques, the existence of synergistic or antagonistic effects among hazardous substances, the accuracy of extrapolating human health risks from animal exposure data, and the existence of unquantified direct or indirect effects on human health; (3) risk assessment studies;

(4) risk management policy issues including the use of lifetime cancer risks to individuals most exposed, incidence of cancer, the cost and technical feasibility of exposure reduction measures and the use of site-specific actual exposure information in setting emissions standards and other limitations applicable to sources of exposure to hazardous substances; and

(5) and comment on the issues in which it is possible or desirable to develop a consistent risk assessment methodology, or a consistent standard of acceptable risk, among various Federal programs.

(c) MEMBERSHIP.—Such Commission shall be composed of ten members who shall have knowledge or experience in fields of risk assessment or risk management, including three members to be appointed by the President, two members to be appointed by the Speaker of the House of Representatives, one member to be appointed by the Minority Leader of the House of Representatives, two members to be appointed by the Majority Leader of the Senate, one member to be appointed by the Minority Leader of the Senate, and one member to be appointed by the President of the National Academy of Sciences. Appointments shall be made not later than 18 months after the date of enactment of the Clean Air Act Amendments of 1992 (Nov. 13, 1992).

(4) ASSISTANCE FROM AGENCIES. The Administrator of the Environmental Protection Agency and the heads of all other departments, agencies, and instrumentalities of the executive branch of the Federal Government shall, to the maximum extent practicable, assist the Commission in gathering such information as the Commission deems necessary to carry out this section subject to other provisions of law.

(1) STAFF AND CONTRACTS

(a) In the conduct of the study required by this section, the Commission is authorized to contract (in accordance with Federal contract law) with nongovernmental entities that are competent to perform research or investigations within the Commission's mandate, and to hold public hearings, forums, and workshops to enable full public participation.

(2) The Commission may appoint and fix the pay of such staff as it deems necessary in accordance with the provisions of title 5 United States Code. The Commission may request the temporary assignment of personnel from the Environmental Protection Agency or other Federal agencies.

(3) The members of the Commission who are not officers or employees of the United States, while attending conferences or meetings of the Commission or while otherwise acting at the request of the final, shall be entitled to receive compensation at a rate not in excess of the maximum rate of pay for Grade GS-13, as provided in the General Schedule under section 5302 of title 5 of the United States Code, including travel time, and while away from their homes or regular places of business they may be allowed travel expenses, including per diem in lieu of

subsistence as authorized by law for persons in the Government service employed intermittently.

(4) REPORT.—A report containing the results of all Commission studies and investigations under this section, together with any appropriate legislative recommendations or administrative recommendations, shall be made available to the public for comment not later than 60 months after the date of enactment of the Clean Air Act Amendments of 1990 (Nov. 13, 1990), and shall be submitted to the President and to the Congress not later than 60 months after such date of enactment. In the report, the Commission shall make recommendations with respect to the appropriate use of risk assessment and risk management in Federal regulatory programs to prevent cancer or other chronic health effects which may result from exposure to hazardous substances. The Commission shall cease to exist upon the date determined by the Commission, but not later than 6 months after the submission of such report.

(5) AUTHORIZATION.—There are authorized to be appropriated such sums as are necessary to carry out the activities of the Commission established by this section.

(References in laws to the rates of pay for GS-16, 17, or 18, or to maximum rates of pay under the General Schedule, to be construed references to rates payable under specified sections of Title 5, Government Organization and Employees, section 5302 (Title 5, § 5302) of Pub. L. 101-591, set out in & held under section 5302 of Title 5.)

EXECUTIVE ORDER OF THE PRESIDENT AND VICE PRESIDENT  
TOXIC STANDARDS RULE

Memorandum of President of the United States, Jan. 21, 2011, 86 FR 8, 8027, provided:

Memorandum for the Administrator of the Environmental Protection Agency:

Today's Executive Order (EO) from the Environmental Protection Agency (EPA), of the Clean Air Act (CAA) and the Toxic Substances Control Act (TSCA) represents a major step forward in my Administration's efforts to protect public health and the environment.

This rule, issued after careful consideration of public comments, prescribes standards under section 112 of the Clean Air Act to control emissions of mercury and other toxic air pollutants from power plants, which collectively are among the largest sources of toxic pollution in the United States. The EPA estimates that by substantially reducing emissions of pollutants that contribute to neurological damage, cancer, respiratory illnesses, and other health risks, the MATS Rule will produce major health benefits for millions of Americans—including children, older Americans and other vulnerable populations. Consistent with Executive Order 13603 Improving Protection and Regulatory Review, the estimated benefits of the MATS Rule far exceed the estimated costs.

The MATS Rule can be implemented through the use of demonstrated, existing pollution control technologies. The United States is a global market leader in the design and manufacture of these technologies, and it is anticipated that U.S. firms and workers will provide much of the equipment and labor needed to meet the substantial investments in pollution control that the standards are expected to spur.

These new standards will promote the transition to a cleaner and more efficient U.S. electric power system. This system as a whole is critical infrastructure that plays a key role in the functioning of all facets of the U.S. economy, and maintaining its stability and reliability is of national importance. It is therefore crucial that implementation of the MATS Rule proceed in a cost-effective manner that ensures electric reliability. Analysis conducted by the EPA and the Department of Energy (DOE) indicates that the MATS Rule is not anticipated to compromise electric generating resource adequacy in any region of the country. The Clean Air Act offers a number of implementation flexibilities, and the EPA has a long and successful history of using these flexibilities to ensure a smooth transition to cleaner technologies.



The Clean Air Act provides 3 years from the effective date of the MATS Rule for sources to comply with its requirements. In addition, section 112(d)(3)(B) of the Act allows for issuance of a permit granting a source up to one additional year where necessary for the installation of controls. As you stated in the preamble to the MATS Rule, this additional fourth year should be broadly available to sources consistent with the requirements of the law.

The EPA has concluded that a year should generally be sufficient to install the necessary emission control equipment, and DOE has issued analysis consistent with that conclusion. While more time is generally not expected to be needed, the Clean Air Act does place important obligations as well. For example, section 112(d) of the Act provides the EPA with flexibility to bring sources into compliance over the course of an additional year, should unusual circumstances arise that warrant such flexibility.

To address any concerns with respect to electric reliability while assuring MATS' public health benefits, I direct you to take the following actions:

1. Building on the information and guidance that you have provided to the public, relevant stakeholders, and permitting authorities in the preamble of the MATS Rule, work with State and local permitting authorities to make the additional year for compliance with the MATS Rule provided under section 112(d)(3)(B) of the Clean Air Act broadly available to sources, consistent with law, and to involve this flexibility expeditiously where needed.

2. Promote early, coordinated, and orderly planning and execution of the measures needed to implement the MATS Rule while maintaining the reliability of the electric power system. Consistent with Executive Order 13583, this process should be designed to "promote predictability and reduce uncertainty," and should include engagement and coordination with DOE, the Federal Energy Regulatory Commission, State utility regulators, Regional Transmission Organizations, the North American Electric Reliability Corporation and regional electric reliability organizations, other grid planning authorities, electric utilities, and other stakeholders, as appropriate.

3. Make available to the public, including relevant stakeholders, information concerning any anticipated use of authority: (a) under section 112(d)(3)(B) of the Clean Air Act in the event that additional time to comply with the MATS Rule is necessary for the installation of technology; and (b) under section 112(a) of the Clean Air Act in the event that additional time to comply with the MATS Rule is necessary to address a specific and documented electric reliability issue. This information should describe the process for working with sources with relevant expertise to identify circumstances where electric reliability concerns might justify allowing additional time to comply.

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

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

BARACK OBAMA.

## § 7413. Federal enforcement

### (a) In general

#### (1) Order to comply with SIP

Whenever, on the basis of any information available to the Administrator, the Administrator finds that any person has violated or is in violation of any requirement or prohibition of an applicable implementation plan or permit, the Administrator shall notify the person and the State in which the plan applies of such

finding. At any time after the expiration of 30 days following the date of which such notice of a violation is issued, the Administrator may, without regard to the period of violation (subject to section 2002 of title 28—

(A) issue an order requiring such person to comply with the requirements or prohibitions of such plan or permit.

(B) issue an administrative penalty order in accordance with subsection (d) of this section, or

(C) bring a civil action in accordance with subsection (b) of this section.

#### (2) State failure to enforce SIP or permit program

Whenever, on the basis of information available to the Administrator, the Administrator finds that violations of an applicable implementation plan or an approved permit program under subchapter V of this chapter are so widespread that such violations appear to result from a failure of the State in which the plan or permit program applies to enforce the plan or permit program effectively, the Administrator shall so notify the State. In the case of a permit program, the notice shall be made in accordance with subchapter V of this chapter. If the Administrator finds such failure extends beyond the 30th day after such notice (90 days in the case of such permit program), the Administrator shall give public notice of such finding. During the period beginning with such public notice and ending when such State satisfies the Administrator that it will enforce such plan or permit program (hereafter referred to in this section as "the end of federally assumed enforcement"), the Administrator may enforce any requirement or prohibition of such plan or permit program with respect to any person by—

(A) issuing an order requiring such person to comply with such requirement or prohibition,

(B) issuing an administrative penalty order in accordance with subsection (d) of this section, or

(C) bringing a civil action in accordance with subsection (b) of this section.

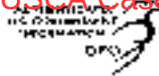
#### (3) EPA enforcement of other requirements

Except for a requirement or prohibition enforceable under the preceding provisions of this subsection, whenever, on the basis of any information available to the Administrator, the Administrator finds that any person has violated, or is in violation of, any other requirement or prohibition of this subchapter, section 7008 of this title, subchapter IV-A, subchapter V, or subchapter VI of this chapter, including, but not limited to, a requirement or prohibition of any rule, plan, order, waiver, or permit promulgated, issued, or approved under those provisions or subchapters, or for the payment of any fee owed to the United States under this chapter (other than subchapter II of this chapter), the Administrator may—

(A) issue an administrative penalty order in accordance with subsection (d) of this section,

(B) issue an order requiring such person to comply with such requirement or prohibition,

# **REGULATORY PROVISIONS**



**Pt. 67, App. A**

local agent, any noncompliance penalties owed by the source owner or operator shall be paid to the State or local agent.

**APPENDIX A TO PART 67—TECHNICAL SUPPORT DOCUMENT**

NOTE: EPA will make copies of Appendix A available from Director, Stationary Source Compliance Division, RM-301, 1200 Pennsylvania Ave., NW, Washington, DC 20460.

154 FR 55279, June 30, 1989

**APPENDIX B TO PART 67—INSTRUCTION MANUAL**

NOTE: EPA will make copies of Appendix B available from Director, Stationary Source Compliance Division, RM-301, 1200 Pennsylvania Ave., NW, Washington, DC 20460.

154 FR 55280, June 30, 1989

**APPENDIX C TO PART 67—COMPLIANCE PROGRAM**

NOTE: EPA will make copies of Appendix C available from Director, Stationary Source Compliance Division, RM-301, 1200 Pennsylvania Ave., NW, Washington, DC 20460.

154 FR 55250, June 30, 1989

**PART 68—CHEMICAL ACCIDENT PREVENTION PROVISIONS**

**Subpart A—General**

- 68.0
- 68.1 Scope.
- 68.3 Definitions.
- 68.10 Applicability.
- 68.12 General requirements.
- 68.15 Management.

**Subpart B—Hazard Assessment**

- 68.20 Applicability.
- 68.22 Offsite consequence analysis parameters.
- 68.24 Worst-case release scenario analysis.
- 68.26 Alternative release scenario analysis.
- 68.30 Defining offsite impacts—population.
- 68.32 Defining offsite impacts—environment.
- 68.35 Review and update.
- 68.38 Documentation.
- 68.42 Five-year accident history.

**Subpart C—Program 2 Prevention Program**

- 68.58 Safety information.
- 68.60 Hazard review.
- 68.62 Operating procedures.
- 68.64 Training.
- 68.66 Maintenance.

**40 CFR Ch. I (7-1-17 Edition)**

- 68.68 Compliance audits.
- 68.70 Third party audits.
- 68.80 Incident investigation.

**Subpart D—Program 3 Prevention Program**

- 68.85 Process safety information.
- 68.87 Process hazard analysis.
- 68.88 Operating procedures.
- 68.91 Training.
- 68.93 Mechanical integrity.
- 68.95 Management of change.
- 68.97 Pre-startup review.
- 68.99 Compliance audits.
- 68.99 Third-party audits.
- 68.99 Incident investigation.
- 68.99 Employee participation.
- 68.99 Hot work permit.
- 68.99 Concessions.

**Subpart E—Emergency Response**

- 68.99 Applicability.
- 68.99 Emergency response coordination activities.
- 68.99 Emergency response program.
- 68.99 Emergency response exercises.

**Subpart F—Regulated Substances for Accidental Release Prevention**

- 68.100 Impose.
- 68.115 Threshold determination.
- 68.120 Petition process.
- 68.125 Exemptions.
- 68.126 Evaluation.
- 68.130 Test of substances.

**Subpart G—Risk Management Plan**

- 68.130 Submission.
- 68.130 American Chemical Society confidential business information.
- 68.132 Substantiating claims of confidential business information.
- 68.155 Executive summary.
- 68.160 Regulations.
- 68.165 Offsite consequence analysis.
- 68.165 Five-year accident history.
- 68.170 Prevention program/Program 2.
- 68.175 Prevention program/Program 3.
- 68.180 Emergency response program.
- 68.185 Certification.
- 68.190 Updates.

**Subpart H—Other Requirements**

- 68.200 Recordkeeping.
- 68.210 Availability of information to the public.
- 68.215 Federal content and air permitting authority or designated agency requirements.
- 68.220 Audits.

**APPENDIX A TO PART 68—TABLE OF TOXIC SUBSTANCES**

AUTHORITY: 42 U.S.C. 1855a, 1855b(1); 701-1071.

## Environmental Protection Agency

## § 68.3

Source: 50 FR 495, Jan. 31, 1984, unless otherwise noted.

## Subpart A—General

## § 68.1 Scope.

This part sets forth the list of regulated substances and thresholds, the petition process for adding or deleting substances to the list of regulated substances, the requirements for owners or operators of stationary sources concerning the prevention of accidental releases, and the State accidental release prevention programs approved under section 112(r). The list of substances, threshold quantities, and accident prevention regulations promulgated under this part do not limit in any way the general duty provisions under section 112(c)(1).

## § 68.2 Definitions.

For the purposes of this part:

**Accidental release** means an unanticipated emission of a regulated substance or other extremely hazardous substance into the ambient air from a stationary source.

**Act** means the Clean Air Act as amended (42 U.S.C. 7401 et seq.).

**Administrative controls** mean written, procedural mechanisms used for hazard control.

**Administrator** means the administrator of the U.S. Environmental Protection Agency.

**AICHE/CCPS** means the American Institute of Chemical Engineers/Center for Chemical Process Safety.

**API** means the American Petroleum Institute.

**Article** means a manufactured item, as defined under 49 CFR 1210.1210(b), that is formed to a specific shape or design during manufacture, that has end use functions dependent in whole or in part upon the shape or design during end use, and that does not release or otherwise result in exposure to a regulated substance under normal conditions of processing and use.

**ASME** means the American Society of Mechanical Engineers.

**CAS** means the Chemical Abstracts Service.

**Catastrophic release** means a major uncontrolled emission, fire, or explosion involving one or more regulated

substances that presents imminent and substantial endangerment to public health and the environment.

**Classified information** means "classified information" as defined in the Classified Information Procedures Act, 16 U.S.C. App. 8, section 11a as "any information or material that has been determined by the United States Government pursuant to an executive order, statute, or regulation, to require protection against unauthorized disclosure for reasons of national security."

**Condensate** means hydrocarbon liquid separated from natural gas that condenses due to changes in temperature, pressure, or both, and remains liquid at standard conditions.

**Controlled process** means a process that has a regulated substance present in more than a threshold quantity as determined under § 68.115.

**Crude oil** means any naturally occurring, unrefined petroleum liquid.

**Designated agency** means the State, local, or Federal agency designated by the state under the provisions of § 68.215(c).

**DOT** means the United States Department of Transportation.

**Environmental receptor areas** means natural areas such as national or state parks, forests, or monuments; officially designated wildlife sanctuaries, preserves, refuges, or areas; and Federal wilderness areas, that could be exposed at any time to toxic concentrations, radiant heat, or overpressure greater than or equal to the endpoints provided in § 68.20(a), as a result of an accidental release and that can be identified on local U. S. Geological Survey maps.

**Field gas** means gas extracted from a production well before the gas enters a natural gas processing plant.

**Hot work** means work involving electric or gas welding, cutting, brazing, or similar flame or spark-producing operations.

**Implementing agency** means the state or local agency that obtains delegation for an accidental release prevention program under subpart E, 40 CFR part 68. The implementing agency may, but is not required to, be the state or local air permitting agency. If no state or local agency is granted delegation, EPA will be the implementing agency for that state.

## § 68.3

**Injury** means any effect on a human that results either from direct exposure to toxic concentrations; radiant heat; or overpressures from accidental releases or from the direct consequences of a vapor cloud explosion (such as flying glass, debris, and other projectiles) from an accidental release and that requires medical treatment or hospitalization.

**Major change** means introduction of a new process, process equipment, or regulated substance, an alteration of process chemistry that results in any change to safe operating limits, or other alteration that introduces a new hazard.

**Mechanical integrity** means the process of ensuring that process equipment is fabricated from the proper materials of construction and is properly installed, maintained, and replaced to prevent failures and accidental releases.

**Medical treatment** means treatment, other than first aid, administered by a physician or registered professional personnel under standing orders from a physician.

**Mitigation or mitigation system** means specific activities, technologies, or equipment designed or deployed to capture or control substances upon loss of containment to minimize exposure of the public or the environment. Passive mitigation means equipment, devices, or technologies that function without human, mechanical, or other energy input. Active mitigation means equipment, devices, or technologies that need human, mechanical, or other energy input to function.

**NACE** means North American Industry Classification System.

**NFA** means the National Fire Protection Association.

**Natural gas processing plant (gas plant)** means any processing site engaged in the extraction of natural gas liquids from field gas, fractionation of mixed natural gas liquids to natural gas products, or both, classified as North American Industry Classification System (NAICS) code 21112 (previously Standard Industrial Classification (SIC) code 1381).

**Offsite** means areas beyond the property boundary of the stationary source, and areas within the property bound-

## 40 CFR Ch. I (7-1-17 Edition)

ary to which the public has routine and unrestricted access during or outside business hours.

**OSHA** means the U.S. Occupational Safety and Health Administration. Owner or operator means all person who owns, leases, operates, controls, or supervises a stationary source.

**Petroleum refining process unit** means a process unit used in an establishment primarily engaged in petroleum refining as defined in NAICS code 2911 for petroleum refining (formerly SIC code 2911) and used for the following: Producing transportation fuels (such as gasoline, diesel fuels, and jet fuels), heating fuels (such as kerosene, fuel gas distillate, and fuel oil), or lubricants. Separating petroleum or separating, cracking, reacting, or reforming intermediate petroleum streams. Examples of such units include, but are not limited to, petroleum based solvent units, alkylation units, catalytic hydrotreating, catalytic hydrosulfiding, catalytic hydrocracking, catalytic reforming, catalytic cracking, amide distillation, lube oil processing, hydrogen production, isomerization, polymerization, thermal processes, and blending, sweetening, and treating processes. Petroleum refining process units include sulfur plants.

**Population** means the public.

**Process** means any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances or combination of these activities. For the purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process.

**Produced water** means water extracted from the earth from an oil or natural gas production well or that is separated from oil or natural gas after extraction.

**Public** means any person except employees or contractors at the stationary source.

**Public receptor** means offsite residences, institutions (e.g., schools, hospitals), industrial, commercial, and office buildings, parks, or recreational



## Environmental Protection Agency

568.3

areas inhabited or occupied by the public at any time without restriction by the stationary source where members of the public could be exposed to toxic concentrations, radiant heat, or overpressure, as a result of an accidental release.

**Regulated substance** means any substance listed pursuant to section 112(r)(3) of the Clean Air Act as amended. In §68.130

**Replacement in kind** means a replacement that satisfies the design specifications.

**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.

**RMP** means the risk management plan required under subpart G of this part.

**Stationary source** means any building, structure, equipment, installation, or substance emitting stationary activities which belong to the same industrial group which are located on one or more contiguous properties, which are under the control of the same person (or persons under common control), and from which an accidental release may occur. The term stationary source does not apply to transportation, including storage incident to transportation, of any regulated substance or any other extremely hazardous substance under the provisions of this part. A stationary source includes transportation containers used for storage not incident to transportation and transportation containers connected to equipment at a stationary source for loading or unloading. Transportation includes, but is not limited to, transportation subject to oversight or regulation under 49 CFR parts 192, 193, or 195, or a state natural gas or hazardous liquid program for which the state has in effect a certification to DOT under 49 U.S.C. section 80105. A stationary source does not include naturally occurring hydrocarbon reservoirs. Properties shall not be considered contiguous solely because of a railroad or pipeline right-of-way.

**Tare/air quantity** means the quantity specified for regulated substances

pursuant to section 112(r)(5) of the Clean Air Act as amended. Listed in §68.130 and determined to be present at a stationary source as specified in §68.115 of this part.

**Typical meteorological conditions** means the temperature, wind speed, cloud cover, and atmospheric stability class, prevailing at the site based on data gathered at or near the site or from a local meteorological station.

**Vessel** means any reactor, tank, drum, barrel, cylinder, vat, kettle, boiler, pipe, hose, or other container.

**Worst-case release** means the release of the largest quantity of a regulated substance from a vessel or process line failure that results in the greatest distance to an endpoint defined in §68.23(a).

199 FR 4981, Jan. 21, 1994, as amended at 61 FR 30117, June 22, 1996; 61 FR 844, Jan. 8, 1996; 64 FR 109, Jan. 6, 1999; 61 FR 28825, May 13, 2000.

**Reference Data Note:** 21 01 FR 4956, Jan. 28, 1998 was amended by adding the definition for "Active monitor", "CEM", "Inherently safer technology or design", "LEPC", "Positive measure", "Practicability", "Procedural measure", "Root cause", and "Third-party audit," effective Mar 16, 2017. At 25 FR 1459, Jan. 25, 2017, this amendment was until Mar. 23, 2017. At 25 FR 13068, Mar. 15, 2017, this amendment was further delayed until June 19, 2017. At 62 FR 3103, June 14, 2017, this amendment was further delayed until Feb. 19, 2018. For the convenience of the user, the added text is set forth at full length.

## §68.3 Definitions.

\* \* \* \* \*

**Active monitor** means risk management measures or engineering controls that rely on mechanical, or other energy input to detect and respond to process deviations. Examples of active measures include alarms, safety instrumented systems, and detection hardware (such as hydrocarbon sensors).

\* \* \* \* \*

**CEM** means confidential business information.

\* \* \* \* \*

**Inherently safer technology or design** means risk management measures that minimize the use of regulated substances, substitute less hazardous substances, minimize the use

§68.10

of regulated substances or simplify covered processes in order to make accidental releases less likely, or the impacts of such releases less severe.

LEPC means local emergency planning committee as established under 42 U.S.C. 11066c.

Passive measures mean risk management measures that use design features that reduce either the frequency or consequence of the hazard without human, mechanical or other active input. Examples of passive measures include pressure vessel designs, dikes, berms, and blast walls.

Practicability means the capability of being successfully accomplished within a reasonable time, accounting for economic, environmental, legal, social, and technological factors. Environmental factors would include consideration of potential transferred risks for new risk reduction measures.

Procedural measures mean risk management measures such as policies, operating procedures, training, administrative controls, and emergency response actions to prevent or minimize incidents.

Risk means a causal, fundamental, underlying, system related reason why an incident occurred.

Third-party audit means a compliance audit conducted pursuant to the requirements of §68.59 and §68.60, performed or led by an entity (individual or firm) meeting the competency and independence described in §68.35(c) or §68.36(c).

§68.10 Applicability.

(a) An owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process, as determined under §68.115, shall comply with the requirements of this part on later than the latest of the following dates:

- (1) June 21, 1989.

40 CFR Ch. I (7-1-17 Edition)

(2) Three years after the date on which a regulated substance is first listed under §68.120, or

(3) The date on which a regulated substance is first present above a threshold quantity in a process.

(b) Program 1 eligibility requirements. A covered process is eligible for Program 1 requirements as provided in §68.12(b) if it meets all of the following requirements:

(1) For the five years prior to the submission of an RMP, the process has not had an accidental release of a regulated substance where exposure to the substance, its reaction products, overpressures generated by an explosion involving the substance, or radiant heat generated by a fire involving the substance led to any of the following off-site:

- (i) Death;
- (ii) Injury; or
- (iii) Response or restoration activities for an exposure of an environmental receptor;

(2) The distance to a toxic or flammable endpoint for a worst-case release assessment conducted under subpart E and §68.25 is less than the distance to any public receptor, as defined in §68.50; and

(3) Emergency response procedures have been coordinated between the stationary source and local emergency planning and response organizations.

(c) Program 2 eligibility requirements. A covered process is subject to Program 2 requirements if it does not meet the eligibility requirements of either paragraph (b) or paragraph (d) of this section.

(d) Program 3 eligibility requirements. A covered process is subject to Program 3 if the process does not meet the requirements of paragraph (b) of this section, and if either of the following conditions is met:

(1) The process is in NAICS code 2211, 2341, 3241, 3251, 3261, 3271, 3311, 3321, 3331, 3341, 3351, 3361, 3371, 3381, 3391, 3411, 3421, 3431, 3441, 3451, 3461, 3471, 3481, 3491, 3511, 3521, 3531, 3541, 3551, 3561, 3571, 3581, 3591, 3611, 3621, 3631, 3641, 3651, 3661, 3671, 3681, 3691, 3711, 3721, 3731, 3741, 3751, 3761, 3771, 3781, 3791, 3811, 3821, 3831, 3841, 3851, 3861, 3871, 3881, 3891, 3911, 3921, 3931, 3941, 3951, 3961, 3971, 3981, 3991, 4011, 4021, 4031, 4041, 4051, 4061, 4071, 4081, 4091, 4111, 4121, 4131, 4141, 4151, 4161, 4171, 4181, 4191, 4211, 4221, 4231, 4241, 4251, 4261, 4271, 4281, 4291, 4311, 4321, 4331, 4341, 4351, 4361, 4371, 4381, 4391, 4411, 4421, 4431, 4441, 4451, 4461, 4471, 4481, 4491, 4511, 4521, 4531, 4541, 4551, 4561, 4571, 4581, 4591, 4611, 4621, 4631, 4641, 4651, 4661, 4671, 4681, 4691, 4711, 4721, 4731, 4741, 4751, 4761, 4771, 4781, 4791, 4811, 4821, 4831, 4841, 4851, 4861, 4871, 4881, 4891, 4911, 4921, 4931, 4941, 4951, 4961, 4971, 4981, 4991, 5011, 5021, 5031, 5041, 5051, 5061, 5071, 5081, 5091, 5111, 5121, 5131, 5141, 5151, 5161, 5171, 5181, 5191, 5211, 5221, 5231, 5241, 5251, 5261, 5271, 5281, 5291, 5311, 5321, 5331, 5341, 5351, 5361, 5371, 5381, 5391, 5411, 5421, 5431, 5441, 5451, 5461, 5471, 5481, 5491, 5511, 5521, 5531, 5541, 5551, 5561, 5571, 5581, 5591, 5611, 5621, 5631, 5641, 5651, 5661, 5671, 5681, 5691, 5711, 5721, 5731, 5741, 5751, 5761, 5771, 5781, 5791, 5811, 5821, 5831, 5841, 5851, 5861, 5871, 5881, 5891, 5911, 5921, 5931, 5941, 5951, 5961, 5971, 5981, 5991, 6011, 6021, 6031, 6041, 6051, 6061, 6071, 6081, 6091, 6111, 6121, 6131, 6141, 6151, 6161, 6171, 6181, 6191, 6211, 6221, 6231, 6241, 6251, 6261, 6271, 6281, 6291, 6311, 6321, 6331, 6341, 6351, 6361, 6371, 6381, 6391, 6411, 6421, 6431, 6441, 6451, 6461, 6471, 6481, 6491, 6511, 6521, 6531, 6541, 6551, 6561, 6571, 6581, 6591, 6611, 6621, 6631, 6641, 6651, 6661, 6671, 6681, 6691, 6711, 6721, 6731, 6741, 6751, 6761, 6771, 6781, 6791, 6811, 6821, 6831, 6841, 6851, 6861, 6871, 6881, 6891, 6911, 6921, 6931, 6941, 6951, 6961, 6971, 6981, 6991, 7011, 7021, 7031, 7041, 7051, 7061, 7071, 7081, 7091, 7111, 7121, 7131, 7141, 7151, 7161, 7171, 7181, 7191, 7211, 7221, 7231, 7241, 7251, 7261, 7271, 7281, 7291, 7311, 7321, 7331, 7341, 7351, 7361, 7371, 7381, 7391, 7411, 7421, 7431, 7441, 7451, 7461, 7471, 7481, 7491, 7511, 7521, 7531, 7541, 7551, 7561, 7571, 7581, 7591, 7611, 7621, 7631, 7641, 7651, 7661, 7671, 7681, 7691, 7711, 7721, 7731, 7741, 7751, 7761, 7771, 7781, 7791, 7811, 7821, 7831, 7841, 7851, 7861, 7871, 7881, 7891, 7911, 7921, 7931, 7941, 7951, 7961, 7971, 7981, 7991, 8011, 8021, 8031, 8041, 8051, 8061, 8071, 8081, 8091, 8111, 8121, 8131, 8141, 8151, 8161, 8171, 8181, 8191, 8211, 8221, 8231, 8241, 8251, 8261, 8271, 8281, 8291, 8311, 8321, 8331, 8341, 8351, 8361, 8371, 8381, 8391, 8411, 8421, 8431, 8441, 8451, 8461, 8471, 8481, 8491, 8511, 8521, 8531, 8541, 8551, 8561, 8571, 8581, 8591, 8611, 8621, 8631, 8641, 8651, 8661, 8671, 8681, 8691, 8711, 8721, 8731, 8741, 8751, 8761, 8771, 8781, 8791, 8811, 8821, 8831, 8841, 8851, 8861, 8871, 8881, 8891, 8911, 8921, 8931, 8941, 8951, 8961, 8971, 8981, 8991, 9011, 9021, 9031, 9041, 9051, 9061, 9071, 9081, 9091, 9111, 9121, 9131, 9141, 9151, 9161, 9171, 9181, 9191, 9211, 9221, 9231, 9241, 9251, 9261, 9271, 9281, 9291, 9311, 9321, 9331, 9341, 9351, 9361, 9371, 9381, 9391, 9411, 9421, 9431, 9441, 9451, 9461, 9471, 9481, 9491, 9511, 9521, 9531, 9541, 9551, 9561, 9571, 9581, 9591, 9611, 9621, 9631, 9641, 9651, 9661, 9671, 9681, 9691, 9711, 9721, 9731, 9741, 9751, 9761, 9771, 9781, 9791, 9811, 9821, 9831, 9841, 9851, 9861, 9871, 9881, 9891, 9911, 9921, 9931, 9941, 9951, 9961, 9971, 9981, 9991.

(2) The process is subject to the OSHA process safety management standard, 29 CFR 1910.119.

(c) If at any time a covered process no longer meets the eligibility criteria of its Program level, the owner or operator shall comply with the requirements of the new Program level that



## Environmental Protection Agency

§ 68.12

applies to the process and update the RMP as provided in § 68.14c.

(1) The provisions of this part shall not apply to an Outer Continental Shelf ("OCS") source, as defined in 40 CFR 68.2.

(6) FR 3177, June 30, 1996, as amended, 61 FR 845, Jan. 6, 1996, 64 FR 979, Jan. 6, 1999

**EFFECTIVE DATE NOTE:** At 38 FR 699, Jan. 13, § 68.12 was amended by redesignating paragraphs (b) through (j) to paragraphs (f) through (l), removing paragraphs (a) and new paragraph (k)(1) and adding new paragraphs (i) through (e), effective Mar. 14, 2017. 48 FR 8460, Jan. 24, 2017. This amendment was until Mar. 20, 2017. At 62 FR 11068, Mar. 16, 2017, this amendment was further delayed until June 19, 2017. At 62 FR 27128, June 14, 2017, this amendment was further delayed until Feb. 19, 2019. For the convenience of the user, the added and revised text is set forth as follows:

## § 68.12 Applicability.

(a) Except as provided in paragraphs (b) through (e) of this section, an owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process, as determined under § 68.15, shall comply with the requirements of this part no later than the latest of the following dates:

(1) June 21, 1999;

(2) Three years after the date on which a regulated substance is first listed under § 68.15a;

(3) The date on which a regulated substance is first present above a threshold quantity in a process; or

(4) For any substance to this part, the effective date of the first rule that revises this part.

(b) By March 14, 2018 the owner or operator of a stationary source shall comply with the emergency response coordination activities in § 68.18.

(c) Within three years of when the owner or operator determines that the stationary source is subject to the emergency response program requirements of § 68.15, pursuant to § 68.20(a), the owner or operator must develop and implement an emergency response program in accordance with § 68.20.

(d) By March 14, 2018, the owner or operator shall comply with the following provisions promulgated on January 15, 2017:

(1) Third-party audit provisions in §§ 68.55(f), 68.55(g), 68.55(h), 68.55, 68.710-68.710(c), 68.710(d), and 68.710;

(2) Incident investigation provisions and job plans in §§ 68.50(d)(1) and 68.51(c)(7);

(3) Safety technology and alternatives analysis provisions in § 68.60(a)(5);

(4) Emergency response activities provisions of § 68.18, and:

(5) Availability of information provisions in §§ 68.200(f) through (e).

(e) By March 14, 2022, the owner or operator shall comply with the risk management plan provisions of subpart B and § 68.25 of this part promulgated on January 18, 2017.

(f) \* \* \*

(4) The distance to a toxic or flammable endpoint for a worst-case release assessment conducted under subpart B and § 68.25 is less than the distance to any public receptor, as defined in § 68.10; and

## § 68.12 General requirements.

(a) General requirements. The owner or operator of a stationary source subject to this part shall submit a single RMP, as provided in §§ 68.15a to 68.15c. The RMP shall include a registration that reflects all covered processes.

(b) Program requirements. In addition to meeting the requirements of paragraph (a) of this section, the owner or operator of a stationary source with a process eligible for Program 1, as provided in § 68.15(f), shall:

(1) Analyze the worst-case release scenario for the processes, as provided in § 68.20, document that the nearest public receptor is beyond the distance to a toxic or flammable endpoint defined in § 68.22(a), and submit in the RMP the worst case release scenario as provided in § 68.23;

(2) Complete the five-year accident history for the process as provided in § 68.43 of this part and submit it in the RMP as provided in § 68.15b;

(3) Ensure that response actions have been coordinated with local emergency planning and response agencies; and

(4) Certify in the RMP the following: "Based on the criteria in 40 CFR 68.12, the distance to the specified endpoint for the worst-case accidental release scenario for the following processes is less than the distance to the nearest public receptor [list processes]. Within the past five years, the process(es) has (have) had no accidental releases that caused offsite impacts provided in the risk management program rule (40 CFR 68.10(b)(1)). No additional measures are necessary to prevent offsite impacts from accidental releases. In the event of fire, explosion, or a release of a regulated substance from the process(es), entry within the distance to

**§ 68.15**

The specified endpoints may pose a danger to public emergency responders. Therefore, public emergency responders should not enter the area except as arranged with the emergency contact indicated in the RMP. The undersigned certifies that, to the best of my knowledge, information, and belief, turned after reasonable inquiry, the information submitted is true, accurate, and complete. (Signature title, date signed)."

(c) Program 2 requirements. In addition to meeting the requirements of paragraph (a) of this section, the owner or operator of a stationary source with a process subject to Program 2, as provided in § 68.10(c), shall:

- (1) Develop and implement a management system as provided in § 68.15;
- (2) Conduct a hazard assessment as provided in §§ 68.20 through 68.42;
- (3) Implement the Program 2 prevention steps provided in §§ 68.48 through 68.60 or implement the Program 3 prevention steps provided in §§ 68.65 through 68.87;
- (4) Develop and implement an emergency response program as provided in §§ 68.90 to 68.96; and
- (5) Submit as part of the RMP the data on prevention program elements for Program 2 processes as provided in § 68.170.

(d) Program 3 requirements. In addition to meeting the requirements of paragraph (a) of this section, the owner or operator of a stationary source with a process subject to Program 3, as provided in § 68.10(d), shall:

- (1) Develop and implement a management system as provided in § 68.15;
- (2) Conduct a hazard assessment as provided in §§ 68.20 through 68.42;
- (3) Implement the prevention requirements of §§ 68.45 through 68.87;
- (4) Develop and implement an emergency response program as provided in §§ 68.90 to 68.96 of this part; and

(5) Submit as part of the RMP the data on prevention program elements for Program 3 processes as provided in § 68.175.

(6) FR 3178, June 25, 1996

Effective Date 2017: At 68 FR 456, Jan. 13, 2003, § 68.12 was amended by revising paragraphs (c)(4), (d), (d)(1) and (5) and adding paragraphs (c)(8) and (d)(6) effective Mar. 11, 2007. At 68 FR 8459, Jan. 26, 2003, this amend-

**40 CFR Ch. I (7-1-17 Edition)**

ment was until Mar. 31, 2017. At 68 FR 13869, Mar. 16, 2003, this amendment was further delayed until June 19, 2007. At 68 FR 37033, June 14, 2007, this amendment was further delayed until Feb. 19, 2018. For the convenience of the user, the added text is set forth as follows.

**§ 68.18 General requirements.**

- \* \* \* \* \*
- (c) \* \* \*
- (4) Coordinate response actions with local emergency planning and response agencies as provided in § 68.53.
- (5) Develop and implement an emergency response program, and conduct exercises, as provided in §§ 68.90 to 68.96, and
- (6) Submit as part of the RMP the data on prevention program elements for Program 3 processes as provided in § 68.170.
- (d) \* \* \*
- (4) Coordinate response actions with local emergency planning and response agencies as provided in § 68.53.
- (5) Develop and implement an emergency response program, and conduct exercises, as provided in §§ 68.90 to 68.96, and
- (6) Submit as part of the RMP the data on prevention program elements for Program 3 processes as provided in § 68.175.

**§ 68.19 Management.**

- (a) The owner or operator of a stationary source with processes subject to Program 2 or Program 3 shall develop a management system to oversee the implementation of the risk management program elements.
- (b) The owner or operator shall assign a qualified person or position that has the overall responsibility for the development, implementation, and integration of the risk management program elements.
- (c) When responsibility for implementing individual requirements of this part is assigned to persons other than the person identified under paragraph (b) of this section, the names or positions of these people shall be documented and the lines of authority defined through an organization chart or similar document.

(6) FR 3178, June 20, 1996

**Subpart 8—Hazard Assessment**

Source: 61 FR 3173, June 30, 1996, unless otherwise noted.

## Environmental Protection Agency

## § 68.25

**§ 68.20 Applicability.**

The owner or operator of a stationary source subject to this part shall prepare a worst-case release scenario analysis as provided in § 68.25 of this part and complete the five year accident history as provided in § 68.42. The owner or operator of a Program 2 and 3 process must comply with all sections in this subpart for these processes.

**§ 68.22 Offsite consequence analysis parameters.**

(a) Endpoints. For analyses of offsite consequences, the following endpoints shall be used:

(1) Toxics. The toxic endpoints provided in appendix A of this part.

(2) Flammables. The endpoints for flammables vary according to the scenarios studied:

(i) Explosion. An overpressure of 1 psi.

(ii) Radiant heat exposure time. A radiant heat of 5 kcal/m<sup>2</sup> for 10 seconds.

(iii) Lower flammability limit. A lower flammability limit as provided in NFPA documents or other generally recognized sources.

(4) Wind speed/atmospheric stability class. For the worst-case release analysis, the owner or operator shall use a wind speed of 1.5 meters per second and B atmospheric stability class. If the owner or operator can demonstrate that local meteorological data applicable to the stationary source show a higher minimum wind speed or less stable atmosphere at all times during the previous three years, these minimums may be used. For analysis of alternative scenarios, the owner or operator may use the typical meteorological conditions for the stationary source.

(c) Ambient temperature/humidity. For worst-case release analysis of a regulated toxic substance, the owner or operator shall use the highest daily maximum temperature in the previous three years and average humidity for the site based on temperature/humidity data gathered at the stationary source or at a local meteorological station; an owner or operator using the RMP Offsite Consequence Analysis Guidance may use 25 °C and 60 percent humidity as values for these variables. For analysis of alternative scenarios,

the owner or operator may use typical temperature/humidity data gathered at the stationary source or at a local meteorological station.

(d) Height of release. The worst-case release of a regulated toxic substance shall be analyzed assuming a ground level (0 feet) release. For an alternative scenario analysis of a regulated toxic substance, release height may be determined by the release scenario.

(e) Surface roughness. The owner or operator shall use either urban or rural topography, as appropriate. Urban means that there are many obstacles in the immediate area; obstacles include buildings or trees. Rural means there are no buildings in the immediate area and the terrain is generally flat and unobstructed.

(f) Dense or neutrally buoyant gases. The owner or operator shall ensure that tables or models used for dispersion analysis of regulated toxic substances appropriately account for gas density.

(g) Temperature of released substance. For worst case, liquids other than gases liquefied by refrigeration only shall be considered to be released at the highest daily maximum temperature, based on data for the previous three years appropriate for the stationary source or at process temperature, whichever is higher. For alternative scenarios, substances may be considered to be released at a process or ambient temperature that is appropriate for the scenario.

**§ 68.25 Worst-case release scenario analysis.**

(a) The owner or operator shall analyze and report in the RMP:

(1) For Program 1 processes, one worst-case release scenario for each Program 1 process;

(2) For Program 2 and 3 processes:

(i) One worst-case release scenario that is estimated to create the greatest distance in any direction to an end point provided in appendix A of this part resulting from an accidental release of regulated toxic substances from covered processes under worst-case conditions defined in § 68.20;

(ii) One worst-case release scenario that is estimated to create the greatest

## § 68.25

## 40 CFR Ch. I (7-1-17 Edition)

distance in any direction to an endpoint defined in § 68.25(a) resulting from an accidental release of regulated flammable substances from covered processes under worst-case conditions defined in § 68.22, and

(11) Additional worst-case release scenarios for a hazard class if a worst-case release from another covered process at the stationary source potentially affects public receptors different from those potentially affected by the worst-case release scenario developed under paragraphs (a)(2)(c) or (a)(2)(ii) of this section.

(b) *Determination of worst-case release quantity.* The worst-case release quantity shall be the greater of the following:

(1) For substances in a vessel, the greatest amount held in a single vessel, taking into account administrative controls that limit the maximum quantity; or

(2) For substances in pipes, the greatest amount in a pipe, taking into account administrative controls that limit the maximum quantity.

(c) *Worst-case release scenario— toxic gases.* (1) For regulated toxic substances that are normally gases at ambient temperature and handled as a gas or as a liquid under pressure, the owner or operator shall assume that the quantity in the vessel or pipe, as determined under paragraph (b) of this section, is released as a gas over 10 minutes. The release rate shall be assumed to be the total quantity divided by 10 unless passive mitigation systems are in place.

(2) For gases handled as refrigerated liquids at ambient pressure.

(i) If the released substance is not contained by passive mitigation systems or if the contained pool would have a depth of 1 cm or less, the owner or operator shall assume that the substance is released as a gas in 10 minutes;

(ii) If the released substance is contained by passive mitigation systems in a pool with a depth greater than 1 cm, the owner or operator may assume that the quantity in the vessel or pipe, as determined under paragraph (b) of this section, is spilled instantaneously to form a liquid pool. The volatilization rate (release rate) shall be cal-

culated at the boiling point of the substance and at the conditions specified in paragraph (d) of this section.

(d) *Worst-case release scenario— toxic liquids.* (1) For regulated toxic substances that are normally liquids at ambient temperature, the owner or operator shall assume that the quantity in the vessel or pipe, as determined under paragraph (b) of this section, is spilled instantaneously to form a liquid pool.

(i) The surface area of the pool shall be determined by assuming that the liquid spreads to 1 centimeter deep unless passive mitigation systems are in place that serve to contain the spill and limit the surface area. Where passive mitigation is in place, the surface area of the contained liquid shall be used to calculate the volatilization rate.

(ii) If the release would occur onto a surface that is not paved or smooth, the owner or operator may take into account the actual surface characteristics.

(2) The volatilization rate shall account for the highest daily maximum temperature occurring in the year 2100 years, the temperature of the substance in the vessel, and the concentration of the substance if the liquid spilled is a mixture or solution.

(3) The rate of release to air shall be determined from the volatilization rate at the liquid pool. The owner or operator may use the methodology in the EMP Offsite Consequence Analysis Guidance or any other publicly available techniques that account for the modeling conditions and are recognized by industry as applicable as part of current practices. Proprietary models that account for the modeling conditions may be used provided the owner or operator allows the implementing agency access to the model and describes model features and differences from publicly available models to local emergency planners upon request.

(c) *Worst-case release scenario— flammable gases.* The owner or operator shall assume that the quantity of the substance, as determined under paragraph (b) of this section and the provisions below, vaporizes resulting in a vapor cloud explosion. A yield factor of

## Environmental Protection Agency

## § 68.25

10 percent of the available energy released in the explosion shall be used to determine the distance to the explosion endpoint if the model used is based on TNT equivalent methods.

(1) For regulated flammable substances that are normally gases at ambient temperature and handled as a gas or as a liquid under pressure, the owner or operator shall assume that the quantity in the vessel or pipe, as determined under paragraph (b) of this section, is released as a gas over 10 minutes. The total quantity shall be assumed to be involved in the vapor cloud explosion.

(2) For flammable gases handled as refrigerated liquids at ambient pressure:

(i) If the released substance is not contained by passive mitigation systems or if the contained pool would have a depth of one centimeter or less, the owner or operator shall assume that the total quantity of the substance is released as a gas in 10 minutes, and the total quantity will be involved in the vapor cloud explosion.

(ii) If the released substance is contained by passive mitigation systems in a pool with a depth greater than 1 centimeter, the owner or operator may assume that the quantity in the vessel or pipe, as determined under paragraph (b) of this section, is spilled instantaneously to form a liquid pool. The volatilization rate (evolve rate) shall be calculated at the boiling point of the substance and at the conditions specified in paragraph (d) of this section. The owner or operator shall assume that the quantity which becomes vapor in the first 10 minutes is involved in the vapor cloud explosion.

(f) Worst-case release scenario for flammable liquids. The owner or operator shall assume that the quantity of the substance, as determined under paragraph (b) of this section and the provisions below, vaporizes resulting in a vapor cloud explosion. A yield factor of 10 percent of the available energy released in the explosion shall be used to determine the distance to the explosion endpoint if the model used is based on TNT equivalent methods.

(1) For regulated flammable substances that are normally liquids at ambient temperature the owner or op-

erator shall assume that the entire quantity in the vessel or pipe, as determined under paragraph (b) of this section, is spilled instantaneously to form a liquid pool. For liquids at temperatures below their atmospheric boiling point, the volatilization rate shall be calculated at the conditions specified in paragraph (d) of this section.

(2) The owner or operator shall assume that the quantity which becomes vapor in the first 10 minutes is involved in the vapor cloud explosion.

(g) Parameters to be applied. The owner or operator shall use the parameters defined in § 68.22 to determine distance to the endpoints. The owner or operator may use the methodology provided in the HBP Offsite Consequence Analysis Guidance or any commercially or publicly available air dispersion modeling techniques, provided the techniques account for the modeling conditions and are recognized by industry as applicable as part of current practices. Proprietary models that are superior for the modeling conditions may be used provided the owner or operator allows the implementing agency access to the model and describes model features and differences from publicly available models to local emergency planners upon request.

(h) Consideration of passive mitigation. Passive mitigation systems may be considered for the analysis of worst case provided that the mitigation system is capable of withstanding the release event triggering the scenario and would still function as intended.

(i) Factors in selecting a worst-case scenario. Notwithstanding the provisions of paragraph (b) of this section, the owner or operator shall select as the worst case for flammable regulated substances or the worst case for regulated toxic substances, a scenario based on the following factors if such a scenario would result in a greater distance to an endpoint defined in § 68.22(a) beyond the stationary source boundary than the scenario provided under paragraph (b) of this section:

(1) Smaller quantities handled at higher process temperature or pressure; and



## § 68.28

(2) Proximity to the boundary of the stationary source.

(61 FR 3176, June 20, 1996, as amended at 65 FR 28700, May 26, 1998)

## § 68.28 Alternative release scenario analysis.

(a) The number of scenarios. The owner or operator shall identify and analyze at least one alternative release scenario for each regulated toxic substance held in a covered process(es) and at least one alternative release scenario to represent all flammable substances held in covered processes.

(b) Scenarios to consider. (1) For each scenario required under paragraph (a) of this section, the owner or operator shall select a scenario:

(i) That is more likely to occur than the worst-case release scenario under § 68.25, and

(ii) That will reach an endpoint off-site, unless no such scenario exists.

(2) Release situations considered should include, but are not limited to, the following, where applicable:

(i) Transfer hose releases due to splits or sudden hose uncoupling;

(ii) Process piping releases from failure of flanges, joints, welds, valves and valve seals, etc drains or bleeds;

(iii) Process vessel or pump releases due to cracks, seal failure, or drain, blind, or plug failure;

(iv) Vessel overfilling and spill, or overpressurization and venting through relief valves or rupture disks; and

(v) Shipping container mishandling and breakage or puncturing leading to a spill.

(c) Parameters to be applied. The owner or operator shall use the appropriate parameters defined in § 68.29 to determine distance to the endpoints. The owner or operator may use either the methodology provided in the RMP Offsite Consequence Analysis Guidance or any commercially or publicly available air dispersion modeling techniques, provided the techniques account for the specified modeling conditions and are recognized by industry as applicable as part of current practice. Proprietary models that account for the modeling conditions may be used provided the owner or operator allows the implementing agency access to the model and describes model features and

## 40 CFR Ch. I (7-1-17 Edition)

differences from publicly available models to local emergency planners upon request.

(d) Consideration of mitigation. Active and passive mitigation systems may be considered provided they are capable of withstanding the event that triggered the release and would still be functional.

(e) Factors in selecting scenarios. The owner or operator shall consider the following in selecting alternative release scenarios:

(1) The five-year accident history provided in § 68.43, and

(2) Failure scenarios identified under § 68.50 or § 68.67.

## § 68.30 Defining offsite impacts—population.

(a) The owner or operator shall estimate in the RMP the population within a circle with its center at the point of the release and a radius determined by the distance to the endpoint defined in § 68.29(a).

(b) Population to be defined. Population shall include residential population. The presence of institutions (schools, hospitals, prisons), parks and recreational areas, and major commercial, office, and industrial buildings shall be noted in the RMP.

(c) Data sources acceptable. The owner or operator may use the most recent Census data, or other updated information, to estimate the population potentially affected.

(d) Level of accuracy. Population shall be estimated to two significant digits.

## § 68.30 Defining offsite impacts—environment.

(a) The owner or operator shall list in the RMP environmental receptors within a circle with its center at the point of the release and a radius determined by the distance to the endpoint defined in § 68.29(a) of this part.

(b) Data sources acceptable. The owner or operator may rely on information provided on local U.S. Geological Survey maps or on any data source containing U.S.G.S. data to identify environmental receptors.

**Environmental Protection Agency****§ 68.48****§ 68.36 Review and update.**

(a) The owner or operator shall review and update the offsite consequence analyses at least once every five years.

(b) If changes in processes, quantities stored or handled, or any other aspect of the stationary source might reasonably be expected to increase or decrease the distance to the endpoint by a factor of two or more, the owner or operator shall complete a revised analysis within six months of the change and submit a revised risk management plan as provided in § 68.120.

**§ 68.38 Documentation.**

The owner or operator shall maintain the following records on the offsite consequence analyses:

(a) For worst case scenarios, a description of the vessel or pipeline and substance selected as worst case, assumptions and parameters used, and the rationale for selection; assumptions shall include use of any administrative controls and any passive mitigation that were assumed to limit the quantity that could be released. Documentation shall include the anticipated effect of the controls and mitigation on the release quantity and rate.

(b) For alternative release scenarios, a description of the scenarios identified, assumptions and parameters used, and the rationale for the selection of specific scenarios; assumptions shall include use of any administrative controls and any mitigation that were assumed to limit the quantity that could be released. Documentation shall include the effect of the controls and mitigation on the release quantity and rate.

(c) Documentation of estimated quantity released, release rate, and duration of release.

(d) Methodology used to determine distance to endpoints.

(e) Data used to estimate population and environmental receptors potentially affected.

**§ 68.42 Five-year accident history.**

(a) The owner or operator shall include in the five-year accident history all accidental releases from covered processes that resulted in deaths, injuries, or significant property damage on

site, or known offsite deaths, injuries, evacuations, sheltering in place, property damage, or environmental damage.

(b) *Data required.* For each accidental release included, the owner or operator shall report the following information:

(1) Date, time, and approximate duration of the release;

(2) Chemical(s) released;

(3) Estimated quantity released in pounds and, for mixtures containing regulated toxic substances, percentage concentration by weight of the released regulated toxic substance in the liquid mixture;

(4) Five- or six-digit NATEC code that most closely corresponds to the process;

(5) The type of release event and its source;

(6) Weather conditions, if known;

(7) On-site impacts;

(8) Known offsite impacts;

(9) Initiating event and contributing factors, if known;

(10) Whether offsite responders were notified, if known; and

(11) Operational or process changes that resulted from investigation of the release and that have been made by the date this information is submitted in accordance with § 68.160.

(c) *Level of accuracy.* Numerical estimates may be provided to two significant digits.

(5) FR 6178, July 20, 1996, as amended at 64 FR 974, Jan. 6, 1999; 69 FR 14031, Apr. 9, 2004

**Subpart C—Program 2 Prevention Program**

SOURCE: 49 FR 3138, June 20, 1980, unless otherwise noted.

**§ 68.43 Safety information.**

(a) The owner or operator shall compile and maintain the following up-to-date safety information related to the regulated substances, processes, and equipment:

(1) Material Safety Data Sheets that meet the requirements of 29 CFR 1910.1200(g);

(2) Maximum intended inventory of equipment in which the regulated substances are stored or processed;



**§ 68.5D**

(3) Safe upper and lower temperatures, pressures, flows, and compositions;

(4) Equipment specifications; and

(5) Codes and standards used to design, build, and operate the process.

(6) The owner or operator shall ensure that the process is designed in compliance with recognized and generally accepted good engineering practices. Compliance with Federal or state regulations that address industry-specific safe design or with industry-specific design codes and standards may be used to demonstrate compliance with this paragraph.

(c) The owner or operator shall update the safety information if a major change occurs that makes the information inaccurate.

**Executive Data Note:** At 68 FR 8897, Jan. 12, 2003, § 68.5D was amended by revising paragraph (a)(1); effective Mar. 14, 2003. At 68 FR 8899, Jan. 28, 2003, this amendment was until Mar. 23, 2003. At 68 FR 12958, Mar. 16, 2003, this amendment was further delayed until June 15, 2003. At 68 FR 27388, June 14, 2003, this amendment was further delayed until Feb. 15, 2004. For the convenience of the user, the revised text is set forth as follows:

**§ 68.4B Safety information.**

(a) \* \* \*

(1) Safety Data Sheets (SDS) that meet the requirements of 29 CFR 1510.1300(g);

**§ 68.5B Hazard review.**

(a) The owner or operator shall conduct a review of the hazards associated with the regulated substances, process, and procedures. The review shall identify the following:

(1) The hazards associated with the process and regulated substances;

(2) Opportunities for equipment malfunctions or human errors that could cause an accidental release;

(3) The safeguards used or needed to control the hazards or prevent equipment malfunction or human error; and

(4) Any steps used or needed to detect or monitor releases.

(b) The owner or operator may use checklists developed by persons or organizations knowledgeable about the process and equipment as a guide to conducting the review. For processes designed to meet industry standards or

**40 CFR Ch. I (7-1-17 Edition)**

Federal or state design rules, the hazard review shall, by inspecting all equipment, determine whether the process is designed, fabricated, and operated in accordance with the applicable standards or rules.

(c) The owner or operator shall document the results of the review and ensure that problems identified are resolved in a timely manner.

(d) The review shall be updated at least once every five years. The owner or operator shall also conduct reviews whenever a major change in the process occurs. All issues identified in the review shall be resolved before startup of the changed process.

**Executive Data Note:** At 68 FR 8897, Jan. 12, 2003, § 68.5B was amended by revising paragraph (a)(2), effective Mar. 14, 2003. At 68 FR 8895, Jan. 28, 2003, this amendment was until Mar. 23, 2003. At 68 FR 12958, Mar. 16, 2003, this amendment was further delayed until June 15, 2003. At 68 FR 27388, June 14, 2003, this amendment was further delayed until Feb. 15, 2004. For the convenience of the user, the revised text is set forth as follows:

**§ 68.5B Hazard review.**

(a) \* \* \*

(2) Opportunities for equipment malfunctions or human errors that could cause an accidental release, including findings from incident investigations;

\* \* \* \* \*

**§ 68.5C Operating procedures.**

(a) The owner or operator shall prepare written operating procedures that provide clear instructions or steps for safely conducting activities associated with each covered process consistent with the safety information for that process. Operating procedures or instructions provided by equipment manufacturers or developed by persons or organizations knowledgeable about the process and equipment may be used as a basis for a stationary source's operating procedures.

(b) The procedures shall address the following:

(1) Initial startup;

(2) Normal operations;

(3) Temporary operations;

(4) Emergency shutdown and operation;

(5) Normal shutdowns;

**Environmental Protection Agency**

5-68.56

(6) Startup following a normal or emergency shutdown or a major change that requires a hazard review;

(7) Consequences of deviations and steps required to correct or avoid deviations; and

(8) Equipment inspections.

(9) The owner or operator shall ensure that the operating procedures are updated, if necessary, whenever a major change occurs and prior to startup of the changed process.

**§68.54 Training.**

(a) The owner or operator shall ensure that each employee presently operating a process, and each employee newly assigned to a covered process have been trained or tested competent in the operating procedures provided in §68.52 that pertain to their duties. For those employees already operating a process on June 21, 1999, the owner or operator may certify in writing that the employee has the required knowledge, skills and abilities to safely carry out the duties and responsibilities as provided in the operating procedures.

(b) Refresher training. Refresher training shall be provided at least every three years, and more often if necessary, to each employee operating a process to ensure that the employee understands and adheres to the current operating procedures of the process. The owner or operator, in consultation with the employee operating the process, shall determine the appropriate frequency of refresher training.

(c) The owner or operator may use training conducted under Federal or state regulations or under industry-specific standards or codes or training conducted by covered process equipment vendors to demonstrate compliance with this section to the extent that the training meets the requirements of this section.

(d) The owner or operator shall ensure that operators are trained in any updated or new procedures prior to startup of a process after a major change.

**REGULATORY DATA NOTE:** At 62 FR 1297, Jan. 13, 1997, §68.54 was amended by revising paragraphs (a), (b) and (c), and adding paragraph (d), effective Mar. 24, 2007. At 82 FR 3499, Jan. 28, 2017, this amendment was until Mar. 21,

2017. At 82 FR 18908, Mar. 15, 2017, this amendment was further delayed until June 15, 2017. At 82 FR 27388, June 14, 2017, this amendment was further delayed until Sep. 19, 2019. For the convenience of the user, the added and revised text is set forth as follows:

**§68.54 Training.**

(a) The owner or operator shall ensure that each employee presently involved in operating a process, and each employee newly assigned to a covered process have been trained or tested competent in the operating procedures provided in §68.52 that pertain to their duties. For those employees already operating a process on June 21, 1999, the owner or operator may certify in writing that the employee has the required knowledge, skills, and abilities to safely carry out the duties and responsibilities as provided in the operating procedures.

(b) Refresher training. Refresher training shall be provided at least every three years, and more often if necessary, to each employee involved in operating a process to ensure that the employee understands and adheres to the current operating procedures of the process. The owner or operator, in consultation with the employee operating the process, shall determine the appropriate frequency of refresher training.

(c) The owner or operator shall ensure that employees involved in operating a process are trained in any updated or new procedures prior to startup of a process after a major change.

(d) For the purpose of this section, the term employee also includes supervisors or operators for directing process operations.

**§68.56 Maintenance.**

(a) The owner or operator shall prepare and implement procedures to maintain the on-going mechanical integrity of the process equipment. The owner or operator may use procedures or instructions provided by covered process equipment vendors or procedures in Federal or state regulations or industry codes as the basis for its primary source maintenance procedures.

(b) The owner or operator shall train or ensure to be trained each employee involved in maintaining the on-going mechanical integrity of the process. To ensure that the employee can perform the job tasks in a safe manner, each such employee shall be trained in the hazards of the process, in how to avoid or correct unsafe conditions, and in the

**§68.58**

procedures applicable to the employer's job tasks.

(c) Any maintenance contractor shall ensure that each contract maintenance employee is trained to perform the maintenance procedures developed under paragraph (a) of this section.

(d) The owner or operator shall perform or cause to be performed inspections and tests on process equipment. Inspection and testing procedures shall follow recognized and generally accepted good engineering practices. The frequency of inspections and tests of process equipment shall be consistent with applicable manufacturers' recommendations, industry standards or codes, good engineering practices, and prior operating experience.

**§68.59 Compliance audits.**

(a) The owner or operator shall certify that they have evaluated compliance with the provisions of this subpart at least every three years to verify that the procedures and practices developed under the rule are adequate and are being followed.

(b) The compliance audit shall be conducted by at least one person knowledgeable in the process.

(c) The owner or operator shall develop a report of the audit findings.

(d) The owner or operator shall promptly determine and document an appropriate response to each of the findings of the compliance audit and document that deficiencies have been corrected.

(e) The owner or operator shall retain the two (2) most recent compliance audit reports. This requirement does not apply to any compliance audit report that is more than five years old.

**Executive Order Note:** At 82 FR 4596, Jan. 11, 2017, §68.58 was amended by revising paragraph (a), and adding paragraphs (b) through (e), effective Mar. 14, 2017. At 82 FR 6995, Jan. 26, 2017, this amendment was until Mar. 21, 2017. At 82 FR 12963, Mar. 16, 2017, this amendment was further delayed until June 19, 2017. At 82 FR 7030, June 14, 2017, this amendment was further delayed until Feb. 19, 2018. For the convenience of the user, the added and revised text is set forth as follows:

**§68.58 Compliance audits.**

(a) The owner or operator shall certify that they have evaluated compliance with the provisions of this subpart for each covered

**40 CFR Ch. I (7-1-17 Edition)**

process at least every three years to verify that the procedures and practices developed under the rule are adequate and are being followed. When required under forth in paragraph (c) of this section, the compliance audit shall be a third-party audit.

(d) **Third-party audit applicability.** The next required compliance audit shall be a third-party audit when one of the following conditions apply:

(1) An accidental release meeting the criteria in §68.42(a) from a covered process at a stationary source has occurred; or

(2) An implementing agency requires a third-party audit due to conditions at the stationary source that could lead to an accident, release of a regulated substance, or when a previous third-party audit failed to meet the requirements or independence criteria of §68.59(c).

(g) **Implementing agency consultation and appeals.** (1) If an implementing agency makes a preliminary determination that a third-party audit is necessary pursuant to paragraph (c)(2) of this section, the implementing agency will provide written notice to the owner or operator that describes the basis for the determination.

(2) Within 30 days of receipt of such written notice, the owner or operator may provide information and data to, and may consult with, the implementing agency on the determination. Thereafter, the implementing agency will provide a final determination to the owner or operator.

(3) If the final determination requires a third-party audit, the owner or operator shall comply with the requirements of §68.59, pursuant to the schedule in paragraph (h) of this section.

(4) **Appeals.** The owner or operator may appeal a final determination made by an implementing agency under paragraph (g)(2) of this section within 30 days of receipt of the final determination. The appeal shall be made to the EPA Regional Administrator or, for determinations made by other implementing agencies, the administrator or director of such implementing agency. The appeal shall contain a clear and concise statement of the issue, facts in the case, and any relevant additional information. In reviewing the appeal, the implementing agency may request additional information from the owner or operator. The implementing agency will provide a written final decision on the appeal to the owner or operator.

(h) **Schedule for producing a third-party audit.** The audit and audit report shall be completed as follows, unless a different timeframe is specified by the implementing agency:

**Environmental Protection Agency**

548.59

(1) For third-party audits required pursuant to paragraph (c)(1) of this section, within 12 months of the release; or

(2) For third-party audits required pursuant to paragraph (c)(2) of this section, within 12 months of the date of the final determination pursuant to paragraph (c)(3) of this section. However, if the final determination is appealed pursuant to paragraph (c)(4) of this section, within 12 months of the date of the final decision on the appeal.

**§ 68.59 Third-party audits.**

(a) **Applicability.** The owner or operator shall engage a third-party to conduct an audit that evaluates compliance with the provisions of this subpart in accordance with the requirements of this section, when either criterion of § 68.58(f) is met.

(b) **Third-party auditors and auditing teams.** The owner or operator shall either:

(1) Engage a third-party auditor meeting all of the competency and independence criteria in paragraph (c) of this section; or

(2) Assemble an auditing team led by a third-party auditor meeting all of the competency and independence criteria in paragraph (c) of this section. The team may include:

(i) Other employees of the third-party auditor firm meeting the independence criteria of paragraph (c)(4) of this section; and

(ii) Other personnel not employed by the third-party auditor firm, including facility personnel.

(c) **Third-party auditor qualifications.** The owner or operator shall determine and document that the third-party auditor(s) meet the following competency and independence requirements:

(1) **Competency requirements.** The third-party auditor(s) shall be:

(i) Knowledgeable with the requirements of this part;

(ii) Experienced with the stationary source type and processes being audited and applicable recognized and generally accepted good engineering practices; and

(iii) Trained and certified in proper auditing techniques.

(2) **Independence requirements.** The third-party auditor(s) shall:

(i) Act impartially when performing all activities under this section;

(ii) Receive no financial benefit from the outcome of the audit, apart from payment for auditing services. For purposes of this paragraph, retired employees who otherwise satisfy the third-party auditor independence criteria in this section may qualify as independent if their sole continuing financial attachments to the owner or operator are employee-financed or managed retirement and/or health plans;

(iii) Not have conducted past research, development, design, construction services or consulting for the owner or operator within the last two years. For purposes of this requirement, consulting does not include performing or participating in third-party audits pursuant to § 60.58 or § 68.59. An audit firm with personnel who, before working for the auditor, conducted research, development, design, construction, or consulting services for the owner or operator within the last two years as an employee or contractor may meet the requirements of this subsection by ensuring such personnel do not participate in the audit, or manage or advise the audit team concerning the audit;

(iv) Not provide other business or consulting services to the owner or operator, including advice or assistance to implement the findings or recommendations in an audit report, for a period of at least two years following submission of the final audit report;

(v) Ensure that all third-party personnel involved in the audit sign and date a conflict of interest statement documenting that they meet the independence criteria of this paragraph; and

(vi) Ensure that all third-party personnel involved in the audit do not accept future employment with the owner or operator of the stationary source for a period of at least two years following submission of the final audit report. For purposes of this requirement, employment does not include performing or participating in third-party audits pursuant to § 60.58 or § 68.59.

(3) The auditor shall have written policies and procedures to ensure that

## § 68.59

all personnel comply with the competency and independence requirements of this section.

(4) **Third-party auditor responsibilities.** The owner or operator shall ensure that the third-party auditor:

(1) Manages the audit and participates in audit initiation, design, implementation, and reporting;

(2) Determines appropriate roles and responsibilities for the audit team members based on the qualifications of each team member;

(3) Prepares the audit report and where there is a team, documents the full audit team's views in the final audit report;

(4) Certifies the final audit report and its contents as meeting the requirements of this section; and

(5) Provides a copy of the audit report to the owner or operator.

(e) **Audit report.** The audit report shall:

(1) Identify all persons participating in the audit team, including names, titles, employers and affiliations, and summaries of qualifications. For third-party auditors, include information demonstrating that the competency requirements in paragraph (c)(1) of this section are met;

(2) Describe or incorporate by reference the policies and procedures required under paragraph (c)(2) of this section;

(3) Document the auditor's evaluation, for each covered process, of the owner or operator's compliance with the provisions of this subpart to determine whether the procedures and practices developed by the owner or operator under this rule are adequate and being followed;

(4) Document the findings of the audit, including any identified compliance or performance deficiencies;

(5) Summarize any significant disagreements (if any) between draft and final versions of the report; and

(6) Include the following certification, signed and dated by the third-party auditor or third-party audit team member leading the audit:

I certify that this RMP compliance audit report was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the informa-

## 40 CFR Ch. I (7-1-17 Edition)

tion upon which the audit is based. I further certify that the audit was conducted and this report was prepared pursuant to the requirements of subpart C of 40 CFR part 68 and all other applicable auditing, competency, independence, impartiality, and conflict of interest standards and protocols. Based on my personal knowledge and experience, and inquiry of personnel involved in the audit, the information submitted herein is true, accurate, and complete.

(C) **Third-party audit findings—(1) Findings response report.** As soon as possible, but no later than 90 days after receiving the final audit report, the owner or operator shall determine an appropriate response to each of the findings in the audit report, and develop a findings response report that includes:

(i) A copy of the final audit report;

(ii) An appropriate response to each of the audit report findings;

(iii) A schedule for promptly addressing deficiencies; and

(iv) A certification, signed and dated by a senior corporate officer, or an official in an equivalent position, of the owner or operator of the stationary source, stating:

I certify under penalty of law that I have engaged a third-party to perform or lead an audit team to conduct a third-party audit in accordance with the requirements of 40 CFR 68.59 and that the attached RMP compliance audit report was received, reviewed, and responded to under my direction or supervision by qualified personnel. I further certify that appropriate responses to the findings have been identified and deficiencies were corrected, or are being corrected, consistent with the requirements of subpart C of 40 CFR part 68, as documented herein. Based on my personal knowledge and experience, or inquiry of personnel involved in evaluating the report findings and determining appropriate responses to the findings, the information submitted herein is true, accurate, and complete. I am aware that there are significant penalties for making false material statements, representations, or certifications including the possibility of fines and imprisonment for knowing violations.

(2) **Schedule implementation.** The owner or operator shall implement the schedule to address deficiencies identified in the audit findings response report in paragraph (C)(1)(iii) of this section and implement the action taken to address each deficiency, along with the date completed.



## Environmental Protection Agency

§ 68.60

(3) *Submission to Board of Directors.* The owner or operator shall immediately provide a copy of each document required under paragraphs (2)(1) and (2) of this section, when completed, to the owner or operator's audit committee of the Board of Directors, or other comparable committee or individual, if applicable.

(g) *Recordkeeping.* The owner or operator shall retain at the stationary source, the two most recent final third-party audit reports, related findings response reports, documentation of actions taken to address deficiencies, and related records. This requirement does not apply to any document that is more than five years old.

*EFFECTIVE DATE NOTE:* At 68 FR 686, Jan. 15, 1993, § 68.60 was added, effective Mar. 19, 2007. At 68 FR 5420, Jan. 26, 2003, this amendment was added. At 68 FR 11558, Mar. 18, 2003, this amendment was further delayed until June 19, 2007. At 68 FR 21183, June 14, 2003, this amendment was further delayed until Feb. 19, 2008.

## § 68.60 Incident investigation.

(a) The owner or operator shall investigate each incident which resulted in, or could reasonably have resulted in, a catastrophic release.

(b) An incident investigation shall be initiated as promptly as possible, but not later than 48 hours following the incident.

(c) A summary shall be prepared at the conclusion of the investigation which includes at a minimum:

- (1) Date of incident;
- (2) Date investigation began;
- (3) A description of the incident;
- (4) The factors that contributed to the incident; and

(5) Any recommendations resulting from the investigation.

(d) The owner or operator shall promptly address and resolve the investigation findings and recommendations. Resolutions and corrective actions shall be documented.

(e) The findings shall be reviewed with all affected personnel whose job tasks are affected by the findings.

(f) Investigation summaries shall be retained for five years.

*EFFECTIVE DATE NOTE:* At 68 FR 686, Jan. 15, 1993, § 68.60 was amended redesignating paragraphs (a) through (f) as (d) through (g); re-

vising paragraph (a) and new paragraphs (b) and (c) and adding a new paragraph (e), effective Mar. 19, 2007. At 68 FR 686, Jan. 25, 2007, this amendment was until Mar. 21, 2007. At 68 FR 11558, Mar. 18, 2003, this amendment was further delayed until June 19, 2007. At 68 FR 21183, June 14, 2003, this amendment was further delayed until Feb. 19, 2008. For the convenience of the user, the added and revised text is set forth as follows:

## § 68.60 Incident investigations.

(a) The owner or operator shall investigate each incident that:

- (1) Resulted in a catastrophic release (including when the affected process is decommissioned or destroyed following, or as the result of, an incident); or
- (2) Could reasonably have resulted in a catastrophic release if a user error had.

(b) An incident investigation team shall be established and consist of at least one person knowledgeable in the process involved and other persons with appropriate knowledge and experience to thoroughly investigate and analyze the incident.

(c) A report shall be prepared at the conclusion of the investigation. The report shall be completed within 12 months of the incident, unless the implementing agency approves in writing an extension of time. The report shall include:

- (1) Date, time, and location of incident;
- (2) Date investigation began;
- (3) A description of the incident in chronological order, providing all relevant facts;
- (4) The name and amount of the regulated substance involved in the release (e.g., fire, explosion, toxic gas loss or containment) or near miss and the duration of the event;
- (5) The consequences, if any, of the incident including but not limited to injuries, fatalities, the number of people evacuated, the number of people sheltered in place, and the impact on the environment;
- (6) Emergency response actions taken;

(7) The factors that contributed to the incident including the initiating event, direct and indirect contributing factors, and root causes. Root causes shall be determined by conducting an analysis for each incident using a recognized method, and

(8) Any recommendations resulting from the investigation and a schedule for addressing them.

(g) Incident investigation reports shall be retained for five years.



## § 68.65

## 40 CFR Ch. I (7-1-17 Edition)

**Subpart D—Program 3 Prevention Program**

Source: 41 FR 31723, June 25, 1976. Unless otherwise noted.

**§ 68.65 Process safety information.**

(a) In accordance with the schedule set forth in § 68.67, the owner or operator shall complete a compilation of written process safety information before conducting any process hazard analysis required by the rule. The compilation of written process safety information is to enable the owner or operator and his employees involved in operating the process to identify and understand the hazards posed by those processes involving regulated substances. This process safety information shall include information pertaining to the hazards of the regulated substances used or produced by the process, the technology pertaining to the process, and information pertaining to the equipment in the process.

(b) Information pertaining to the hazards of the regulated substances in the process. This information shall consist of at least the following:

- (1) Toxicity information;
- (2) Permissible exposure limits;
- (3) Physical data;
- (4) Reactivity data;
- (5) Corrosivity data;
- (6) Thermal and chemical stability data; and
- (7) Hazardous effects of inadvertent mixing of different materials that could foreseeably occur.

Note to PARAGRAPH (b): Material safety data sheets meeting the requirements of 29 CFR 1910.1200 may be used to comply with this requirement to the extent they contain the information required by this sub-paragraph.

(c) Information pertaining to the technology of the process.

(1) Information concerning the technology of the process shall include at least the following:

- (i) A block flow diagram or simplified process flow diagram;
- (ii) Process chemistry;
- (iii) Maximum intended inventory;

(iv) Safe upper and lower limits for such items as temperatures, pressures, flows or compositions; and,

(v) An evaluation of the consequences of deviations.

(2) Where the original technical information no longer exists, such information may be developed in conjunction with the process hazard analysis in sufficient detail to support the analysis.

(3) Information pertaining to the equipment in the process.

(i) Information pertaining to the equipment in the process shall include:

- (1) Materials of construction;
- (2) Piping and instrument diagrams (P&ID's);
- (3) Electrical classification;
- (4) Relief system design and design basis;
- (5) Ventilation system design;
- (6) Design codes and standards employed;
- (7) Material and energy balances for processes built after June 21, 1996; and
- (8) Safety systems (e.g., interlocks, detection or suppression systems).

(2) The owner or operator shall document that equipment complies with recognized and generally accepted good engineering practices.

(3) For existing equipment designed and constructed in accordance with codes, standards, or practices that are no longer in general use, the owner or operator shall determine and document that the equipment is designed, maintained, inspected, tested, and operating in a safe manner.

RESPONSE DATE NOTE: At 42 FR 4299, Jan. 13, 1977, § 68.65 was amended by revising the first sentence of paragraph (a) and the note to paragraph (c), effective May 14, 2017. At 43 FR 2459, Jan. 25, 2017, this amendment was until Mar. 31, 2017. At 43 FR 13661, Mar. 16, 2017, this amendment was further delayed until June 15, 2017. At 48 FR 27138, June 14, 2017, this amendment was further delayed until Feb. 18, 2019. For the convenience of the user, the added text is set forth as follows:

**§ 68.65 Process safety information.**

(a) The owner or operator shall complete a compilation of written process safety information before conducting any process hazard analysis required by the rule, and shall keep process safety information up-to-date. \*\*\*

(b) \*\*\*

**Environmental Protection Agency****§ 68.67**

NOTE TO PARAGRAPH (b): Safety data sheets (SDS) meeting the requirements of 29 CFR 1910.1200(g) may be used to comply with this requirement to the extent they contain the information required by paragraph (b) of this section.

**§ 68.67 Process hazard analysis.**

(a) The owner or operator shall perform an initial process hazard analysis (hazard evaluation) on processes covered by this part. The process hazard analysis shall be appropriate to the complexity of the process and shall identify, evaluate, and control the hazards involved in the process. The owner or operator shall determine and document the priority order for conducting process hazard analyses based on a rationale which includes such considerations as extent of the process hazards, number of potentially affected employees, age of the process, and operating history of the process. The process hazard analysis shall be conducted as soon as possible, but not later than June 21, 1989. Process hazards analyses completed to comply with 29 CFR 1910.119(e) are acceptable as initial process hazards analyses. These process hazard analyses shall be updated and revalidated, based on their completion date.

(b) The owner or operator shall use one or more of the following methodologies that are appropriate to determine and evaluate the hazards of the process being analyzed.

- (1) What-If;
- (2) Checklist;
- (3) What If/Checklist;
- (4) Hazard and Operability Study (HAZOP);
- (5) Failure Mode and Effects Analysis (FMEA);
- (6) Fault Tree Analysis; or
- (7) An appropriate equivalent methodology.

(c) The process hazard analysis shall address:

- (1) The hazards of the process;
- (2) The identification of any positions or catastrophic consequences;
- (3) Engineering and administrative controls applicable to the hazards and their interrelationships such as appropriate application of detection meth-

odologies to provide early warning of releases. (Acceptable detection methods might include process monitoring and control instrumentation with alarms, and detection hardware such as hydrocarbon sensors);

- (4) Consequences of failure of engineering and administrative controls;
- (5) Stationary source siting;
- (6) Human factors; and

(7) A qualitative evaluation of a range of the possible safety and health effects of failure of controls.

(d) The process hazard analysis shall be performed by a team with expertise in engineering and process operations, and the team shall include at least one employee who has experience and knowledge specific to the process being evaluated. Also, one member of the team must be knowledgeable in the specific process hazard analysis methodology being used.

(e) The owner or operator shall establish a system to promptly address the team's findings and recommendations; assure that the recommendations are resolved in a timely manner and that the resolution is documented; document what actions are to be taken; complete actions as soon as possible; develop a written schedule of when these actions are to be completed; communicate the actions to operating, maintenance and other employees whose work assignments are in the process and who may be affected by the recommendations or actions.

(f) At least every five (5) years after the completion of the initial process hazard analysis, the process hazard analysis shall be updated and revalidated by a team meeting the requirements of paragraph (d) of this section, to assure that the process hazard analysis is consistent with the current process. Updated and revalidated process hazard analyses completed to comply with 29 CFR 1910.119(e) are acceptable to meet the requirements of this paragraph.

(g) The owner or operator shall re-evaluate process hazards analyses and updates or revalidations for each process covered by this section, as well as the documented resolution of recommendations described in paragraph (e) of this section for the life of the process.

§ 68.69

40 CFR Ch. I (7-1-17 Edition)

EFFECTIVE DATE NOTE: At 82 FR 4086, Jan 10, 2017, § 68.69 was amended by removing paragraph (c)(2), amending paragraph (c)(4) by removing the word "and," amending paragraph (c)(7) by removing the period at the end of the paragraph and adding " and" to its place; and by adding paragraph (e)(6), effective Mar. 14, 2017. At 83 FR 3466, Jan. 28, 2018, this amendment was until Mar. 23, 2017. At 83 FR 15865, Mar. 26, 2018, this amendment was further delayed until June 19, 2017. At 83 FR 27123, June 11, 2017, this amendment was further delayed until Feb. 18, 2018. For the convenience of the user, the added text is set forth as follows:

§ 68.69 Process hazard analysis.

(b) The findings from all incident investigations required under § 68.61, as well as any other potential future accidents;

(8) For processes in NAICS 291, 324, and 325, safer technology and alternative risk management strategies applicable to eliminating or reducing risk from process hazards. (i) The owner or operator shall consider, in the following order of preference inherently safer technology or design, passive measures, active measures, and procedural measures. A combination of risk management measures may be used to achieve the desired risk reduction. (ii) The owner or operator shall document the practicability of the inherently safer technologies and designs considered.

§ 68.69 Operating procedures.

(a) The owner or operator shall develop and implement written operating procedures that provide clear instructions for safely conducting activities involved in each covered process consistent with the process safety information and shall address at least the following elements: (i) Steps for each operating phase: (I) Initial startup, (II) Normal operations, (III) Temporary operations, (IV) Emergency shutdown (including the conditions under which emergency shutdown is required, and the assignment of shutdown responsibility to qualified operators to ensure that emergency shutdown is executed in a safe and timely manner

(v) Emergency operations; (vi) Normal shutdown; and, (vii) Startup following a turnaround, or after an emergency shutdown.

(2) Operating limits (i) Consequences of deviation; and (ii) Steps required to correct or avoid deviation.

(3) Safety and health considerations. (i) Properties of, and hazards presented by, the chemicals used in the process;

(ii) Precautions necessary to prevent exposure, including engineering controls, administrative controls, and personal protective equipment.

(iii) Control measures to be taken if physical contact or airborne exposure occurs.

(iv) Quality control for raw materials and control of hazardous chemical inventory levels, and.

(v) Any special or unique hazards.

(4) Safety systems and their functions.

(b) Operating procedures shall be readily accessible to employees who work in or maintain a process.

(c) The operating procedures shall be reviewed as often as necessary to assure that they reflect current operating practice, including changes that result from changes in process chemicals, technology, and equipment, and changes to stationary sources. The owner or operator shall certify annually that these operating procedures are current and adequate.

(d) The owner or operator shall develop and implement safe work practices to provide for the control of hazards during operations such as lockout/tagout, confined space entry, opening process equipment or piping, and control over entrance into a stationary source by maintenance, contracting, laboratory, or other support personnel. These safe work practices shall apply to employees and contractor employees.

§ 68.71 Training-

(a) Initial training (i) Each employee presently involved in operating a process, and each employee before being involved in operating a newly assigned process, shall be trained in an overview of the process and in the operating procedures as specified in § 68.69. The

## Environmental Protection Agency

§ 48.73

training shall include emphasis on the specific safety and health hazards, emergency operations including shut-down, and safe work practices applicable to the employee's job tasks.

(2) In lieu of initial training for those employees already involved in operating a process on June 21, 1999 an owner or operator may certify in writing that the employee has the required knowledge, skills, and abilities to safely carry out the duties and responsibilities as specified in the operating procedures.

(b) Refresher training. Refresher training shall be provided at least every three years, and more often if necessary, to each employee involved in operating a process to assure that the employee understands and adheres to the current operating procedures of the process. The owner or operator, in consultation with the employees involved in operating the process, shall determine the appropriate frequency of refresher training.

(c) Training documentation. The owner or operator shall ascertain that each employee involved in operating a process has received and understood the training required by this paragraph. The owner or operator shall prepare a record which contains the identity of the employee, the date of training, and the means used to verify that the employee understood the training.

**Effective Date Note:** At 51 FR 429, Jan. 13, 1986, § 48.73 was amended by adding paragraph (b), effective Mar. 14, 2017. At 32 FR 8409, Jan. 26, 2017 this amendment was amended Mar. 21, 2021. At 32 FR 13558, Mar. 16, 2017, this amendment was further delayed until June 19, 2017. At 33 FR 2713, June 14, 2017, this amendment was further delayed until Feb. 19, 2019. For the convenience of the user, the added text is set forth as follows:

**48.73 Training.**

(d) For the purposes of this section, the term employee also includes supervisors with process operational responsibilities.

**588.73 Mechanical integrity.**

(a) Application. Paragraphs (b) through (f) of this section apply to the following process equipment:

(1) Pressure vessels and storage tanks,

(2) Piping systems (including piping components such as valves);

(3) Relief and vent systems and devices;

(4) Emergency shutdown systems;

(5) Controls including monitoring devices and sensors, alarms, and interlocks; and,

(6) Pumps.

(b) Written procedures. The owner or operator shall establish and implement written procedures to maintain the ongoing integrity of process equipment.

(c) Training for process maintenance activities. The owner or operator shall train each employee involved in maintaining the ongoing integrity of process equipment in an overview of that process and its hazards and in the procedures applicable to the employee's job tasks to assure that the employee can perform the job tasks in a safe manner.

(d) Inspection and testing. (1) Inspections and tests shall be performed on process equipment.

(2) Inspection and testing procedures shall follow recognized and generally accepted good engineering practices.

(3) The frequency of inspections and tests of process equipment shall be consistent with applicable manufacturers' recommendations and good engineering practices, and more frequently if determined to be necessary by prior operating experience.

(4) The owner or operator shall document each inspection and test that has been performed on process equipment. The documentation shall identify the date of the inspection or test, the name of the person who performed the inspection or test, the serial number or other identifier of the equipment on which the inspection or test was performed, a description of the inspection or test performed, and the results of the inspection or test.

(e) Equipment deficiencies. The owner or operator shall correct deficiencies in equipment that are outside acceptable limits (defined by the process safety information in § 69.65) before further use or in a safe and timely manner when necessary means are taken to assure safe operation.

(f) Quality assurance. (1) In the construction of new plants and equipment, the owner or operator shall assure that

**§ 68.75**

equipment as it is fabricated is suitable for the process application for which they will be used.

(2) Appropriate checks and inspections shall be performed to assure that equipment is installed properly and consistent with design specifications and the manufacturer's instructions.

(3) The owner or operator shall assure that maintenance materials, spare parts and equipment are suitable for the process application for which they will be used.

**§ 68.75 Management of change.**

(a) The owner or operator shall establish and implement written procedures to manage changes (except for "replacements in kind") to process chemicals, technology, equipment, and procedures; and, changes to stationary sources that affect a covered process.

(b) The procedures shall assure that the following considerations are addressed prior to any change:

(1) The technical basis for the proposed change.

(2) Impact of change on safety and health.

(3) Modifications to operating procedures.

(4) Necessary time period for the change, and

(5) Authorization requirements for the proposed change.

(c) Employees involved in operating a process and maintenance and contract employees whose job tasks will be affected by a change in the process shall be informed of, and trained in, the change prior to start-up of the process or affected part of the process.

(d) If a change covered by this paragraph results in a change in the process safety information required by § 68.65 of this part, such information shall be updated accordingly.

(e) If a change covered by this paragraph results in a change in the operating procedures or practices required by § 68.69, such procedures or practices shall be updated accordingly.

**§ 68.77 Pre-startup review.**

(a) The owner or operator shall perform a pre-startup safety review for new stationary sources and for modified stationary sources when the modification is significant enough to re-

**40 CFR Ch. I (7-1-17 Edition)**

quire a change in the process safety information.

(b) The pre-startup safety review shall confirm that prior to the introduction of regulated substances to a process:

(1) Construction and equipment is in accordance with design specifications;

(2) Safety, operating, maintenance, and emergency procedures are in place and are adequate;

(3) For new stationary sources, a process hazard analysis has been performed and recommendations have been received or implemented before startup, and modified stationary sources meet the requirements contained in management of change, § 68.75.

(4) Training of each employee involved in operating a process has been completed.

**§ 68.78 Compliance audits.**

(a) The owner or operator shall verify that they have evaluated compliance with the provisions of this subpart at least every three years to verify that procedures and practices developed under this subpart are adequate and are being followed.

(b) The compliance audit shall be conducted by at least one person knowledgeable in the process.

(c) A report of the findings of the audit shall be developed.

(d) The owner or operator shall promptly determine and document an appropriate response to each of the findings of the compliance audit, and document that deficiencies have been corrected.

(e) The owner or operator shall retain the two (2) most recent compliance audit reports.

(51 FR 3172, June 30, 1996, as amended at 61 FR 519, Jan. 6, 1996)

*Regulatory Data Note:* At 18 FR 488, Jan. 13, § 68.75 was amended by revising paragraph (a), and adding paragraphs (b) through (d), effective Mar. 14, 2017. At 52 FR 3488, Jan. 28, 2017, this amendment was until Mar. 21, 2017. At 62 FR 13668, Mar. 18, 2011, this amendment was further delayed until June 19, 2017. At 62 FR 27388, June 15, 2017, this amendment was further delayed until Feb. 19, 2019. For the convenience of the user, the edited text is set forth as follows:



**Environmental Protection Agency****§ 68.80****§ 68.79 Compliance audits.**

(a) The owner or operator shall certify that they have achieved compliance with the provisions of this subpart for each covered process, at least every three years to verify that the procedures and practices developed under the rule were adequate and are being followed. When required as set forth in paragraph (f) of this section, the compliance audit shall be a third-party audit.

(f) **Third party audit applicability.** The next required compliance audit shall be a third-party audit when one of the following conditions apply:

(1) An accidental release meeting the criteria in § 68.81(a) from a covered process at a stationary source has occurred; or

(2) An implementing agency requires a third-party audit due to conditions at the stationary source that could lead to an accidental release of a regulated substance, or when a previous third-party audit failed to meet the competency or independence criteria of § 68.80(c).

(g) **Implementing agency notification and appeals.** If an implementing agency makes a preliminary determination that a third-party audit is necessary pursuant to paragraph (f)(2) of this section, the implementing agency will provide written notice to the owner or operator that describes the basis for this determination.

(h) **Written notice.** Within 30 days of receipt of such written notice, the owner or operator may provide information and data to, and may consult with, the implementing agency on the determination. Thereafter, the implementing agency will provide a final determination to the owner or operator.

(i) **Final determination requires a third party audit.** The owner or operator shall comply with the requirements of § 68.80, pursuant to the schedule in paragraph (k) of this section.

(j) **Appeals.** The owner or operator may appeal a final determination made by an implementing agency under paragraph (f)(2) of this section within 30 days of receipt of the final determination. The appeal shall be made to the EPA Regional Administrator, or for determinations made by other implementing agencies, the administrator or director of such implementing agency. The appeal shall contain a clear and concise statement of the issues, facts in the case, and any relevant additional information in reviewing the appeal. The implementing agency may request additional information from the owner or operator. The implementing agency will provide a written, final decision on the appeal to the owner or operator.

(k) **Schedule for conducting a third-party audit.** The audit and audit report shall be completed as follows, unless a different time-

frame is specified by the implementing agency:

(1) For third-party audits required pursuant to paragraph (f)(1) of this section, within 12 months of the release; or

(2) For third-party audits required pursuant to paragraph (f)(2) of this section, within 12 months of the date of the final determination pursuant to paragraph (g)(i) of this section. However, if the final determination is appealed pursuant to paragraph (j)(4) of this section, within 12 months of the date of the final decision on the appeal.

**§ 68.80 Third-party audits.**

(a) **Applicability.** The owner or operator shall engage a third-party to conduct an audit that evaluates compliance with the provisions of this subpart in accordance with the requirements of this section when either criterion of § 68.79(f) is met.

(b) **Third-party auditors and auditing teams.** The owner or operator shall either:

(1) Engage a third-party auditor meeting all of the competency and independence criteria in paragraph (c) of this section; or

(2) Assemble an auditing team, led by a third party auditor meeting all of the competency and independence criteria in paragraph (c) of this section. The team may include:

(i) Other employees of the third-party auditor firm meeting the independence criteria of paragraph (c)(2) of this section; and

(ii) Other personnel not employed by the third-party auditor firm, including facility personnel.

(c) **Third-party auditor qualifications.** The owner or operator shall determine and document that the third-party auditor(s) meet the following competency and independence requirements:

(1) **Competency requirements.** The third-party auditor(s) shall be:

(i) Knowledgeable with the requirements of this part;

(ii) Experienced with the stationary source type and processes being audited and applicable recognized and generally accepted good engineering practices; and

(iii) Trained or certified in proper auditing techniques.

(2) **Independence requirements.** The third-party auditor(s) shall:



## §68.80

## 40 CFR Ch. I (7-1-17 Edition)

(I) Act impartially when performing all activities under this section;

(II) Receive no financial benefit from the outcome of the audit, apart from payment for auditing services. For purposes of this paragraph, retired employees who otherwise satisfy the third-party auditor independence criteria in this section may qualify as independent if their sole continuing financial attachments to the owner or operator are employee-business or managed retirement and/or health plans;

(III) Not have conducted past research, development, design, construction services, or consulting for the owner or operator within the last two years. For purposes of this requirement, consulting does not include performing or participating in third-party audits pursuant to §68.58 or §68.80. An audit firm with personnel who, before working for the auditor, conducted research, development, design, construction, or consulting services for the owner or operator within the last two years as an employee or contractor may meet the requirements of this subsection by ensuring such personnel do not participate in the audit, or manage or advise the audit team concerning the audit;

(IV) Not provide other business or consulting services to the owner or operator, including advice or assistance to implement the findings or the recommendations in an audit report, for a period of at least two years following submission of the final audit report;

(V) Ensure that all third-party personnel involved in the audit sign and date a conflict of interest statement documenting that they meet the independence criteria of this paragraph, and

(VI) Ensure that all third-party personnel involved in the audit do not accept future employment with the owner or operator of the stationary source for a period of at least two years following submission of the final audit report. For purposes of this requirement, employment does not include performing or participating in third-party audits pursuant to §68.58 or §68.80.

(7) The auditor shall have written policies and procedures to ensure that

all personnel comply with the competency and independence requirements of this section.

(8) Third-party auditor responsibilities. The owner or operator shall ensure that the third-party auditor:

(1) Manages the audit and participates in audit initiation, design, implementation, and reporting;

(2) Determines appropriate roles and responsibilities for the audit team members based on the qualifications of each team member;

(3) Prepares the audit report and where there is a team, documents the full audit team's views in the final audit report;

(4) Certifies the final audit report and its contents as meeting the requirements of this section; and

(5) Provides a copy of the audit report to the owner or operator.

(9) Audit report. The audit report shall:

(1) Identify all persons participating on the audit team, including names, titles, employers and/or affiliations, and summaries of qualifications. For third-party auditors, include information demonstrating that the competency requirements in paragraph (8)(5) of this section are met;

(2) Describe or incorporate by reference the policies and procedures required under paragraph (6)(3) of this section;

(3) Document the auditor's evaluation, for each covered process, of the owner or operator's compliance with the provisions of this subpart to determine whether the procedures and practices developed by the owner or operator under this rule are adequate and being followed;

(4) Document the findings of the audit, including any identified compliance or performance deficiencies;

(5) Summarize any significant revisions (if any) between draft and final versions of the report; and

(6) Include the following verification, signed and dated by the third-party auditor or third party audit team member leading the audit,

I certify that this AME compliance audit report was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel

**Environmental Protection Agency**

§ 68.81

properly gather and evaluate the information upon which the audit is based. I further certify that the audit was conducted and this report was prepared pursuant to the requirements of subpart D of 40 CFR part 68 and all other applicable auditing competency, independence, impartiality, and conflict of interest standards and protocols. Based on my personal knowledge and experience, and inquiry of personnel involved in the audit, the information submitted herein is true, accurate, and complete.

(f) **Third-party audit findings--(1) Findings response report.** As soon as possible, but no later than 90 days after receiving the final audit report, the owner or operator shall determine an appropriate response to each of the findings in the audit report, and develop a (findings response report that includes:

- (i) A copy of the final audit report;
- (ii) An appropriate response to each of the audit report findings;
- (iii) A schedule for promptly addressing deficiencies; and
- (iv) A certification, signed and dated by a senior corporate officer, or an official in an equivalent position, of the owner or operator of the stationary source stating:

I certify under penalty of law that I have engaged a third-party to perform or had an audit team to conduct a third-party audit in accordance with the requirements of 40 CFR 68.80 and that the attached RMP compliance audit report was received, reviewed, and responded to under my direction or supervision by qualified personnel. I further certify that appropriate responses to the findings have been identified and deficiencies were corrected, or are being corrected, consistent with the requirements of subpart D of 40 CFR part 68, as documented herein. Based on my personal knowledge and experience, or inquiry of personnel involved in evaluating the report findings and determining appropriate responses to the findings, the information submitted herein is true, accurate, and complete. I am aware that there are significant penalties for making false material statements, representations, or certifications, including the possibility of fines and imprisonment for knowing violations.

(2) **Schedule implementation.** The owner or operator shall implement the schedule to address deficiencies identified in the audit findings response report in paragraph (f)(1)(ii) of this section and document the action taken to address each deficiency, along with the date completed.

(3) **Submission to Board of Directors.** The owner or operator shall immediately provide a copy of each document required under paragraphs (f)(1) and (2) of this section, when completed, to the owner or operator's audit committee of the Board of Directors, or other comparable committee or individual, if applicable.

(4) **Recordkeeping.** The owner or operator shall retain at the stationary source the two most recent final third-party audit reports, related findings response reports, documentation of actions taken to address deficiencies, and related records.

Effective Date NOTE: At 40 FR 4700, Jan. 18, 1965, § 68.80 was added, effective Mar. 15, 2017. At 40 FR 1400, Jan. 28, 2017, this amendment was until Mar. 31, 2017. At 40 FR 1896, Mar. 16, 2017, this amendment was further delayed until June 9, 2017. At 40 FR 2738, Jan. 16, 2017, this amendment was further delayed until Feb. 19, 2019.

**§ 68.81 Incident investigation.**

(a) The owner or operator shall investigate each incident which resulted in, or could reasonably have resulted in a catastrophic release of a regulated substance.

(b) An incident investigation shall be initiated as promptly as possible, but not later than 48 hours following the incident.

(c) An incident investigation team shall be established and consist of at least one person knowledgeable in the process involved, including a contract employee if the incident involved work of the contractor, and other persons with appropriate knowledge and experience to thoroughly investigate and analyze the incident.

(d) A report shall be prepared at the conclusion of the investigation which includes as a minimum:

- (1) Date of incident;
- (2) Date investigation began;
- (3) A description of the incident;
- (4) The factors that contributed to the incident; and,
- (5) Any recommendations resulting from the investigation.

(e) The owner or operator shall establish a system to promptly address and resolve the incident report findings and recommendations. Resolutions and corrective actions shall be documented.

**§ 69.83**

(f) The report shall be reviewed with all affected personnel whose job tasks are relevant to the incident findings including contract employees where applicable.

(g) Incident investigation reports shall be retained for five years.

**REVISIONS DATA NOTE:** 40 CFR 69.83, Dec. 13, 1984, was amended by revising paragraphs (a), (b) introductory text, (c), (d) through (f), and adding paragraphs (f)(6) through (g), effective Mar. 14, 1997. At 62 FR 6439, Jan. 26, 2007, this amendment was until Mar. 31, 2017. At 48 FR 13960, Mar. 15, 2017, this amendment was further delayed until June 19, 2017. At 82 FR 7158, June 11, 2017, this amendment was further delayed until Feb. 19, 2019. For the convenience of the user, the added and revised text is set forth as follows:

**§ 69.84. Technical investigation.**

(a) The owner or operator shall investigate each incident that:

(1) Resulted in a catastrophic release (including when the affected process is decommissioned or destroyed following an incident), or

(2) Could reasonably have resulted in a catastrophic release (i.e., was a near miss).

(b) A report shall be prepared at the conclusion of the investigation. The report shall be completed within 18 months of the incident, unless the implementing agency approves, in writing, an extension of time. The report shall include:

(1) Date, time, and location of incident.

(2) A description of the incident, in chronological order, providing all relevant facts.

(3) The name and amount of the regulated substance involved in the release (e.g., fire, explosion, toxic gas loss or containment) or near miss and the duration of the event.

(4) The consequences, if any, of the incident including, but not limited to: injuries, fatalities, the number of people evacuated, the number of people sheltered in place, and the impact on the environment.

(5) Emergency response actions taken.

(6) The factors that contributed to the incident including the initiating event, direct and indirect contributing factors and root causes. Root causes shall be determined by conducting an analysis for each incident using a recognized method; and

**40 CFR Ch. I (7–1–17 Edition)**

(7) Any recommendations resulting from the investigation and a schedule for addressing them.

**§ 69.85. Employee participation.**

(a) The owner or operator shall develop a written plan of action regarding the implementation of the employee participation required by this section.

(b) The owner or operator shall consult with employees and their representatives on the conduct and development of process hazards analyses and on the development of the other elements of process safety management in this rule.

(c) The owner or operator shall provide to employees and their representatives access to process hazard analyses and to all other information required to be developed under this rule.

**§ 69.86. Hot work permit.**

(a) The owner or operator shall issue a hot work permit for hot work operations conducted on or near a covered process.

(b) The permit shall document that the fire prevention and protection requirements in 29 CFR 1910.252(a) have been implemented prior to beginning the hot work operations; it shall indicate the date(s) authorized for hot work, and identify the object on which hot work is to be performed. The permit shall be kept on file until completion of the hot work operations.

**§ 69.87. Contractors.**

(a) **Application.** This section applies to contractors performing maintenance or repair, turnaround, major renovation, or specialty work on or adjacent to a covered process. It does not apply to contractors providing incidental services which do not influence process safety, such as janitorial work, food and drink services, laundry delivery or other supply services.

(b) **Owner or operator responsibilities.** (1) The owner or operator, when selecting a contractor, shall obtain and evaluate information regarding the contractor owner or operator's safety performance and programs.

## Environmental Protection Agency

§ 68.90

(2) The owner or operator shall inform contract owner or operator of the known potential fire, explosion, or toxic release hazards related to the contractor's work and the process.

(3) The owner or operator shall explain to the contract owner or operator the applicable provisions of subpart E of this part.

(4) The owner or operator shall develop and implement safe work practices consistent with § 68.89(c), to control the entrance, presence, and exit of the contract owner or operator and contract employees in covered process areas.

(5) The owner or operator shall periodically evaluate the performance of the contract owner or operator in fulfilling their obligations as specified in paragraph (c) of this section.

(6) *Contract owner or operator responsibilities.* (i) The contract owner or operator shall assure that each contract employee is trained in the work practices necessary to safely perform his/her job.

(2) The contract owner or operator shall assure that each contract employee is instructed in the known potential fire, explosion, or toxic release hazards related to his/her job and the process, and the applicable provisions of the emergency action plan.

(3) The contract owner or operator shall document that each contract employee has received and understood the training required by this section. The contract owner or operator shall prepare a record which contains the identity of the contract employee, the date of training, and the means used to verify that the employee understood the training.

(4) The contract owner or operator shall assure that each contract employee follows the safety rules of the stationary source including the safe work practices required by § 68.89(d).

(5) The contract owner or operator shall advise the owner or operator of any unique hazards presented by the contract owner or operator's work, or of any hazards found by the contract owner or operator's work.

## Subpart E—Emergency Response

Source: 61 FR 31185, June 30, 1996, unless otherwise noted.

## § 68.90 Applicability.

(a) Except as provided in paragraph (c) of this section, the owner or operator of a stationary source with Program 2 and Program 3 processes shall comply with the requirements of § 68.95.

(b) The owner or operator of stationary source whose employees will not respond to accidental releases of regulated substances need not comply with § 68.95 of this part provided that they meet the following:

(1) For stationary sources with any regulated toxic substance held in a process above the threshold quantity, the stationary source is included in the community emergency response plan developed under 42 U.S.C. 11004;

(2) For stationary sources with only regulated flammable substances held in a process above the threshold quantity, the owner or operator has coordinated response actions with the local fire department, and

(3) Appropriate mechanisms are in place to notify emergency responders when there is a need for a response.

Effective Date Note: At 62 FR 600, Jan. 23, 2000 was revised, effective Mar. 14, 2017. At 62 FR 3159, Jan. 26, 2017, this amendment was amended Mar. 31, 2017. At 62 FR 12965, Mar. 16, 2017, this amendment was further delayed until June 14, 2017. At 62 FR 2703, June 14, 2017, this amendment was further delayed until Feb. 18, 2018. For the convenience of the user the added text is set forth as follows.

## § 68.90 Applicability.

(a) Except as provided in paragraph (c) of this section, the owner or operator of a stationary source with Program 2 and Program 3 processes shall comply with the requirements of §§ 68.95, 68.96, and 68.95.

(b) Non-responding stationary source. The owner or operator of a stationary source whose employees will not respond to accidental releases of regulated substances need not comply with § 68.95 of this part provided that:

(1) For stationary sources with any regulated toxic substance held in a process above the threshold quantity, the stationary source is included in the community emergency response plan developed under 42 U.S.C. 11004;

**§ 68.93**

(2) The stationary source with only regulated flammable substances held in a process above the threshold quantity, the owner or operator has coordinated response actions with the local fire department;

(3) Appropriate procedures are in place to notify emergency responders when there is a need for a response;

(4) The owner or operator performs the annual emergency response coordination activities required under §§ 68.98, and

(5) The owner or operator performs the annual notification exercise required under § 68.95(a).

**§ 68.98 Emergency response coordination activities.**

The owner or operator of a stationary source shall coordinate response needs with local emergency planning and response organizations to determine how the stationary source is addressed in the community emergency response plan and to ensure that local response organizations are aware of the regulated substances at the stationary source, their quantities, the risks presented by covered processes, and the resources and capabilities at the stationary source to respond to an accidental release of a regulated substance.

(a) Coordination shall occur at least annually, and more frequently if necessary, to address changes at the stationary source; in the stationary source's emergency response and/or emergency action plan, and/or in the community emergency response plan.

(a) Coordination shall include providing to the local emergency planning and response organizations: The stationary source's emergency response plan if one exists; emergency action plan; updated emergency contact information; and any other information that local emergency planning and response organizations identify as relevant to local emergency response planning. For responding stationary sources, coordination shall also include consulting with local emergency response officials to establish appropriate schedules and plans for field and tabletop exercises required under § 68.95(b). The owner or operator shall request an opportunity to meet with the local emergency planning committee (or equivalent) and/or local fire department as appropriate to review and discuss these materials.

**40 CFR Ch. I (7-1-17 Edition)**

(c) The owner or operator shall document coordination with local authorities, including: The names of individuals involved and their contact information (phone number, email address, and organizational affiliation); dates of coordination activities; and nature of coordination activities.

**EFFECTIVE DATE NOTE:** At 62 FR 9291, Jan. 18, 1997, § 68.93 was added, effective Mar. 14, 2011. At 82 FR 1409, Jan. 26, 2017, the amendment was until Mar. 31, 2017. At 82 FR 18968, May 16, 2017, this amendment was further delayed until June 14, 2017. At 82 FR 87138, June 14, 2017, the amendment was further delayed until Feb. 19, 2019.

**§ 68.98 Emergency response program.**

(a) The owner or operator shall develop and implement an emergency response program for the purpose of protecting public health and the environment. Such program shall include the following elements:

(1) An emergency response plan, which shall be maintained at the stationary source and contain at least the following elements:

(i) Procedures for informing the public and local emergency response agencies about accidental releases;

(ii) Documentation of proper first aid and emergency medical treatment necessary to treat accidental human exposures; and

(iii) Procedures and measures for emergency response after an accidental release of a regulated substance;

(2) Procedures for the use of emergency response equipment and for its inspection, testing, and maintenance;

(3) Training for all employees in relevant procedures; and

(4) Procedures to review and update, as appropriate, the emergency response plan to reflect changes at the stationary source and ensure that employees are informed of changes.

(b) A written plan that complies with other Federal contingency plan regulations or is consistent with the approach in the National Response Team's Integrated Contingency Plan Guidance ("One Plan") and that, among other matters, includes the elements provided in paragraph (a) of this section, shall satisfy the requirements of this section, if the owner or operator



**Environmental Protection Agency****§ 68.96**

also complies with paragraph (c) of this section.

(c) The emergency response plan developed under paragraph (a)(1) of this section shall be coordinated with the community emergency response plan developed under 42 U.S.C. 11002. Upon request of the local emergency planning committee or emergency response officials, the owner or operator shall promptly provide to the local emergency response officials information necessary for developing and implementing the community emergency response plan.

§ 68.95 (late EPCRA at 42 FR 470) Jan. 13, 1985 was amended by revising paragraphs (a)(1) and (c), and adding a sentence to the end of paragraph (a)(4), effective Mar. 14, 2011. At 42 FR 6825, Jan. 26, 2011, this amendment was until Mar. 21, 2017. At 42 FR 11568, Mar. 18, 2017, this amendment was further delayed until Jan. 19, 2017. At 42 FR 21188, June 14, 2017, this amendment was further delayed until Feb. 18, 2017. For the convenience of the user, the added text is set forth as follows:

**§ 68.95 Emergency response program.**

(a) \* \* \*

(c) \* \* \*

(1) Procedures for informing the public and the appropriate Federal, State, and local emergency response agencies about accidental releases.

\* \* \*

(4) \* \* \* The owner or operator shall review and update the plan as appropriate based on changes at the stationary source or new information obtained from coordination activities, emergency response exercises, incident investigations, or other available information, and ensure that employees are informed of the changes.

\* \* \*

(b) The emergency response plan developed under paragraph (a)(1) of this section shall be coordinated with the community emergency response plan developed under 42 U.S.C. 11002. Upon request of the LEPD or emergency response officials, the owner or operator shall promptly provide to the local emergency response officials information necessary for developing and implementing the community emergency response plan.

**§ 68.96 Emergency response exercises.**

(a) Notification exercises. At least once each calendar year, the owner or oper-

ator of a stationary source with any Program 2 or Program 3 process shall conduct an exercise of the stationary source's emergency response notification mechanisms required under §§ 68.90(a)(2) or § 68.95(a)(1), as appropriate. Owners or operators of responding stationary sources may perform the notification exercise as part of the tabletop and field exercises required in paragraph (b) of this section. The owner/operator shall maintain a written record of each notification exercise conducted over the last five years.

(b) Emergency response exercise program. The owner or operator of a stationary source subject to the requirements of § 68.95 shall develop and implement an exercise program for its emergency response program, including the plan required under § 68.95(a)(1). Exercises shall involve facility emergency response personnel and, as appropriate, emergency response contractors. When planning emergency response field and tabletop exercises, the owner or operator shall coordinate with local public emergency response officials and invite them to participate in the exercise. The emergency response exercise program shall include:

(1) Emergency response field exercises. The owner or operator shall conduct field exercises involving the simulated accidental release of a regulated substance (i.e., toxic substance release or release of a regulated flammable substance involving a fire and/or explosion).

(2) Frequency. As part of coordination with local emergency response officials required by § 68.95, the owner or operator shall consult with these officials to establish an appropriate frequency for field exercises, but at a minimum, shall conduct a field exercise at least once every two years.

(3) Scope. Field exercises shall include tests of procedures to notify the public and the appropriate Federal, State, and local emergency response agencies about an accidental release, tests of procedures and resources for emergency response actions including evacuations and medical treatment; tests of communications systems, mobilization of facility emergency response personnel, including contractors as appropriate, coordination with



**§ 68.100**

local emergency responders; emergency response equipment deployment; and any other action identified in the emergency response program, as appropriate.

(2) *Tabletop exercises.* The owner or operator shall conduct a tabletop exercise involving the simulated accidental release of a regulated substance.

(3) *Frequency.* As part of coordination with local emergency response officials required by § 68.95, the owner or operator shall consult with these officials to establish an appropriate frequency for tabletop exercises, but at a minimum, shall conduct a field exercise at least once every three years.

(4) *Scope.* The exercise shall include discussions of: Procedures to notify the public; and the appropriate Federal, state, and local emergency response agencies; procedures and measures for emergency response including evacuations and medical treatment; identification of facility emergency response personnel and/or contractors and their responsibilities; coordination with local emergency responders; procedures for emergency response equipment deployment; and any other action identified in the emergency response plan, as appropriate.

(5) *Documentation.* The owner/operator shall prepare an evaluation report within 30 days of each exercise. The report shall include: A description of the exercise scenario; names and organizations of each participant; an evaluation of the exercise results including lessons learned; recommendations for improvement or revisions to the emergency response exercise program and emergency response program; and a schedule to promptly address and resolve recommendations.

(6) *Alternative means of meeting exercise requirements.* The owner or operator may satisfy the requirement to conduct notification, field and/or tabletop exercises through:

(1) Exercises conducted to meet other Federal, state or local exercise requirements, provided the exercise meets the requirements of paragraphs (1) and/or (2) of this section, as appropriate.

(2) Response to an accidental release, provided the response includes the actions indicated in paragraphs (a) and/or (b) of this section, as appropriate.

**40 CFR Ch. I (7-1-17 Edition)**

When used to meet field and/or tabletop exercise requirements, the owner or operator shall prepare an after-action report comparable to the exercise evaluation report required in paragraph (b)(3) of this section within 30 days of the incident.

*Effective Date Note:* At 62 FR 1502, Jan. 13, 1997, 40 CFR was added, effective Mar. 14, 2017. At 48 FR 8999, Jan. 26, 2013, this amendment was until Mar. 21, 2017. At 48 FR 13568, Mar. 14, 2013, this amendment was further delayed until June 19, 2017. At 62 FR 21210, June 11, 2017, this amendment was further delayed until 6/23/17, 2017.

**Subpart F—Regulated Substances for Accidental Release Prevention**

*Source:* 40 FR 1429, Jan. 31, 1975, unless otherwise noted. Reinstated at 61 FR 31137, June 20, 1996.

**§ 68.100 Purpose.**

This subject designates substances to be listed under section 112(a)(3), (4), and (5) of the Clean Air Act, as amended. It identifies their threshold quantities, and establishes the requirements for petitioning to add or delete substances from the list.

**§ 68.110 Threshold determination.**

(a) A threshold quantity of a regulated substance listed in § 68.120 is present at a stationary source if the total quantity of the regulated substance contained in a process exceeds the threshold.

(b) For the purposes of determining whether more than a threshold quantity of a regulated substance is present at the stationary source, the following exemptions apply:

(1) Concentrations of a regulated toxic substance in a mixture. If a regulated substance is present in a mixture and the concentration of the substance is below one percent by weight of the mixture, the amount of the substance in the mixture need not be considered when determining whether more than a threshold quantity is present at the stationary source. Except for oleum, toluene 2,4-dinitrobenzene, toluene 2,6-dinitrobenzene, and toluene dinitrobenzene (unspecified isomer). If the concentration of the regulated substance in the mixture is one percent or greater by

## Environmental Protection Agency

§ 68.115

weight, but the owner or operator can demonstrate that the partial pressure of the regulated substance in the mixture (solution) under handling or storage conditions in any portion of the process is less than 19 millimeters of mercury (mm Hg). The amount of the substance in the mixture in that portion of the process need not be considered when determining whether more than a threshold quantity is present at the stationary source. The owner or operator shall document this partial pressure measurement or estimate.

(2) Concentrations of a regulated flammable substance in a mixture. (a) General provision. If a regulated substance is present in a mixture and the concentration of the substance is below one percent by weight of the mixture, the mixture need not be considered when determining whether more than a threshold quantity of the regulated substance is present at the stationary source, except as provided in paragraph (b)(2) (i) and (ii) of this section. If the concentration of the substance is one percent or greater by weight of the mixture, then, for purposes of determining whether a threshold quantity is present at the stationary source, the entire weight of the mixture shall be treated as the regulated substance unless the owner or operator can demonstrate that the mixture itself does not have a National Fire Protection Association flammability hazard rating of 4. The demonstration shall be in accordance with the definition of Flammability hazard rating 4 in the NFPA 704, Standard System for the Identification of the Hazards of Materials for Emergency Response, National Fire Protection Association, Quincy, MA, 1995. Available from the National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02269-9100. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be inspected at the Environmental Protection Agency Air Docket (6102), Attention: Docket No. A-96-138, Waterside Mall, 101 M. St. SW, Washington DC, or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or

go to: <http://www.archives.gov/federal-register/code-of-federal-regulations/> for locations. (b) Boiling point and flash point shall be defined and determined in accordance with NFPA 30, Flammable and Combustible Liquids Code, National Fire Protection Association, Quincy, MA, 1996. Available from the National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02269-9100. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be inspected at the Environmental Protection Agency Air Docket (6102), Attention: Docket No. A-96-138, Waterside Mall, 101 M. St. SW, Washington DC, or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or

go to: <http://www.archives.gov/federal-register/code-of-federal-regulations/> for locations. (c) The owner or operator shall document the National Fire Protection Association flammability hazard rating.

(i) Gasoline. Regulated substances in gasoline, when in distribution or related storage for use as fuel for internal combustion engines, need not be considered when determining whether more than a threshold quantity is present at a stationary source.

(ii) Naturally occurring hydrocarbon mixtures. Prior to entry into a natural gas processing plant or a petroleum refining process unit, regulated substances in naturally occurring hydrocarbon mixtures need not be considered when determining whether more than a threshold quantity is present at a stationary source. Naturally occurring hydrocarbon mixtures include any combination of the following: condensate, crude oil, field gas, and produced water, each as defined in § 68.9 of this part.

(3) Articles. Regulated substances contained in articles need not be considered when determining whether more than a threshold quantity is present at the stationary source.

(4) Uses. Regulated substances, when in use for the following purposes, need not be included in determining whether

## § 68.120

## 40 CFR Ch. I (7–1–17 Edition)

more than a threshold quantity is present at the stationary source.

(i) Use as a structural component of the stationary source;

(ii) Use of products for routine janitorial maintenance;

(iii) Use by employees of foods, drugs, cosmetics, or other personal items containing the regulated substance; and

(iv) Use of regulated substances present in process water or non-contact cooling water as drawn from the environment or municipal sources, or use of regulated substances present in air used either as compressed air or as part of combustion.

(3) Activities in laboratories. If a regulated substance is manufactured, processed or used in a laboratory at a stationary source under the supervision of a technically qualified individual as defined in § 60.304(e) of this chapter, the quantity of the substance need not be considered in determining whether a threshold quantity is present. This exemption does not apply to:

(i) Specialty chemical production;

(ii) Manufacture, processing, or use of substances in pilot plant scale operations; and

(iii) Activities conducted outside the laboratory.

[50 FR 108, Jan 31, 1995. Redesignated at 61 FR 2770, June 20, 1996, as amended at 63 FR 645 Jan 6, 2000; 64 FR 10092, Apr. 9, 2000.]

## § 68.120 Petition process.

(a) Any person may petition the Administrator to modify by addition or deletion, the list of regulated substances identified in § 68.130. Based on the information presented by the petitioner, the Administrator may grant or deny a petition.

(b) A substance may be added to the list if, in the case of an accidental release, it is known to cause or may be reasonably anticipated to cause death, injury, or serious adverse effects to human health or the environment.

(c) A substance may be deleted from the list if adequate data on the health and environmental effects of the substance are available to determine that the substance, in the case of an accidental release, is not known to cause and may not be reasonably anticipated to cause death, injury, or serious ad-

verse effects to human health or the environment.

(d) No substance for which a national primary ambient air quality standard has been established shall be added to the list. No substance regulated under title VI of the Clean Air Act, as amended, shall be added to the list.

(e) The burden of proof is on the petitioner to demonstrate that the criteria for addition and deletion are met. A petition will be denied if this demonstration is not made.

(f) The Administrator will not accept additional petitions on the same substance following publication of a final notice of the decision to grant or deny a petition, unless new data become available that could significantly affect the basis for the decision.

(g) Petitions to modify the list of regulated substances must contain the following:

(1) Name and address of the petitioner and a brief description of the organization(s) that the petitioner represents, if applicable;

(2) Name, address, and telephone number of a contact person for the petitioner;

(3) Common chemical name(s), common synonym(s), Chemical Abstracts Service number, and chemical formula and structure;

(4) Action requested (add or delete a substance);

(5) Rationale supporting the petitioner's position; that is, how the substance meets the criteria for addition and deletion. A short summary of the rationale must be submitted along with a more detailed narrative; and

(6) Supporting data; that is, the petition must include sufficient information to scientifically support the request to modify the list. Such information shall include:

(i) A list of all support documents;

(ii) Documentation of literature searches conducted, including but not limited to, identification of the database(s) searched, the search strategy, dates covered, and printed results;

(iii) Effects data (animal, human, and environmental test data) indicating the potential for death, injury, or serious adverse human and environmental impacts from acute exposure following an accidental release, printed copies of

**Environmental Protection Agency**

**§ 68.130**

The data sources, in English, should be provided and

(v) Exposure data or previous accident history data, indicating the potential for serious adverse human health or environmental effects from an accidental release. These data may include, but are not limited to, physical and chemical properties of the substance, such as vapor pressures, modeling results, including data and assumptions used and model documentation; and historical accident data, citing data sources.

(b) Within 18 months of receipt of a petition, the Administrator shall publish in the *FEDERAL REGISTER* a notice either denying the petition or granting the petition and proposing a listing.

**§ 68.125 Exemptions**

**Agricultural nutrients.** Ammonia used as an agricultural nutrient when held by farmers, is exempt from all provisions of this part.

**§ 68.126 Exclusion**

**Flammable Substances Used as Fuel or Held for Sale as Fuel at Retail Facilities.** A flammable substance listed in Tables 3 and 4 of § 68.130 is nevertheless excluded from all provisions of this part when the substance is used as a fuel or held for sale as a fuel at a retail facility.

(65 FR 15322, Mar. 18, 2000)

**§ 68.130 List of substances**

(a) Regulated toxic and flammable substances under section 112(b) of the Clean Air Act are the substances listed in Tables 1, 2, 3, and 4. Threshold quantities for listed toxic and flammable substances are specified in the tables.

(b) The basis for placing toxic and flammable substances on the list of regulated substances are explained in the notes to the list.

**TABLE 1 TO § 68.130—LIST OF REGULATED TOXIC SUBSTANCES AND THRESHOLD QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION (Alphabetical Order—77 Substances)**

Chemical name	CAS No.	Threshold quantity (lb.)	Basis for listing
Acetylene (Ethyne)	107-10-6	5,000	b

**TABLE 1 to § 68.130—LIST OF REGULATED TOXIC SUBSTANCES AND THRESHOLD QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION (Continued)**  
(Alphabetical Order—77 Substances)

Chemical name	CAS No.	Threshold quantity (lb.)	Basis for listing
Acetylene (Ethyne)	107-10-6	5,000	b
Acetyl chloride (Ethanoyl chloride)	814-74-6	5,000	b
Acrylonitrile (Prop-2-enenitrile)	107-13-6	16,000	b
Adipic acid (Hexanedioic acid)	117-11-0	10,000	b
Airacetic acid (Acetic acid)	7934-11-1	10,000	b, c
Aminic acid (Amino acid)	2950-01-7	20,000	f, g
Asbestos in asbestos	7782-34-1	15,000	e
Asphalt	7980-42-1	1,200	h
Boron trichloride (Boric trichloride)	10304-01-0	5,000	b
Boron trichloride (Boric trichloride)	10304-01-0	5,000	c
Boron trichloride (Boric trichloride)	980-2-8	15,000	l
Bromine	7726-95-6	12,000	a, b
Carbon dioxide	7440-49-9	20,000	o
Carbon tetrachloride	7564-11-5	2,500	a, b
Chloroacetylene (Ethenediyl chloride)	70643-00-1	1,000	c
Chloroform (Trichloromethane)	67-68-2	20,000	z
Chloroform (Trichloromethane)	542-96-1	1,000	g
Chlorophenol (Chlorobenzene)	107-20-2	5,000	c
Chloroethylene (Dichloroethylene)	1327-36-7	20,000	n
Chloroethylene (Dichloroethylene)	122-73-9	20,000	u
Chloroethylene (Dichloroethylene)	305-77-1	10,000	u
Cyanoacetylene (Dicyanoacetylene)	489-51-6	15,000	h
Dibromine	13277-45-7	2,500	b
Dimethylacetylene (Diacetylene)	74-11-0	5,000	n

§ 69.130

40 CFR Ch. I (7-1-17 Edition)

TABLE 1 TO § 69.130—LIST OF REGULATED TOXIC SUBSTANCES AND THRESHOLD QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION—Continued

Chemical name	CAS No.	Threshold quantity (lb)	Case for listing
1,1-Dimethylhydrazine (Hydrazine, 1,1-dimethyl)	57-84-7	15,000	b
Epichlorohydrin (Chlorine, epichlorohydrin)	10-69-8	20,000	b
Ethylbenzene (Benzene, ethyl)	107-15-3	20,000	b
Ethylene glycol (Ethylene glycol)	107-98-4	10,000	b
Ethylene oxide (Ethylene oxide)	75-21-8	10,000	a, c
Formaldehyde (Formaldehyde)	50-00-0	1,000	b
Formaldehyde (Formaldehyde)	50-00-0	15,000	b
Furan	140-84-2	5,000	b
Hydrazine	302-27-2	15,000	b
Hydrochloric acid (more than 50% acid)	7647-01-0	25,000	d
Hydrocyanic acid (Hydrocyanic acid)	74-90-8	2,500	a, b
Hydrogen fluoride (Hydrogen fluoride)	7664-09-3	7,000	a
Hydrogen fluoride (Hydrofluoric acid (more than 50% acid)) (Hydrofluoric acid)	7664-09-3	1,000	a, b
Hydrogen sulfide	7782-97-5	500	b
Hydroxyacetaldehyde	7782-96-4	10,000	a, b
Hydroxyacetaldehyde (Hydroxyacetaldehyde)	12463-01-8	2,500	b
Isobutylene (Isobutylene)	78-10-0	20,000	b
Isopropyl alcohol (Isopropyl alcohol)	156-80-8	15,000	b
Methacrylonitrile (Methacrylonitrile)	126-58-7	10,000	b
Methyl acetate (Methyl acetate)	79-20-9	10,000	b
Methyl methacrylate (Methyl methacrylate)	95-01-7	5,000	b

TABLE 1 TO § 69.130—LIST OF REGULATED TOXIC SUBSTANCES AND THRESHOLD QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION—Continued

Chemical name	CAS No.	Threshold quantity (lb)	Case for listing
Methylamine (Methylamine)	67-50-8	10,000	a, b
Methyl methacrylate (Methyl methacrylate)	95-01-7	10,000	b
Methyl methacrylate (Methyl methacrylate)	95-01-7	20,000	b
Methyl methacrylate (Methyl methacrylate)	95-01-7	5,000	b
Methyl methacrylate (Methyl methacrylate)	95-01-7	10,000	b
Methyl methacrylate (Methyl methacrylate)	95-01-7	15,000	b
Methyl methacrylate (Methyl methacrylate)	95-01-7	20,000	b
Methyl methacrylate (Methyl methacrylate)	95-01-7	25,000	b
Methyl methacrylate (Methyl methacrylate)	95-01-7	30,000	b
Methyl methacrylate (Methyl methacrylate)	95-01-7	35,000	b
Methyl methacrylate (Methyl methacrylate)	95-01-7	40,000	b
Methyl methacrylate (Methyl methacrylate)	95-01-7	45,000	b
Methyl methacrylate (Methyl methacrylate)	95-01-7	50,000	b
Methyl methacrylate (Methyl methacrylate)	95-01-7	55,000	b
Methyl methacrylate (Methyl methacrylate)	95-01-7	60,000	b
Methyl methacrylate (Methyl methacrylate)	95-01-7	65,000	b
Methyl methacrylate (Methyl methacrylate)	95-01-7	70,000	b
Methyl methacrylate (Methyl methacrylate)	95-01-7	75,000	b
Methyl methacrylate (Methyl methacrylate)	95-01-7	80,000	b
Methyl methacrylate (Methyl methacrylate)	95-01-7	85,000	b
Methyl methacrylate (Methyl methacrylate)	95-01-7	90,000	b
Methyl methacrylate (Methyl methacrylate)	95-01-7	95,000	b
Methyl methacrylate (Methyl methacrylate)	95-01-7	100,000	b

Environmental Protection Agency

§ 68.130

TABLE 1 TO § 68.130—LIST OF REGULATED TOXIC SUBSTANCES AND THRESHOLD QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION—Continued.

Chemical name	CAS No.	Threshold quantity (lb)	Reason for listing
Sulfur hexafluoride (SF <sub>6</sub> ) (T-4)	7782-50-0	2,000	b
Toluene	7446-11-9	10,000	a, b
Toluene, o-xylene, and p-xylene (Toluene, o-xylene, p-xylene)	75-28-1	10,000	b
Toluene, m-xylene, and p-xylene (Toluene, m-xylene, p-xylene)	503-14-3	10,000	b
Toluene, o-xylene, and p-xylene (Toluene, o-xylene, p-xylene)	7003-45-0	2,000	b
Toluene, o-xylene, and p-xylene (Toluene, o-xylene, p-xylene)	584-24-9	10,000	b
Toluene, o-xylene, and p-xylene (Toluene, o-xylene, p-xylene)	51-08-7	10,000	a

TABLE 1 TO § 68.130—LIST OF REGULATED TOXIC SUBSTANCES AND THRESHOLD QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION—Continued.

Chemical name	CAS No.	Threshold quantity (gal)	Reason for listing
1,1,1-trichloroethane (perchloroethylene) (Bromoethane, 1,1,1-trichloroethane)	75-35-4	10,000	a
Trinitrochlorobenzene (Trinitrochlorobenzene)	75-77-4	10,000	b
Vinyl acetate (monomer) (Vinyl acetate)	100-05-1	15,000	b

<sup>1</sup> This mixture exemption in § 68.130(b)(1) does not apply to use facilities.

NOTE: Reason for listing:

- a. Mandated for listing by Congress.
- b. On OHS-301 super pressure 10 mmHg or greater.
- c. Toxicity.
- d. Toxicity of hydrolysis products, peroxide forming hydroperoxide, and hydrolysis products.
- e. Toxicity of sulfur dioxide and sulfuric acid, toxicity to release sulfur dioxide and hydrolysis products.

TABLE 2 TO § 68.130—LIST OF REGULATED TOXIC SUBSTANCES AND THRESHOLD QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION.

CAS No.	Chemical name	Threshold quantity (lb)	Reason for listing
91-00-0	Formaldehyde (formal)	15,200	u
57-14-7	1,1-Dichloroethane (Hydrogen, 1,1-dichloroethane)	15,000	b
69-14-4	Methyl hydrazine (Hydrazine, methyl)	15,000	b
67-68-3	Chloroform (Methane, trichloro-)	20,000	b
74-82-3	Methyl chloride (Methane, chloro-)	10,000	a
74-20-0	Hydrocyanic acid	5,500	a, b
67-45-1	Methyl mercaptan (Methane, thio-)	10,000	b
73-12-0	Carbon disulfide	20,000	u
78-21-8	Ethylene oxide (Oxirane)	10,000	a, c
75-44-5	Propane (Carbon, trichloro-)	500	a, b
75-55-4	Propane, isobutane (Carbon, dimethyl-)	10,000	b
75-50-8	Propane, n-butane (Carbon, methyl-)	10,000	u
75-74-1	Isopropyl alcohol (Propanol, isomeric)	10,000	b
75-77-4	Trinitrochlorobenzene (Chloro, trinitro-)	10,000	u
75-77-5	Dinitrochlorobenzene (Chloro, dinitro-)	5,000	b
75-79-6	Methyl ethyl ketone (Ketone, methyl-)	5,000	u
74-82-0	Acetylene (Ethyne)	20,000	b
79-21-0	Peracetic acid (Peroxyacetic acid)	10,000	b
79-22-1	Methyl ethyl ketone (Ketone, methyl-)	5,000	b
91-02-7	Toluene, o-xylene, and p-xylene (Toluene, o-xylene, p-xylene)	10,200	a
106-32-8	Acrylonitrile (Vinylidene, cyano-)	50,000	b
117-19-8	Acetone (Propanone)	5,000	b
107-11-9	Acetylene (Ethyne)	10,000	b
107-10-0	Propylene (Propan-1-ene)	10,000	b
117-15-1	Acrylonitrile (Vinylidene, cyano-)	20,000	b
107-15-3	Ethylene oxide (Oxirane)	50,000	b
107-11-9	Acetylene (Ethyne)	15,000	u
107-10-0	Propylene (Propan-1-ene)	5,000	u
108-05-4	Vinyl acetate (monomer) (Acetoxyethene)	15,000	b
108-81-6	Acrylonitrile (Vinylidene, cyano-)	15,000	u



§ 68.130

40 CFR Ch. I (7-1-17 Edition)

TABLE 2 TO § 68.130—LIST OF REGULATED FLAMMABLE SUBSTANCES AND THRESHOLD QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION—Continued  
(CAS Number: Chem—77 Substances)

CAS No.	Chemical name	Threshold quantity (kg)	Base for listing
104-61-6	Cyclohexylamine (Cyclohexylamine)	15,000	b
409-61-5	Propyl chloroacetate (Chloroacetone acid, propyl ester)	15,000	b
110-62-9	Evan	5,000	U
110-69-4	Hexane	15,000	b
323-73-9	Cyclohexanone, (E)- [2-Bornyl, (E)-]	20,000	b
136-66-7	N-hexylamine [2-Propylaminoethanol, 2-methyl-]	10,000	b
137-65-4	Rhyleneimine (Azulene)	10,000	b
302-61-7	Hydrofene	15,000	b
303-42-4	Downy olefinic compound with methyl ether C <sub>12</sub> [2-methyl-2-(2-methyl-2-butyl)ethyl ether], 1,4-	15,000	d
505-70-6	Cyanogen chloride	10,000	c
505-74-8	1,3-Dichloroacetone [1,3-Dichloro-2-propanone]	10,000	b
547-43-1	Chloromethyl ether (Bis(hydroxyethyl)ether)	1,000	b
686-64-0	Methyl isopropyl ether (1-isopropoxy-2-methyl-ethoxy)	20,000	b
809-81-9	Triphenyl 2,4-diazopyrene [Benzene, 2,4-diazopyrene 1-methyl-]	10,000	a
844-42-3	Perchloroacetyl chloride (2,2,2-trichloroethyl chloride, dichloro-)	10,000	b
851-83-9	Methyl isopropyl ether (isobutane, isopropyl-)	10,000	a, d
874-82-8	Propyl propanoate [2-Propoxypropanoate]	5,000	b
875-30-7	Dioxanohexane (2-Dioxane)	20,000	b
7446-09-5	Sulfur dioxide (Sulfur dioxide)	5,000	a, b
7446-11-8	Sulfur trioxide	10,000	a, b
2757-45-0	Triphenyl tetrahydrofuran (Triphenyl tetrahydrofuran, THF)	7,500	b
7617-07-7	Hexamethylenediamine (Hexane, 1,6-diamine)	5,000	b
7617-01-0	Hydrochloric acid (conc. 37% or greater)	15,000	d
7647-41-0	Hydrogen chloride (hydrochloric acid, hydrochloric acid)	5,000	a
7664-39-3	Hydrogen fluoride-hydrochloric acid (conc. 48% hydrogen fluoride acid)	1,000	a, c
684-41-7	Acetic anhydride	10,000	a, b
7664-41-7	Sulfuric acid (conc. 98% or greater)	20,000	a, b
7664-37-2	Nitric acid (conc. 50% or greater)	15,000	b
7703-12-2	Phosphorus pentoxide (Phosphorus pentoxide)	15,000	d
7723-36-6	Bromine	10,000	a, b
7732-41-4	Ethylene	1,000	b
7732-50-5	Chlorine	2,500	a, b
7733-06-9	Hydrogen sulfide	10,000	a, b
7733-10-5	Hydrogen cyanide	500	c
7733-56-0	Sulfur hexafluoride (Sulfur fluoride SF <sub>6</sub> ) (F <sub>6</sub> )	2,500	b
7734-34-1	Acetylene	1,000	b
7803-51-2	Phosphine	6,000	b
8114-65-7	Glucum (Glucum Sulfonic Acid) (Sulfuric acid, mixture with sulfur trioxide)	10,000	v
8320-57-3	Phosphorus pentoxide (Phosphorus pentoxide)	5,000	b
8345-64-4	Chlorine dioxide (Chlorine dioxide, ClO <sub>2</sub> )	1,000	f
8382-43-9	Calcium chloride (Calcium chloride, CaCl <sub>2</sub> )	10,000	b
9254-34-5	Downy olefinic compound with methyl ether C <sub>12</sub>	5,000	b
1345-69-8	Methyl propanoate	1,000	b
13463-40-8	Iron pentacarbonyl (Iron carbonyl) (Fe(CO) <sub>5</sub> , (CO) <sub>5</sub> Fe)	2,500	b
15283-45-7	Dibromane	5,000	b
29471-82-6	Toluene isocyanate (isocyanate acetone) (Benzene, 1,2-dicyanatoethyl ether)	10,000	a

<sup>1</sup> The maximum quantity in § 68.130(a) does not apply to the substance.

Here, Base for Listing

a. Max listed for 5000 lb category.

b. On CTE list, except those with 10,000 lb or greater.

c. Toxic gas.

d. Toxicity of hydrogen chloride, potassium chloride, hydrogen chloride, and hydrochloric acid.

e. Toxicity of sulfur dioxide and sulfur trioxide, potential to release sulfur dioxide into history of acetone.

TABLE 3 TO § 68.130—LIST OF REGULATED FLAMMABLE SUBSTANCES<sup>1</sup> AND THRESHOLD QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION  
(Alphabetical Order—43 Substances)

Chemical name	CAS No.	Threshold quantity (kg)	Base for listing
Acetylene	75-07-0	10,000	a
Acetylene (Liquefied)	75-07-0	10,000	f
Dioxanohexane, Ethane, hexamethylene	808-01-2	10,000	f



568.130

40 CFR Ch. I (7-1-17 Edition)

TABLE 4 TO 568.130—LIST OF REGULATED FLAMMABLE SUBSTANCES<sup>1</sup> AND THRESHOLD QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION (CAS Number Under 45 Substances)

CAS No.	Chemical name	CAS No.	Threshold quantity (lb.)	Class. (HAP/HPV)
69-29-7	Ethyl ether (Diethyl, 1,1-dimethyl)	69-29-7	10,000	0
74-82-6	Nellium	74-82-6	10,000	1
74-84-0	Ethane	74-84-0	10,000	1
74-85-1	Ethylene (Ethene)	74-85-1	10,000	1
74-86-2	Acetylene (Ethyne)	74-86-2	10,000	1
74-88-5	Methylamine (Methanamine)	74-88-5	10,000	1
74-93-7	Propene (1-Propene)	74-93-7	10,000	1
75-00-3	Ethyl Alcohol (Ethanol, ethyl)	75-00-3	10,000	1
75-01-4	Methyl alcohol (Ethanol, methyl)	75-01-4	10,000	M
75-05-2	Diethyl ether (Ether, 1,2-dimethyl)	75-05-2	10,000	1
75-06-1	Ethylamine (Amine, ethyl)	75-06-1	10,000	1
75-07-3	Acetaldehyde	75-07-3	10,000	0
75-08-1	Dimethylamine (Amine, dimethyl)	75-08-1	10,000	0
75-09-4	Diethylamine (Amine, diethyl)	75-09-4	10,000	1
75-10-5	Propyl alcohol (Propan-1-ol)	75-10-5	10,000	0
75-11-3	Isopropylamine (2-Propanamine)	75-11-3	10,000	0
75-12-4	Methylamine (Ethane, 1,1-dimethyl)	75-12-4	10,000	0
75-13-5	Dimethylamine (Ethane, 1,1-dimethyl)	75-13-5	10,000	1
75-14-6	Trimethylamine (N,N-dimethyl, N,N-dimethyl)	75-14-6	10,000	1
75-15-7	Tetraethylamine (Ethane, tetraethyl)	75-15-7	10,000	U
75-16-8	Diethylamine (Ethane, 2-dimethyl)	75-16-8	10,000	U
75-17-9	Diethylamine (Ethane, 2-dimethyl)	75-17-9	10,000	0
75-18-0	Triethylamine (Ethane, 2-trimethyl)	75-18-0	10,000	0
100-02-8	Benzene	100-02-8	10,000	1
100-04-9	1-Butane	100-04-9	10,000	1
100-05-1	1-Butene	100-05-1	10,000	1
100-06-2	Ethyl acetate (1-Butyl)	100-06-2	10,000	1
100-07-3	2-Butane	100-07-3	10,000	1
100-23-6	1,2-Dichloroethane (Ethane, dichloro)	100-23-6	10,000	1
100-28-1	Methyl bromide (Ethane, bromo, methyl)	100-28-1	10,000	U
109-06-0	Pentane	109-06-0	10,000	0
109-07-1	1-Pentene	109-07-1	10,000	0
109-62-2	Methyl ethyl ether (Ethane, ethyl, methyl)	109-62-2	10,000	0
109-66-6	Ethyl ether (Ethane, ethyl, methyl)	109-66-6	10,000	0
115-07-1	Propylene (1-Propene)	115-07-1	10,000	1
115-10-6	Methyl ether (Methane, methyl)	115-10-6	10,000	1
115-11-7	2-Methylpropane (1-Propene, 2-methyl)	115-11-7	10,000	1
115-14-3	Tetrahydrofuran (Ethane, tetrahydro)	115-14-3	10,000	1
124-40-3	Dichloroethane (Ethane, dichloro)	124-40-3	10,000	1
146-01-6	Diisopropylamine (Amine, diisopropyl)	146-01-6	10,000	1
146-03-2	Propylamine (1-Propylamine)	146-03-2	10,000	1
146-05-1	Diethylamine (Ethane, diethyl)	146-05-1	10,000	1
146-08-4	Diethylamine (Ethane, diethyl)	146-08-4	10,000	1
146-09-5	Diethylamine (Ethane, diethyl)	146-09-5	10,000	1
146-10-6	Diethylamine (Ethane, diethyl)	146-10-6	10,000	1
146-11-7	Diethylamine (Ethane, diethyl)	146-11-7	10,000	1
146-12-8	Diethylamine (Ethane, diethyl)	146-12-8	10,000	1
146-13-9	Diethylamine (Ethane, diethyl)	146-13-9	10,000	1
146-14-0	Diethylamine (Ethane, diethyl)	146-14-0	10,000	1
146-15-1	Diethylamine (Ethane, diethyl)	146-15-1	10,000	1
146-16-2	Diethylamine (Ethane, diethyl)	146-16-2	10,000	1
146-17-3	Diethylamine (Ethane, diethyl)	146-17-3	10,000	1
146-18-4	Diethylamine (Ethane, diethyl)	146-18-4	10,000	1
146-19-5	Diethylamine (Ethane, diethyl)	146-19-5	10,000	1
146-20-6	Diethylamine (Ethane, diethyl)	146-20-6	10,000	1
146-21-7	Diethylamine (Ethane, diethyl)	146-21-7	10,000	1
146-22-8	Diethylamine (Ethane, diethyl)	146-22-8	10,000	1
146-23-9	Diethylamine (Ethane, diethyl)	146-23-9	10,000	1
146-24-0	Diethylamine (Ethane, diethyl)	146-24-0	10,000	1
146-25-1	Diethylamine (Ethane, diethyl)	146-25-1	10,000	1
146-26-2	Diethylamine (Ethane, diethyl)	146-26-2	10,000	1
146-27-3	Diethylamine (Ethane, diethyl)	146-27-3	10,000	1
146-28-4	Diethylamine (Ethane, diethyl)	146-28-4	10,000	1
146-29-5	Diethylamine (Ethane, diethyl)	146-29-5	10,000	1
146-30-6	Diethylamine (Ethane, diethyl)	146-30-6	10,000	1
146-31-7	Diethylamine (Ethane, diethyl)	146-31-7	10,000	1
146-32-8	Diethylamine (Ethane, diethyl)	146-32-8	10,000	1
146-33-9	Diethylamine (Ethane, diethyl)	146-33-9	10,000	1
146-34-0	Diethylamine (Ethane, diethyl)	146-34-0	10,000	1
146-35-1	Diethylamine (Ethane, diethyl)	146-35-1	10,000	1
146-36-2	Diethylamine (Ethane, diethyl)	146-36-2	10,000	1
146-37-3	Diethylamine (Ethane, diethyl)	146-37-3	10,000	1
146-38-4	Diethylamine (Ethane, diethyl)	146-38-4	10,000	1
146-39-5	Diethylamine (Ethane, diethyl)	146-39-5	10,000	1
146-40-6	Diethylamine (Ethane, diethyl)	146-40-6	10,000	1
146-41-7	Diethylamine (Ethane, diethyl)	146-41-7	10,000	1
146-42-8	Diethylamine (Ethane, diethyl)	146-42-8	10,000	1
146-43-9	Diethylamine (Ethane, diethyl)	146-43-9	10,000	1
146-44-0	Diethylamine (Ethane, diethyl)	146-44-0	10,000	1
146-45-1	Diethylamine (Ethane, diethyl)	146-45-1	10,000	1
146-46-2	Diethylamine (Ethane, diethyl)	146-46-2	10,000	1
146-47-3	Diethylamine (Ethane, diethyl)	146-47-3	10,000	1
146-48-4	Diethylamine (Ethane, diethyl)	146-48-4	10,000	1
146-49-5	Diethylamine (Ethane, diethyl)	146-49-5	10,000	1
146-50-6	Diethylamine (Ethane, diethyl)	146-50-6	10,000	1
146-51-7	Diethylamine (Ethane, diethyl)	146-51-7	10,000	1
146-52-8	Diethylamine (Ethane, diethyl)	146-52-8	10,000	1
146-53-9	Diethylamine (Ethane, diethyl)	146-53-9	10,000	1
146-54-0	Diethylamine (Ethane, diethyl)	146-54-0	10,000	1
146-55-1	Diethylamine (Ethane, diethyl)	146-55-1	10,000	1
146-56-2	Diethylamine (Ethane, diethyl)	146-56-2	10,000	1
146-57-3	Diethylamine (Ethane, diethyl)	146-57-3	10,000	1
146-58-4	Diethylamine (Ethane, diethyl)	146-58-4	10,000	1
146-59-5	Diethylamine (Ethane, diethyl)	146-59-5	10,000	1
146-60-6	Diethylamine (Ethane, diethyl)	146-60-6	10,000	1
146-61-7	Diethylamine (Ethane, diethyl)	146-61-7	10,000	1
146-62-8	Diethylamine (Ethane, diethyl)	146-62-8	10,000	1
146-63-9	Diethylamine (Ethane, diethyl)	146-63-9	10,000	1
146-64-0	Diethylamine (Ethane, diethyl)	146-64-0	10,000	1
146-65-1	Diethylamine (Ethane, diethyl)	146-65-1	10,000	1
146-66-2	Diethylamine (Ethane, diethyl)	146-66-2	10,000	1
146-67-3	Diethylamine (Ethane, diethyl)	146-67-3	10,000	1
146-68-4	Diethylamine (Ethane, diethyl)	146-68-4	10,000	1
146-69-5	Diethylamine (Ethane, diethyl)	146-69-5	10,000	1
146-70-6	Diethylamine (Ethane, diethyl)	146-70-6	10,000	1
146-71-7	Diethylamine (Ethane, diethyl)	146-71-7	10,000	1
146-72-8	Diethylamine (Ethane, diethyl)	146-72-8	10,000	1
146-73-9	Diethylamine (Ethane, diethyl)	146-73-9	10,000	1
146-74-0	Diethylamine (Ethane, diethyl)	146-74-0	10,000	1
146-75-1	Diethylamine (Ethane, diethyl)	146-75-1	10,000	1
146-76-2	Diethylamine (Ethane, diethyl)	146-76-2	10,000	1
146-77-3	Diethylamine (Ethane, diethyl)	146-77-3	10,000	1
146-78-4	Diethylamine (Ethane, diethyl)	146-78-4	10,000	1
146-79-5	Diethylamine (Ethane, diethyl)	146-79-5	10,000	1
146-80-6	Diethylamine (Ethane, diethyl)	146-80-6	10,000	1
146-81-7	Diethylamine (Ethane, diethyl)	146-81-7	10,000	1
146-82-8	Diethylamine (Ethane, diethyl)	146-82-8	10,000	1
146-83-9	Diethylamine (Ethane, diethyl)	146-83-9	10,000	1
146-84-0	Diethylamine (Ethane, diethyl)	146-84-0	10,000	1
146-85-1	Diethylamine (Ethane, diethyl)	146-85-1	10,000	1
146-86-2	Diethylamine (Ethane, diethyl)	146-86-2	10,000	1
146-87-3	Diethylamine (Ethane, diethyl)	146-87-3	10,000	1
146-88-4	Diethylamine (Ethane, diethyl)	146-88-4	10,000	1
146-89-5	Diethylamine (Ethane, diethyl)	146-89-5	10,000	1
146-90-6	Diethylamine (Ethane, diethyl)	146-90-6	10,000	1
146-91-7	Diethylamine (Ethane, diethyl)	146-91-7	10,000	1
146-92-8	Diethylamine (Ethane, diethyl)	146-92-8	10,000	1
146-93-9	Diethylamine (Ethane, diethyl)	146-93-9	10,000	1
146-94-0	Diethylamine (Ethane, diethyl)	146-94-0	10,000	1
146-95-1	Diethylamine (Ethane, diethyl)	146-95-1	10,000	1
146-96-2	Diethylamine (Ethane, diethyl)	146-96-2	10,000	1
146-97-3	Diethylamine (Ethane, diethyl)	146-97-3	10,000	1
146-98-4	Diethylamine (Ethane, diethyl)	146-98-4	10,000	1
146-99-5	Diethylamine (Ethane, diethyl)	146-99-5	10,000	1
147-00-6	Diethylamine (Ethane, diethyl)	147-00-6	10,000	1

<sup>1</sup> A flammable substance when used as a fuel or for the production of a fuel is a regulated flammable substance if it is a regulated flammable substance under 40 CFR 568.130.  
 \*Methylamine is listed as a flammable gas.  
 †Methylamine is listed as a flammable liquid.

ADD-075

Environmental Protection Agency

§ 68.130, NR.

Flammable gas  
40 CFR 136.400-40.13

(29 FR 487, Jan. 31, 1994. Redesignated at 62 FR 5177, June 10, 1997, as amended at 62 FR 10132, Aug. 29, 1997; 61 FR 645, Jan. 8, 1996; 65 FR 13320, Mar. 18, 2000)

EFFECTIVE DATE NOTE: At 65 FR 4705, Jan. 11, § 68.130 was amended to Table 1 under second column entitled "CAS No.", removing the number "107-18-61" adding "107-18-61" in its place; and by revising Table 6, effective MAR. 14, 2017. At 65 FR 10429, Jan. 26, 2000, this amendment was until Mar. 31, 2001. At 67 FR 13508, Mar. 16, 2001, this amendment was thereafter delayed until June 18, 2001. At 68 FR

3113, June 14, 2001, this amendment was thereafter delayed until Feb. 19, 2003. For the convenience of the user, the added and revised text is set forth as follows.

§ 68.130 List of substances.

TABLE 4 to § 68.130—LIST OF REGULATED FLAMMABLE SUBSTANCES<sup>1</sup> AND THRESHOLD QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION  
(CAS Number Code—(6) Continued)

GAS No.	Chemical name	Threshold quantity (Tq)	Basis for Listing
50-29-7	Ethyl ether (Ether, 1,1-dioxane)	10,000	4
74-28-8	Methane	10,000	4
74-28-6	Ethane	10,000	4
74-29-7	Ethylene (Ethene)	10,000	4
74-86-2	Acetylene (Ethyne)	10,000	4
74-84-6	Methoxyamine (Methanamine)	10,000	4
74-98-4	Propane	10,000	4
74-98-1	Propene (1-Propene)	10,000	4
75-00-3	Ethyl chloride (Ethene, chloro-)	10,000	4, 5
75-01-4	Vinyl chloride (Ethene, chloro-)	10,000	4, 5
75-07-6	Vinyl fluoride (Ethene, fluoro-)	10,000	4
75-04-7	Ethylamine (Ethanimine)	10,000	4
75-07-0	Azobicyclodecane	10,000	4
75-08-1	Ethyl mercaptan (Ethanethiol)	10,000	4
75-18-4	Cyclopropane	10,000	4
75-21-5	Isobutane (Propane, 2-methyl)	10,000	4
75-29-6	Isopropyl chloride (Propane, 2-chloro-)	10,000	4
75-31-0	Isopropylamine (Propanamine)	10,000	4
75-31-4	Vinylidene chloride (Ethene, 1,1-dichloro-)	10,000	4
75-37-0	Dichloroethane (Ethene, 1,2-dichloro-)	10,000	4
75-38-7	Vinylidene fluoride (Ethene, 1,1-difluoro-)	10,000	4
75-50-1	Trimethylamine (Aminamine, N, N, N-methyl-)	10,000	4
78-70-3	Tetramethylamine (Amin, tetramethyl-)	10,000	4
78-78-4	Isobutane (Butane, 2-methyl)	10,000	4
78-79-0	Isoprene (1,3-Butadiene, 2-methyl)	10,000	4
79-38-9	Tetrafluoroethylene (Ethene, tetrafluoro-)	10,000	4
105-97-8	Benzene	10,000	4
105-98-0	1-Ethene	10,000	4
105-99-0	1,2-Dichloroethane	10,000	4
107-92-6	1-Hydroxyethane (1-Ethanol)	10,000	4
107-91-7	2-Ethanol	10,000	4
107-25-5	Vinyl methyl ether (Ethene, methoxy-)	10,000	4
107-31-3	Methylamine (Amin, methyl, distal)	10,000	4
109-66-0	Pentane	10,000	4
109-67-1	1-Pentene	10,000	4
109-70-2	Vinyl ethyl ether (Ethene, ethoxy-)	10,000	4
109-99-0	Ethylamine (Amin, ethyl, distal)	10,000	4
115-07-1	Propene (1-Propene)	10,000	4
115-10-5	Methyl ether (Methoxy, methyl)	10,000	4
115-11-7	2-Hydroxypropane (1-Propene, 2-methyl)	10,000	4
116-14-5	Tetrahydrofuran (Ethene, tetrahydro-)	10,000	4
124-40-3	Dimethylamine (Methanamine, N, N-methyl)	10,000	4
180-19-8	Dioxane (Ethansixane)	10,000	4
453-45-9	Propylene (1,2-Propadiene)	10,000	4
463-26-1	Carbon disulfide (Carbon code sulfur (CCS))	10,000	4
463-82-1	2,2-Dimethylpropane (Pentane, 2,2-dimethyl)	10,000	4

§ 68.150

40 CFR Ch. I (7-1-17 Edition)

TABLE 4 TO § 68.130—LIST OF REGULATED FLAMMABLE SUBSTANCES<sup>1</sup> AND THRESHOLD QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION—Continued  
(CAS Number Order—G Substances)

CAS No.	Chemical name	Threshold quantity (lbs)	Basis for listing
904-60-0	1,3-Pentadiene	10,000	f
557-90-7	2-Chloropropylene [1-Propene, 2-chloro-]	10,000	g
563-45-1	2-Methyl-1-butene	10,000	g
573-46-7	2-Methyl-2-butene	10,000	g
500-18-1	2-Butene-cis	10,000	g
500-21-8	1-Chloropropylene [1-Propene, 1-chloro-]	10,000	g
598-73-2	Bismoulihydridylene [Eilene, trimoulihydride]	10,000	g
624-64-6	2-Butene-trans [2-Butene, (E)]	10,000	g
647-20-3	2-Pentene, (Z)	10,000	g
646-04-0	2-Pentene, (E)	10,000	g
629-67-4	Vinyl acetylene [1-Buten-3-yn-1-yl]	10,000	f
1313-74-0	Hydrogen	10,000	f
4102-96-0	Nitromethane [Nitro, Methylene-]	10,000	f
1291-21-1	Chlorine monoxide [Chlorine oxide]	10,000	f
7809-62-6	Silane	10,000	g
10025-78-2	Trichloroethane [Silane, trichloro-]	10,000	g
25167-67-7	Butane	10,000	g

<sup>1</sup> A flammable substance when used as a fuel or held for sale as a fuel at a retail facility is excluded from all provisions of this part (see § 68.126).  
 Note: Basis for listing:  
 f Mandated for listing by Congress.  
 f Flammable gas.  
 g Volatile flammable liquid.

Subpart G—Risk Management Plan

Source: 61 FR 32725, June 20, 1996, unless otherwise noted.

§ 68.150 Submissions.

- (a) The owner or operator shall submit a single RMP that includes the information required by §§ 68.155 through 68.165 for all covered processes. The RMP shall be submitted in the method and format to the central point specified by RPA as of the date of submission.
- (b) The owner or operator shall submit the first RMP no later than the latest of the following dates:
  - (1) June 21, 1999;
  - (2) Three years after the date on which a regulated substance is first listed under § 68.130; or
  - (3) The date on which a regulated substance is first present above a threshold quantity in a process.
- (c) The owner or operator of any stationary source for which an RMP was submitted before June 21, 2009, shall revise the RMP to include the informa-

tion required by § 68.160(b)(6) and (14) by June 21, 2009 in the manner specified by EPA prior to that date. Any such submission shall also include the information required by § 68.160(b)(2) (indicating that the submission is a correction to include the information required by § 68.160(b)(6) and (14) or an update under § 68.150).

(d) RMPs submitted under this section shall be updated and corrected in accordance with §§ 68.150 and 68.155.

(e) Notwithstanding the provisions of §§ 68.155 to 68.160, the RMP shall exclude classified information. Subject to appropriate procedures to protect such information from public disclosure, classified data or information excluded from the RMP may be made available in a classified annex to the RMP for review by Federal and state representatives who have received the appropriate security clearances.

(f) Procedures for asserting that information submitted in the RMP is entitled to protection as confidential business information are set forth in §§ 68.151 and 68.152.

(a) FR 6136, June 20, 1996, as amended at 64 FR 875, Jan. 6, 1999, 69 FR 16891, Apr. 9, 2004.

## Environmental Protection Agency

§ 68.160

**§ 68.151 Assertion of claims of confidential business information.**

(a) Except as provided in paragraph (b) of this section, an owner or operator of a stationary source required to report or otherwise provide information under this part may make a claim of confidential business information for any such information that meets the criteria set forth in 40 CFR 2.801.

(b) Notwithstanding the provisions of 40 CFR part 2, an owner or operator of a stationary source subject to this part may not claim as confidential business information the following information:

(1) Registration data required by § 68.160(b)(1) through (b)(6) and (b)(8); (b)(10) through (b)(13); and NAICS code and Program level of the process set forth in § 68.160(b)(7);

(2) Offsite consequence analysis data required by § 68.165(b)(4), (b)(9), (b)(10), (b)(11), and (b)(12);

(3) Accident history data required by § 68.168;

(4) Prevention program data required by § 68.170(b), (d), (e)(1), (f) through (k);

(5) Prevention program data required by § 68.170(b), (d), (e)(1), (f) through (p); and

(6) Emergency response program data required by § 68.180.

(c) Notwithstanding the procedures specified in 40 CFR part 2, an owner or operator asserting a claim of CBI with respect to information contained in its RMP, shall submit to RPA at the time it submits the RMP the following:

(1) The information claimed confidential, provided in a format to be specified by EPA;

(2) A sanitized (redacted) copy of the RMP, with the notation "CBI" substituted for the information claimed confidential, except that a generic category or class name shall be substituted for any chemical name or identity claimed confidential; and

(3) The document or documents substantiating each claim of confidential business information, as described in § 68.162.

161 FR 676, Jan. 6, 1996

**§ 68.162 Substantiating claims of confidential business information.**

(a) An owner or operator claiming that information is confidential business information must substantiate

that claim by providing documentation that demonstrates that the claim meets the substantive criteria set forth in 40 CFR 2.801.

(b) Information that is submitted as part of the substantiation may be claimed confidential by marking it as confidential business information. Information not so marked will be treated as public and may be disclosed without notice to the submitter. If information that is submitted as part of the substantiation is claimed confidential, the owner or operator must provide a sanitized and unannotated version of the substantiation.

(c) The owner, operator, or senior official with management responsibility of the stationary source shall sign a certification that the signer has personally examined the information submitted and that based on inquiry of the persons who compiled the information, the information is true, accurate, and complete, and that those portions of the substantiation claimed as confidential business information would, if disclosed, reveal trade secrets or other confidential business information.

161 FR 685, Jan. 6, 1996

**§ 68.163 Executive summary.**

The owner or operator shall provide in the RMP an executive summary that includes a brief description of the following elements:

(a) The accidental release prevention and emergency response policies at the stationary source;

(b) The stationary source and regulated substances handled;

(c) The general accidental release prevention program and chemical-specific prevention steps;

(d) The five-year accident history;

(e) The emergency response program; and

(f) Planned changes to improve safety.

65 FR 21026, July 20, 1996, as amended at 68 FR 11631, Apr. 2, 2004

**§ 68.160 Registration.**

(a) The owner or operator shall complete a single registration form and include it in the RMP. The form shall cover all regulated substances handled in covered processes.



## § 68.165

## 40 CFR Ch. I (7-E-17 Edition)

(b) The registration shall include the following data:

(1) Stationary source name, street city, county, state, zip code, latitude and longitude, method for obtaining latitude and longitude, and description of location that latitude and longitude represent;

(2) The stationary source ID# and Bradstreet number;

(3) Name and ID# and Bradstreet number of the corporate parent company;

(4) The name, telephone number, and mailing address of the owner or operator;

(5) The name and title of the person or position with overall responsibility for RMP elements and implementation, and (optional) the e-mail address for that person or position;

(6) The name, title, telephone number, 24-hour telephone number, and, as of June 21, 2009, the e-mail address (if an e-mail address exists) of the emergency contact;

(7) For each covered process, the name and CAS number of each regulated substance held above the threshold quantity in the process, the maximum quantity of each regulated substance or mixture in the process (in pounds) to two significant digits, the five- or six-digit NAICS code that most closely corresponds to the process, and the Program level of the process;

(8) The stationary source EPA identifier;

(9) The number of full-time employees at the stationary source;

(10) Whether the stationary source is subject to 40 CFR 190.119;

(11) Whether the stationary source is subject to 40 CFR part 266;

(12) If the stationary source has a CAA Title V operating permit, the permit number, and

(13) The date of the last safety inspection of the stationary source by a Federal, state, or local government agency and the identity of the inspecting entity.

(14) As of June 21, 2009, the name, the mailing address, and the telephone number of the contractor who prepared the RMP (if any);

(15) Source or Parent Company E Mail Address (Optional);

(16) Source Homepage address (Optional);

(17) Phone number at the source for public inquiries (Optional);

(18) Local Emergency Planning Committee (Optional);

(19) OSHA Voluntary Protection Program status (Optional);

(20) As of June 21, 2009, the type of and reason for any changes being made to a previously submitted RMP; the type of changes to RMP are categorized as follows:

(i) Updates and re-submissions required under § 68.190(b);

(ii) Corrections under § 68.195 or for purposes of correcting minor clerical errors, updating administrative information, providing missing data elements or reflecting facility ownership changes, and which do not require an update and re-submission as specified in § 68.190(b);

(iii) De-registrations required under § 68.190(c); and

(iv) Withdrawals of an RMP for any facility that was erroneously considered subject to this part 68.

(c) FR 3076, June 20, 1996, as amended at: FR 590, Jan. 5, 1999; 59 FR 1833, Apr. 9, 2004

Effective Date Note: At 42 FR 416, Jan. 11, 1968, § 68.160 was amended by adding paragraphs (1)(2) and (2), effective Mar. 11, 1971. At 42 FR 1409, Jan. 28, 2017, this amendment was withdrawn. At 42 FR 1369, Mar. 16, 2017, this amendment was further delayed until June 18, 2017. At 32 FR 2728, June 14, 2017, this amendment was further delayed until Feb. 15, 2012. For the convenience of the user, the added text is set forth as follows.

## § 68.166 Registration.

(c) \* \* \*

(1) Method of communication and location of the notification that observed hazard information is available to the public, pursuant to § 68.200(c); and

(2) Whether a public meeting has been held following an RMP reportable accident, pursuant to § 68.210(a).

## § 68.166 Offsite consequence analysis.

(a) The owner or operator shall submit to the RMP information:

(1) One worst-case release scenario for each Program 1 process; and

XII

ADD-079

## Environmental Protection Agency

§ 68.170

(2) For Program 2 and 3 processes, one worst-case release scenario to represent all regulated toxic substances held above the threshold quantity and one worst-case release scenario to represent all regulated flammable substances held above the threshold quantity. If additional worst-case scenarios for toxic or flammables are required by § 68.121(b)(3)(ii), the owner or operator shall submit the same information on the additional scenarios. The owner or operator of Program 2 and 3 processes shall also submit information on one alternative release scenario for each regulated toxic substance held above the threshold quantity and one alternative release scenario to represent all regulated flammable substances held above the threshold quantity.

(b) The owner or operator shall submit the following data:

- (1) Chemical name;
- (2) Percentage weight of the chemical in a liquid mixture (toxics only);
- (3) Physical state (toxics only);
- (4) Hazards of results (give model name if need);
- (5) Scenario (explosion, fire, toxic gas release, or liquid spill) and evaporation;
- (6) Quantity released in pounds;
- (7) Release rate;
- (8) Release duration;
- (9) Wind speed and atmospheric stability class (toxics only);
- (10) Topography (toxics only);
- (11) Distance to endpoint;
- (12) Public and environmental receptors within the distance;
- (13) Passive mitigation considered; and
- (14) Active mitigation considered (alternative releases only).

[61 FR 3326, June 22, 1996, as amended at 64 FR 983, Jan. 8, 1999]

**§ 68.169 Five-year accident history.**

The owner or operator shall submit in the RMP the information provided in § 68.121c in each accident covered by § 68.121a.

**§ 68.170 Prevention program/Program 2.**

(a) For each Program 2 process, the owner or operator shall provide in the RMP the information indicated in

paragraphs (b) through (k) of this section. If the same information applies to more than one covered process, the owner or operator may provide the information only once, but shall indicate to which processes the information applies.

(b) The five- or six-digit NAICS code that most closely corresponds to the process.

(c) The name(s) of the chemical(s) covered.

(d) The date of the most recent review or revision of the safety information and a list of Federal or state regulations or industry-specific design codes and standards used to demonstrate compliance with the safety information requirement.

(e) The date of completion of the most recent hazard review or update.

(1) The expected date of completion of any changes resulting from the hazard review;

- (2) Major hazards identified;
- (3) Process controls in use;
- (4) Mitigation systems in use;
- (5) Monitoring and detection systems in use; and
- (6) Changes since the last hazard review.

(f) The date of the most recent review or revision of operating procedures.

(g) The date of the most recent review or revision of training programs.

(1) The type of training provided—classroom, classroom plus on the job, on the job; and

(2) The type of competency testing used.

(h) The date of the most recent review or revision of maintenance procedures and the date of the most recent equipment inspection or test and the equipment inspected or tested.

(1) The date of the most recent compliance audit and the expected date of completion of any changes resulting from the compliance audit.

(2) The date of the most recent incident investigation and the expected date of completion of any changes resulting from the investigation.

(k) The date of the most recent change that triggered a review or revision of safety information, the hazard

## § 68.175

review, operating or maintenance procedures, or training.

(61 FR 31726, June 20, 1996, as amended at 64 FR 21350, Jan. 6, 1999)

**Effective Date Note:** At 62 FR 4704, Jan. 13, 1997, § 68.175 was amended by revising paragraphs (1) and (1), effective Mar. 14, 2007. At 63 FR 3488, Jan. 26, 2007, this amendment was dual Mar. 11, 2007. At 63 FR 12560, Mar. 16, 2007, this amendment was further delayed until June 19, 2007. At 62 FR 27035, June 16, 2007, this amendment was further delayed until Feb. 19, 2010. For the convenience of the user, the added text is set forth as follows:

## § 68.170 Prevention program—Program 2.

\* \* \* \* \*

(1) The date of the most recent compliance audit, the expected date of completion of any changes resulting from the compliance audit, and identify whether the most recent compliance audit was a third-party audit, pursuant to § 60.51 and 61.59.

(1) The completion date of the most recent incident investigation and the expected date of completion of any changes resulting from the investigation.

\* \* \* \* \*

## § 68.175 Prevention program—Program 3.

(a) For each Program 3 process, the owner or operator shall provide the information indicated in paragraphs (b) through (p) of this section. If the same information applies to more than one covered process, the owner or operator may provide the information only once, but shall indicate to which process the information applies.

(b) The five- or six-digit NAICS code that most closely corresponds to the process.

(c) The name(s) of the substance(s) covered.

(d) The date on which the safety information was last reviewed or revised.

(e) The date of completion of the most recent PHA or update and the technique used.

(f) The expected date of completion of any changes resulting from the PHA.

(g) Major hazards identified;

(h) Process controls in use;

(i) Mitigation systems in use;

(j) Monitoring and detection systems in use; and

## 40 CFR Ch. I (7–1–17 Edition)

(k) Changes since the last PHA.

(l) The date of the most recent review or revision of operating procedures.

(m) The date of the most recent review or revision of testing programs.

(n) The type of training provided—classroom, classroom plus on the job, on the job, and

(o) The type of competency testing used.

(p) The date of the most recent review or revision of maintenance procedures and the date of the most recent equipment inspection or test and the equipment inspected or tested.

(q) The date of the most recent change that triggered management of change procedures and the date of the most recent review or revision of management of change procedures.

(r) The date of the most recent pre-startup review.

(s) The date of the most recent compliance audit and the expected date of completion of any changes resulting from the compliance audit;

(t) The date of the most recent incident investigation and the expected date of completion of any changes resulting from the investigation;

(u) The date of the most recent review or revision of employee participation plans.

(v) The date of the most recent review or revision of hot work permit procedures.

(w) The date of the most recent review or revision of contractor safety procedures; and

(x) The date of the most recent evaluation of contractor safety performance.

(61 FR 31726, June 20, 1996, as amended at 64 FR 21350, Jan. 6, 1999)

**Effective Date Note:** At 62 FR 4704, Jan. 13, 1997, § 68.175 was amended by revising paragraphs (b) introductory text, (1), (3), (6), (k) and (l) and adding paragraph (s)(7), effective Mar. 14, 2007. At 62 FR 689, Jan. 25, 2007, this amendment was until Mar. 21, 2007. At 62 FR 17083, Mar. 16, 2007, this amendment was further delayed until June 19, 2007. At 62 FR 27143, June 16, 2007, this amendment was further delayed until Feb. 19, 2010. For the convenience of the user, the added and revised text is set forth as follows:

## § 68.175 Prevention program—Program 3.

\* \* \* \* \*

## Environmental Protection Agency

§ 68.180

(c) The most recent process hazard analysis (PHA) or PHA update and recalculation information pursuant to § 68.171 including:

(1) The date of completion of the most recent PHA or update and the technique used.

\* \* \* \* \*

(5) Monitoring and detection systems in use;

(6) Changes since the last PHA, and

(7) Inherently safer technology or design recently implemented since the last PHA, if any, and the technology category (substitution, minimization, simplification and/or moderation).

\* \* \* \* \*

(2) The date of the most recent compliance audit, the expected date of completion of any changes resulting from the compliance audit, and identify whether the most recent compliance audit was a third party audit, pursuant to §§ 61.15 and 68.30.

(3) The completion date of the most recent incident investigation and the expected date of completion of any changes resulting from the investigation.

\* \* \* \* \*

## § 68.180 Emergency response program.

(a) The owner or operator shall provide in the RMP the following information:

(1) Do you have a written emergency response plan?

(2) Does the plan include specific actions to be taken in response to an accidental release of a regulated substance?

(3) Does the plan include procedures for informing the public and local agencies responsible for responding to accidental releases?

(4) Does the plan include information on emergency health care?

(5) The date of the most recent review or update of the emergency response plan.

(6) The date of the most recent emergency response training for employees.

(b) The owner or operator shall provide the name and telephone number of the local agency with which emergency response activities and the emergency response plan is coordinated.

(c) The owner or operator shall list other Federal or state emergency plan

requirements to which the stationary source is subject.

(5) FR 31786, June 20, 1986, as amended at 64 FR 591, Jan. 6, 1999.

REPRESENTATIVE DATE NOTE: At 82 FR 474, Jan. 12, 2017, § 68.180 was revised, effective Mar. 14, 2017. At 82 FR 8455, Jan. 25, 2017, this amendment was made Mar. 21, 2017. At 83 FR 10680, Mar. 16, 2017, this amendment was further delayed until June 19, 2017. At 83 FR 27081, June 14, 2017, this amendment was further delayed until Feb. 19, 2018. For the convenience of the user, the revised text is set forth as follows:

## § 68.180 Emergency response program and exercises.

(a) The owner or operator shall provide in the RMP:

(1) Name, organizational affiliation, phone number, and email address of local emergency planning and response organizations with which the stationary source has coordinated safety emergency response efforts, pursuant to §§ 61.15(1) or 68.30;

(2) The date of the most recent coordination with the local emergency response organizations, pursuant to § 61.15 and

(3) A list of Federal or state emergency plan requirements to which the stationary source is subject.

(b) The owner or operator shall identify in the RMP whether the facility is a responding stationary source or a non-responding stationary source, pursuant to § 68.92.

(3) For non-responding stationary sources the owner or operator shall identify:

(i) For stationary sources with any regulated toxic substances held in a process above the threshold quantity, whether the stationary source is included in the community emergency response plan developed under 42 U.S.C. 11033 pursuant to § 61.15(b)(1);

(ii) For stationary sources with only regulated flammable substances held in a process above the threshold quantity, the date of the most recent coordination with the local fire department, pursuant to § 68.90(b)(2);

(iii) What mechanisms are in place to notify the public and emergency responders when there is a need for emergency response; and

(iv) The date of the most recent notification exercise, as required in § 68.90(a).

(2) For responding stationary sources, the owner or operator shall identify:

(i) The date of the most recent review and update of the emergency response plan, pursuant to § 68.95(a)(4);

(ii) The date of the most recent notification exercise, as required in § 68.90(a);

(iii) The date of the most recent field exercise, as required in § 68.95(b)(1); and

(iv) The date of the most recent tabletop exercise, as required in § 68.95(b)(2).

**§68.185****§68.185 Certification.**

(a) For Program 1 processes, the owner or operator shall submit in the RMP the certification statement provided in §68.185(b)(4).

(b) For all other covered processes, the owner or operator shall submit in the RMP a single certification that, to the best of the signer's knowledge, information, and belief formed after reasonable inquiry, the information submitted is true, accurate, and complete.

**§68.190 Updates.**

(a) The owner or operator shall review and update the RMP as specified in paragraph (b) of this section and submit it in the media and format to the central point specified by EPA as of the date of submission.

(b) The owner or operator of a stationary source shall review and update the RMP submitted under §68.185 as follows:

(1) At least once every five years from the date of its initial submission or most recent update required by paragraphs (b)(2) through (b)(7) of this section, whichever is later. For purposes of determining the date of initial submissions, RMPs submitted before June 21, 1999 are considered to have been submitted on that date.

(2) No later than three years after a newly regulated substance is first listed by EPA;

(3) No later than the date on which a new regulated substance is first present in an already covered process above a threshold quantity;

(4) No later than the date on which a regulated substance is first present above a threshold quantity in a new process;

(5) Within six months of a change that requires a revised PFA or hazard review;

(6) Within six months of a change that requires a revised onsite consequence analysis as provided in §68.186; and

(7) Within six months of a change that alters the Program level that applied to any covered process.

(c) If a stationary source is no longer subject to this part, the owner or operator shall submit a de-registration to EPA within six months indicating that

**(4) CFR Ch. I (7-1-17 Edition)**

the stationary source is no longer covered.

(5) FR 3178, July 20, 1998, as amended at 64 FR 16870, Apr. 8, 2004.

**REPEATED DATE NOTE.** At 52 FR 404, Jan. 13, 1987 (50) was amended by adding a sentence at the end of paragraph (c) effective Mar. 14, 2011. At 55 FR 3499, Jan. 26, 2010, this amendment was null. Mar. 31, 2017. At 52 FR 13568, Mar. 18, 2017, this amendment was further delayed until June 13, 2017. At 68 FR 71133, June 13, 2017, this amendment was further delayed until Feb. 13, 2018. For the convenience of the user, the revised text is set forth as follows.

**§68.186 Updates.**

(a) Prior to de-registration the owner or operator shall meet applicable reporting and incident investigation requirements in accordance with §§63.48, 68.60, and/or 68.81.

**§68.185 Required corrections.**

The owner or operator of a stationary source for which a RMP was submitted shall correct the RMP as follows:

(a) New accident history information.—For any accidental release meeting the five-year accident history reporting criteria of §60.42 and occurring after April 9, 2004, the owner or operator shall submit the data required under §§68.180, 68.170(j), and 68.175(i) with respect to that accident within six months of the release or by the time the RMP is updated under §68.190, whichever is earlier.

(b) Emergency contact information.—Beginning June 21, 2004, within one month of any change in the emergency contact information required under §68.168(h)(ii), the owner or operator shall submit a correction of that information.

(59 FR 16842, Apr. 8, 2004)

**Subpart H—Other Requirements**

Source: 44 FR 31728, June 20, 1979, unless otherwise noted.

**§68.200 Recordkeeping.**

The owner or operator shall maintain records supporting the implementation



**Environmental Protection Agency****§ 68.210**

of this part for five years unless otherwise provided in subpart D of this part.

**EFFECTIVE DATE NOTE:** At 82 FR 4704, Jan. 13, 2017, § 68.210 was revised, effective Mar. 14, 2017. At 82 FR 8999, Jan. 12, 2017, this amendment was until Mar. 31, 2017. At 82 FR 18068, May 16, 2017, this amendment was further delayed until June 18, 2017. At 82 FR 27111, June 14, 2017, this amendment was further delayed until Feb. 19, 2019. For the convenience of the user, the added text is set forth as follows:

**§ 68.200 Recordkeeping.**

The owner or operator shall maintain records supporting the implementation of this part at the stationary source for five years, unless otherwise provided in subpart D of this part.

**§ 68.210 Availability of information to the public.**

(a) The RMP required under subpart G of this part shall be available to the public under 42 U.S.C. 1714(c).

(b) The disclosure of classified information by the Department of Defense or other Federal agencies or contractors of such agencies shall be controlled by applicable laws, regulations, or executive orders concerning the release of classified information.

**EFFECTIVE DATE NOTE:** At 82 FR 4704, Jan. 13, 2017, § 68.210 was revised, effective Mar. 14, 2017. At 82 FR 18068, May 16, 2017, this amendment was until Mar. 31, 2017. At 82 FR 13400, Mar. 26, 2017, this amendment was further delayed until June 14, 2017. At 82 FR 31193, June 14, 2017, this amendment was further delayed until Feb. 19, 2019. For the convenience of the user, the added text is set forth as follows:

**§ 68.210 Availability of information to the public.**

(1) **RMP reporting.** The RMP required under subpart G of this part shall be available to the public under 42 U.S.C. 1714(c) and 42 CFR part 1409.

(b) **Classified hazard information.** The owner or operator of a stationary source shall provide, upon request by any member of the public, the following classified hazard information for all regulated processes in applicable units:

(1) Regulated substances information. Name(s) of regulated substances held in a process;

(2) Safety data sheets (SDS) SDSs for all regulated substances located at the facility;

(c) **Accident history information.** Provide the five year accident history information required under § 68.42.

(4) **Emergency response program.** The following summary information concerning the stationary source's compliance with § 68.100(d) or the emergency response provisions of subpart F:

(i) Whether the stationary source is a responding stationary source or a non-responding stationary source;

(ii) Name and phone number of local emergency response organizations with which the owner or operator last coordinated emergency response efforts, pursuant to § 68.180; and

(iii) For stationary sources subject to § 68.156 procedures for limiting the public and local emergency response agencies about accidental releases:

(B) Exercise. A list of scheduled exercises required under § 68.18, and

(C) LEPC contact information. Include LEPC name, phone number, and web address as available.

(c) **Notification of availability of information.** The owner or operator shall provide ongoing notification on a company Web site, social media platforms, or through other publicly accessible means that:

(1) Information specified in paragraph (b) of this section is available to the public upon request. (The notification shall)

(A) Specify the information elements, identified in paragraph (b) of this section, that can be requested; and

(B) Provide instructions for how to request the information (e.g., email, mailing address, or telephone or Web site request);

(2) Identify where to access information on community preparedness, if available, including shelter in place and evacuation procedures;

(3) Inventory to provide requested information. The owner or operator shall provide the requested information under paragraph (b) of this section within 45 days of receiving a request from any member of the public;

(c) **Public meetings.** The owner or operator of a stationary source shall hold a public meeting to provide information required under § 68.42 as well as other relevant clean air hazard information, such as that described in paragraph (b) of this section, no later than 90 days after any accident subject to reporting under § 68.42.

(d) **Classified information.** The disclosure of information classified by the Department of Defense or other Federal agencies or contractors of such agencies shall be controlled by applicable laws, regulations, or executive orders concerning the release of classified information.

(4) **OSHA.** An owner or operator reporting (1) for information required under this section shall provide a sanitized version to the public. Assertion of claims of OSHA and sanitation of OSHA claims shall be in the same manner as required in § 68.153 and § 68.158 for information contained in the RMP.



## § 68.215

required under subpart C of this part. As provided under § 68.215(a)(3), an owner or operator of a stationary source may not claim five year accident history information as CBI. As provided in § 68.215(c)(2), an owner or operator of a stationary source asserting that a chemical name is CBI shall provide a generic category or class name as a substitute.

**§ 68.215 Permit content and air permitting authority or designated agency requirements.**

(a) These requirements apply to any stationary source subject to this part 68 and parts 70 or 71 of this chapter. The 40 CFR part 70 or part 71 permit for the stationary source shall contain:

(1) A statement listing this part as an applicable requirement;

(2) Conditions that require the source owner or operator to submit:

(i) A compliance schedule for meeting the requirements of this part by the date provided in § 68.204; or

(ii) As part of the compliance certification submitted under 40 CFR 70.212(b), a certification statement that the source is in compliance with all requirements of this part, including the registration and submission of the RMP.

(3) The owner or operator shall submit any additional relevant information requested by the air permitting authority or designated agency.

(c) For 40 CFR part 70 or part 71 permits issued prior to the deadline for registering and submitting the RMP and which do not contain permit conditions described in paragraph (a) of this section, the owner or operator or air permitting authority shall initiate permit revision or reopening according to the procedures of 40 CFR 70.7 or 71.7 to incorporate the terms and conditions consistent with paragraph (a) of this section.

(d) The state may delegate the authority to implement and enforce the requirements of paragraph (a) of this section to a state or local agency or agencies other than the air permitting authority. An up-to-date copy of any delegation instrument shall be maintained by the air permitting authority. The state may enter a written agreement with the Administrator under which EPA will implement and enforce

## 40 CFR Ch. I (7-1-17 Edition)

the requirements of paragraph (a) of this section.

(e) The air permitting authority or the agency designated by delegation or agreement under paragraph (d) of this section shall, at a minimum:

(1) Verify that the source owner or operator has registered and submitted an RMP or a revised plan when required by this part;

(2) Verify that the source owner or operator has submitted a source certification or in its absence has submitted a compliance schedule consistent with paragraph (a)(2) of this section;

(3) For some or all of the sources subject to this section, use one or more mechanisms such as, but not limited to, a completeness check, source audits, record reviews, or facility inspections to ensure that permitted sources are in compliance with the requirements of this part, and

(4) Initiate enforcement action based on paragraphs (e)(1) and (e)(2) of this section as appropriate.

## § 68.220 Audits.

(a) In addition to inspections for the purpose of regulatory development and enforcement of the Act, the implementing agency shall periodically audit RMPs submitted under subpart C of this part to review the adequacy of such RMPs and require revisions of RMPs when necessary to ensure compliance with subpart C of this part.

(b) The implementing agency shall select stationary sources for audits based on any of the following criteria:

(1) Accident history of the stationary source;

(2) Accident history of other stationary sources in the same industry;

(3) Quantity of regulated substances present at the stationary source;

(4) Location of the stationary source and its proximity to the public and environmental receptors;

(5) The presence of specific regulated substances;

(6) The hazards identified in the RMP; and

(7) A plan providing for neutral, random oversight.

(c) Exemption from audits. A stationary source with a Star or Merit

## Environmental Protection Agency

§ 68.220

ranking under CERCLA's voluntary prevention program shall be exempt from audit under paragraph (b)(2) and (b)(3) of this section.

(d) The implementing agency shall have access to the stationary source, supporting documentation, and any area where an accidental release could occur.

(e) Based on the audit, the implementing agency may issue the owner or operator of a stationary source a written preliminary determination of necessary revisions to the stationary source's RMP to ensure that the RMP meets the criteria of subpart G of this part. The preliminary determination shall include an explanation for the basis for the revisions, reflecting industry standards and guidelines such as AICHA/CSPS guidelines and ASME and API standards, to the extent that such standards and guidelines are applicable, and shall include a timetable for their implementation.

(f) Written response to a preliminary determination. (1) The owner or operator shall respond in writing to a preliminary determination made in accordance with paragraph (e) of this section. The response shall state the owner or operator will implement the revisions contained in the preliminary determination in accordance with the timetable included in the preliminary determination or shall state that the owner or operator rejects the revisions in whole or in part. For each rejected revision, the owner or operator shall explain the basis for rejecting such revision. Such explanation may include substitute revisions.

(2) The written response under paragraph (f)(1) of this section shall be received by the implementing agency within 90 days of the issue of the preliminary determination or a shorter period of time as the implementing agency specifies in the preliminary determination as necessary to protect public health and the environment. Prior to the written response being due

and upon written request from the owner or operator, the implementing agency may provide an additional time for the response to be received.

(g) After providing the owner or operator an opportunity to respond under paragraph (f) of this section, the implementing agency may issue the owner or operator a written final determination of necessary revisions to the stationary source's RMP. The final determination may adopt or modify the revisions contained in the preliminary determination under paragraph (e) of this section or may adopt or modify the substitute revisions provided in the response under paragraph (f) of this section. A final determination that adopts a revision rejected by the owner or operator shall include an explanation of the basis for the revision. A final determination that fails to adopt a substitute revision provided under paragraph (f) of this section shall include an explanation of the basis for finding such substitute revision unreasonable.

(h) Thirty days after completion of the actions detailed in the implementation schedule set in the final determination under paragraph (g) of this section, the owner or operator shall be in violation of subpart G of this part and this section unless the owner or operator revises the RMP prepared under subpart G of this part as required by the final determination, and submits the revised RMP as required under § 68.150.

(i) The public shall have access to the preliminary determinations, responses, and final determinations under this section in a manner consistent with § 68.210.

(j) Nothing in this section shall preclude, limit, or interfere in any way with the authority of EPA or the state to exercise its enforcement, investigatory, and information gathering authorities concerning this part under the Act.

Pl. 68, App. A

40 CFR Ch. I (7-1-17 Edition)

APPENDIX A TO PART 68—TABLE OF TOXIC ENDPOINTS  
 (As defined in § 68.02 of this part)

CAS No.	Chemical name	Toxic end-point (mg/kg)
107-17-8	Acrolein (2-Propenal)	0.001
107-13-1	Acrylonitrile (2-Propenitrile)	0.075
87-42-8	Acrylamide (2-Acrylamidoethane)	0.00050
107-18-8	Allyl alcohol (2-Propen-1-ol)	0.056
107-11-9	Allylamine (2-Propen-1-amine)	0.0032
6024-41-7	Ammonia (NH <sub>3</sub> )	0.14
7664-41-7	Ammonium hydroxide (20% of (NH <sub>3</sub> ))	0.14
7784-34-1	Ammonium hydroxide	0.010
7734-42-1	Azine	0.0013
76214-34-5	Boron trichloride (Boron trichloride)	0.010
7617-07-7	Boron trifluoride (Boron trifluoride)	0.028
6064-42-4	Boron trifluoride compounds with methyl ether [C <sub>1</sub> ] (Boron trifluoride dimethyl ether)	0.023
7726-66-8	Bromine	0.0053
75-15-0	Carbon dioxide	0.16
7517-04-0	Chlorine	0.0037
73049-14-4	Chlorine dioxide (Chlorine dioxide (ClO <sub>2</sub> ))	0.0024
67-86-3	Chloroform (Trichloromethane)	0.40
54-66-1	Chloroform, other (Methane, trichloride)	0.00125
127-36-2	Chloroform, other (Methane, trichloride)	0.010
4175-26-3	Chloroform, 2-Ethyl-	0.020
125-72-9	Chloroform, (1,1,1-Trichloro- (E)-)	0.029
535-71-4	Cyclohexane	0.030
134-91-6	Cyclohexane (Cyclohexane (Hexane))	0.16
5027-45-7	Diethylene	0.001
75-78-5	Dimethylacetamide (N,N-Dimethylformamide)	0.009
67-14-7	1,1-Dichloroethane (1,1-Dichloroethane)	0.012
64-19-8	Dibromochloroethane (Dibromochloroethane)	0.014
75-15-0	Ethylene glycol (1,2-Ethylene glycol)	0.48
151-56-1	Ethylene glycol (Ethyleneglycol)	0.018
75-71-9	Ethylene oxide (Oxirane)	0.050
7722-41-4	Ethanol	0.0024
55-50-8	Formaldehyde (Methanal)	0.012
142-66-9	Formic acid	0.0012
302-71-2	Hydrogen	0.011
7782-01-0	Hydrogen chloride (hydrogen chloride)	0.020
74-85-2	Hydrogen sulfide	0.011
442-79-0	Hydrogen cyanide (hydrogen cyanide)	0.009
7524-33-3	Hydrogen fluoride (hydrogen fluoride)	0.016
7782-07-5	Hydrogen iodide	0.0040
7782-46-4	Hydrogen nitrate (hydrogen nitrate)	0.042
13455-40-6	Hydrogen sulfide (hydrogen sulfide)	0.00094
78-06-0	Hydroxybenzene (Phenol)	0.14
125-22-8	Hydroxybenzene (Phenol)	0.10
125-26-7	Methacrylonitrile (2-Methacrylonitrile)	0.0027
74-87-3	Methanol (Methanol)	0.52
75-22-1	Methyl acetate (Acetic acid, methyl ester)	0.013
65-14-4	Methyl hydrazine (Hydrazine, methyl-)	0.0091
624-63-9	Methyl isocyanate (Isocyanic acid, methyl ester)	0.012
76-93-1	Methyl mercaptan (Methanethiol)	0.029
495-84-9	Methyl isocyanate (Isocyanic acid, methyl ester)	0.002
75-72-6	Methyl chloroform (1,1,1-Trichloroethane)	0.018
13163-94-0	Methyl acetate (Acetic acid, methyl ester)	0.00027
7527-37-2	Methyl acetate (Acetic acid, methyl ester)	0.026
4927-41-6	Nitric acid (Nitrogen oxide (NO <sub>2</sub> ))	0.071
8014-95-7	Nitric acid (Nitrogen oxide (NO <sub>2</sub> ))	0.010
75-21-0	Nitrous acid (Nitrogen oxide (NO))	0.0045
513-42-3	Polychlorinated biphenyls (Polychlorinated biphenyls)	0.016
75-44-8	Manganese (Carbonic acid)	0.0030
7821-51-0	Phosphine	0.0033
78025-61-8	Phosphorus pentachloride (Phosphorus pentachloride)	0.0030
7745-18-2	Phosphorus trichloride (Phosphorus trichloride)	0.028
7723-34-4	Phosphine	0.022
107-17-8	Propylene Glycol	0.0007
528-61-8	Propyl chloroformate (Chloroformate, propyl ester)	0.010
75-75-8	Propylamine (Amine, 2-methyl-)	0.12
75-15-0	Propylene glycol (Glycol, methyl-)	0.78
7446-09-5	Sulfur dioxide (Sulfur dioxide)	0.0029
7782-56-0	Sulfur hexafluoride (Sulfur hexafluoride (SF <sub>6</sub> ))	0.002
7645-11-0	Sulfur hexafluoride	0.010
75-74-1	Tetraethyllead (Lead tetraethyl)	0.0040

Environmental Protection Agency

§ 69.11

(As amended by § 69.22 of this part)

CAS No.	Chemical name	Toxic and combustible
509-14-2	Isobutene (Methyl ethylene)	0.0040
7739-13-0	Thionyl chloride (Sulfur chloride) (SO <sub>2</sub> ) (T-2)	0.020
100-21-9	Triene 2,4-dioxane (Hexene, 2,4-dioxane-methyl)	0.0070
91-05-7	Triene 2,5-dioxane (Hexene, 2,5-dioxane-methyl)	0.0070
26171-82-5	Toluene diisocyanate (isocyanate) (Hexane, 1,3-diisocyanate-methyl)	0.0070
75-77-4	Triene, azoxane (Hexene, azoxane-methyl)	0.020
103-05-4	Vinyl acetate (Acetic acid ethyl ester)	0.25

(5) FT, 27781, June 30, 1956, as amended at 62 FR 4122, Aug. 26, 1997.

**PART 69—SPECIAL EXEMPTIONS FROM REQUIREMENTS OF THE CLEAN AIR ACT**

**Subpart A—Guam**

- 69.11 New exemptions.
- 69.12 Continuing exemptions.
- 69.13 Title V conditional exemption.

**Subpart B—American Samoa**

- 69.21 New exemptions (Reserved)
- 69.22 Title V conditional exemption.

**Subpart C—Commonwealth of the Northern Mariana Islands**

- 69.31 New exemptions.
- 69.32 Title V conditional exemption.

**Subpart D—The U.S. Virgin Islands**

- 69.41 New exemptions.

**Subpart E—Alaska**

- 69.51 Motor vehicle diesel fuel
  - 69.52 Non-motor vehicle diesel fuel
- Authority: 42 U.S.C. 7515(c), (g) and (l), and 7515-1.
- Source: 50 FR 22671, June 20, 1985, unless otherwise noted.

**Subpart A—Guam**

- 69.11 New exemptions.
- (a) Pursuant to section 303(a) of the Clean Air Act ("CAA") and a petition submitted by the Governor of Guam ("Petition"), the Administrator of the Environmental Protection Agency ("EPA") conditionally exempts electric generating units on Guam from certain CAA requirements.
- (1) A waiver of the requirement to obtain a prevention of significant degra-

dation ("PSD") permit prior to construction is granted for the electric generating units identified in the Petition as Cabras Diesel No. 1, the Tenjo project, and three 6-megawatt diesel generators to be constructed at Orote, with the following conditions:

(i) Each electric generating unit shall not be operated until a final PSD permit is issued for that unit;

(ii) Each electric generating unit shall not be operated until that unit complies with all requirements of the PSD permit, including, if necessary, retrofitting with the best available control technology ("BACT");

(iii) The PSD application for each electric generating unit shall be deemed complete without the submittal of the required one year of on-site meteorological data; however, EPA will not issue a PSD permit to such a unit prior to submission of such data or data which the EPA finds to be an equivalent and acceptable substitute; and

(iv) If any electric generating unit covered by this paragraph is operated either prior to the issuance of a final PSD permit or without BACT equipment that electric generating unit shall be deemed in violation of this waiver and the CAA beginning on the date of commencement of construction of that unit.

(2) A waiver of the three nonattainment area requirements (a construction ban, the use of lowest achievable emission rate control equipment, and emission offset requirements) currently applicable to the Cabras-Pit area is granted for electric generating units with the following conditions:

(i) A tower and meteorological station shall be constructed in the Cabras-Pit area by May 1, 1995.

risk or environmental justice (EJ) communities.

EPA believes there were numerous opportunities for the public to provide meaningful input on this final rule. This final rule was developed following extensive public feedback through Executive Order 13650 listening sessions, public comments on the RFI and the proposed rulemaking, and the public hearing held on March 29, 2016. EPA has incorporated requirements in the final rule to prevent accidental releases, mitigate the impacts of releases that do occur, and share chemical hazard information with the public.

**K. Congressional Review Act (CRA)**

This action is subject to the CRA, and the EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is a "major rule" as defined by 5 U.S.C. 804(2).

**List of Subjects in 40 CFR Part 68**

Environmental protection, Administrative practice and procedure, Air pollution control, Chemicals, Hazardous substances, Intergovernmental relations, Reporting and recordkeeping requirements.

Dated: December 21, 2016.

Gina McCarthy,

Administrator.

For the reasons set out in the preamble, title 40, chapter I, part 68, of the Code of Federal Regulations is amended as follows:

**PART 68—CHEMICAL ACCIDENT PREVENTION PROVISIONS**

- 1. The authority citation for part 68 continues to read as follows:

Authority: 42 U.S.C. 7412(r), 7601(a)(1), 7601–7601.

- 2. Amend § 68.3 by adding in alphabetical order the definitions "Active measures", "CBI", "Inherently safer technology or design", "LEPC", "Passive measures", "Practicability", "Procedural measures", "Root cause", and "Third-party audit" to read as follows:

**§ 68.3 Definitions.**

**Active measures** mean risk management measures or engineering controls that rely on mechanical, or other energy input to detect and respond to process deviations. Examples of active measures include alarms, safety instrumented systems, and detection hardware (such as hydrocarbon sensors).

**CBI** means confidential business information.

**Inherently safer technology or design** means risk management measures that minimize the use of regulated substances, substitute less hazardous substances, moderate the use of regulated substances, or simplify covered processes in order to make accidental releases less likely, or the impacts of such releases less severe.

**LEPC** means local emergency planning committee as established under 42 U.S.C. 13001(r).

**Passive measures** mean risk management measures that use design features that reduce either the frequency or consequence of the hazard without human, mechanical, or other energy input. Examples of passive measures include pressure vessel designs, dikes, berms, and blast walls.

**Practicability** means the capability of being successfully accomplished within a reasonable time, accounting for economic, environmental, legal, social, and technological factors. Environmental factors would include consideration of potential transferred risks for new risk reduction measures.

**Procedural measures** mean risk management measures such as policies, operating procedures, training, administrative controls, and emergency response actions to prevent or minimize incidents.

**Root cause** means a fundamental, underlying, system-related reason why an incident occurred.

**Third-party audit** means a compliance audit conducted pursuant to the requirements of § 68.55 and/or § 68.90, performed or led by an entity (individual or firm) meeting the competency and independence described in § 68.50(c) or § 68.80(c).

- 3. Amend § 68.10 by:
  - a. Revising paragraph (a).
  - b. Redesignating paragraphs (b) through (j) as paragraphs (2) through (j);
  - c. Adding new paragraphs (i) through (e); and
  - d. Revising the newly designated paragraph (f)(2).

The revisions and additions read as follow:

**§ 68.10 Applicability.**

- (a) Except as provided in paragraphs (b) through (e) of this section, an owner

or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process, as determined under § 68.115, shall comply with the requirements of this part no later than the latest of the following dates:

- (1) June 21, 1999,
- (2) Three years after the date on which a regulated substance is first listed under § 68.130;
- (3) The date on which a regulated substance is first present above a threshold quantity in a process; or
- (4) For any revisions to this part, the effective date of the final rule that revises this part.

(b) By March 14, 2018 the owner or operator of a stationary source shall comply with the emergency response coordination activities in § 68.93.

(c) Within three years of when the owner or operator determines that the stationary source is subject to the emergency response program requirements of § 68.95, pursuant to § 68.80(a), the owner or operator must develop and implement an emergency response program in accordance with § 68.95.

(d) By March 15, 2021, the owner or operator shall comply with the following provisions promulgated on January 13, 2017.

- (1) Third-party audit provisions in §§ 68.50(f), 68.50(g), 68.50(h), 68.59, 68.79(i), 68.79(j), 68.79(h), and 68.80;
- (2) Incident investigation root cause analysis provisions in §§ 68.80(d)(7) and 68.81(d)(7);
- (3) Safer technology and alternatives analysis provisions in § 68.67(c)(3);
- (4) Emergency response exercise provisions of § 68.95; and
- (5) Availability of information provisions in § 68.210(b) through (e).

(e) By March 14, 2023, the owner or operator shall comply with the risk management plan provisions of subpart C of this part promulgated on January 13, 2017.

- (1) \* \* \*
- (2) The distance to a toxic or flammable endpoint for a worst-case release assessment conducted under subpart B and § 68.25 is less than the distance to any public receptor as defined in § 68.3, and

- 4. Amend § 68.12 by:
  - a. Revising paragraphs (c)(4) and (5), and adding paragraph (c)(6); and
  - b. Revising paragraphs (d)(4) and (5), and adding paragraph (d)(6).

The revisions and additions read as follows:

**§ 68.12 General requirements.**



(4) Coordinate response actions with local emergency planning and response agencies as provided in § 68.93;

(5) Develop and implement an emergency response program, and conduct exercises, as provided in §§ 68.90 to 68.96; and

(6) Submit as part of the RMP the data on prevention program elements for Program 2 processes as provided in § 68.170.

(4) Coordinate response actions with local emergency planning and response agencies as provided in § 68.93;

(5) Develop and implement an emergency response program, and conduct exercises, as provided in §§ 68.90 to 68.96; and

(6) Submit as part of the RMP the data on prevention program elements for Program 3 processes as provided in § 68.175.

■ 5. Amend § 68.48 by revising paragraph (a)(1) to read as follows:

**§ 68.48 Safety information.**

(1) Safety Data Sheets (SDS) that meet the requirements of 29 CFR 1910.1200(g);

■ 6. Amend § 68.50 by revising paragraph (a)(2) to read as follows:

**§ 68.50 Hazard review.**

(2) Opportunities for equipment malfunctions or human errors that could cause an accidental release, including findings from incident investigations.

■ 7. Amend § 68.54 by revising paragraphs (a), (b), and (c); and adding paragraph (e) to read as follows:

**§ 68.54 Training.**

(a) The owner or operator shall ensure that each employee presently involved in operating a process, and each employee newly assigned to a covered process have been trained or tested competent in the operating procedures provided in § 68.52 that pertain to their duties. For those employees already operating a process on June 21, 1995, the owner or operator may certify in writing that the employee has the required knowledge, skills, and abilities to safely carry out the duties and responsibilities as provided in the operating procedures.

(b) Refresher training. Refresher training shall be provided at least every three years, and more often if necessary, to each employee involved in operating a process to ensure that the employee

understands and adheres to the current operating procedures of the process. The owner or operator, in consultation with the employees operating the process, shall determine the appropriate frequency of refresher training.

(d) The owner or operator shall ensure that employees involved in operating a process are trained in any updated or new procedures prior to startup of a process after a major change.

(e) For the purposes of this section, the term employee also includes supervisors responsible for directing process operations.

■ 8. Amend § 68.58 by revising paragraph (a) and adding paragraphs (f) through (g) to read as follows:

**§ 68.58 Compliance audits.**

(a) The owner or operator shall certify that they have evaluated compliance with the provisions of this subpart for each covered process, at least every three years to verify that the procedures and practices developed under the rule are adequate and are being followed. When required as set forth in paragraph (f) of this section, the compliance audit shall be a third-party audit.

(f) *Third-party audit applicability.* The next required compliance audit shall be a third-party audit when one of the following conditions apply:

(1) An accidental release meeting the criteria in § 68.42(a) from a covered process at a stationary source has occurred; or

(2) An implementing agency requires a third-party audit due to conditions at the stationary source that could lead to an accidental release of a regulated substance, or when a previous third-party audit failed to meet the competency or independence criteria of § 68.59(c).

(g) *Implementing agency notification and appeals.* (1) If an implementing agency makes a preliminary determination that a third party audit is necessary pursuant to paragraph (f)(2) of this section, the implementing agency will provide written notice to the owner or operator that describes the basis for this determination.

(2) Within 30 days of receipt of such written notice, the owner or operator may provide information and data to, and may consult with, the implementing agency on the determination. Thereafter, the implementing agency will provide a final determination to the owner or operator.

(3) If the final determination requires a third-party audit, the owner or

operator shall comply with the requirements of § 68.59, pursuant to the schedule in paragraph (h) of this section.

(4) *Appeals.* The owner or operator may appeal a final determination made by an implementing agency under paragraph (g)(2) of this section within 30 days of receipt of the final determination. The appeal shall be made to the EPA Regional Administrator, or for determinations made by other implementing agencies, the administrator or director of such implementing agency. The appeal shall contain a clear and concise statement of the issues, facts in the case, and any relevant additional information. In reviewing the appeal, the implementing agency may request additional information from the owner or operator. The implementing agency will provide a written final decision on the appeal to the owner or operator.

(h) *Schedule for conducting a third-party audit.* The audit and audit report shall be completed as follows, unless a different timeframe is specified by the implementing agency:

(1) For third-party audits required pursuant to paragraph (f)(1) of this section, within 12 months of the release; or

(2) For third-party audits required pursuant to paragraph (f)(2) of this section, within 12 months of the date of the final determination pursuant to paragraph (g)(2) of this section.

However, if the final determination is appealed pursuant to paragraph (g)(4) of this section, within 12 months of the date of the final decision on the appeal.

■ 9. Section 68.59 is added to subpart C to read as follows:

**§ 68.59 Third-party audits.**

(a) *Applicability.* The owner or operator shall engage a third-party to conduct an audit that evaluates compliance with the provisions of this subpart in accordance with the requirements of this section when either criterion of § 68.58(f) is met.

(1) *Third-party auditors and auditing teams.* The owner or operator shall either:

(1) Engage a third-party auditor meeting all of the competency and independence criteria in paragraph (c) of this section; or

(2) Assemble an auditing team, led by a third-party auditor meeting all of the competency and independence criteria in paragraph (c) of this section. The team may include:

(i) Other employees of the third-party auditor firm meeting the independence criteria of paragraph (c)(2) of this section; and



(ii) Other personnel not employed by the third-party auditor firm, including facility personnel.

(c) **Third-party auditor qualifications.** The owner or operator shall determine and document that the third-party auditor(s) meet the following competency and independence requirements:

(1) **Competency requirements.** The third-party auditor(s) shall be:

- (i) Knowledgeable with the requirements of this part;
- (ii) Experienced with the stationary source type and processes being audited and applicable recognized and generally accepted good engineering practices, and
- (iii) Trained and/or certified in proper auditing techniques.

(2) **Independence requirements.** The third-party auditor(s) shall:

- (a) Act impartially when performing all activities under this section;
- (b) Receive no financial benefit from the outcome of the audit, apart from payment for auditing services. For purposes of this paragraph, retired employees who otherwise satisfy the third-party auditor independence criteria in this section may qualify as independent if their sole continuing financial attachments to the owner or operator are employer-financed or managed retirement and/or health plans;
- (iii) Not have conducted past research, development, design, construction services, or consulting for the owner or operator within the last two years. For purposes of this requirement, consulting does not include participating or participating in third-party audits pursuant to § 68.58 or § 68.60. An audit firm with personnel who, before working for the auditor, conducted research, development, design, construction, or consulting services for the owner or operator within the last two years as an employee or contractor may meet the requirements of this subsection by ensuring such personnel do not participate in the audit, or manage or advise the audit team concerning the audit;
- (c) Not provide other business or consulting services to the owner or operator, including advice or assistance to implement the findings or recommendations in an audit report, for a period of at least two years following submission of the final audit report;

(v) Ensure that all third-party personnel involved in the audit sign and date a conflict of interest statement documenting that they meet the independence criteria of this paragraph; and

(vi) Ensure that all third-party personnel involved in the audit do not accept future employment with the owner or operator of the stationary source for a period of at least two years following submission of the final audit report. For purposes of this requirement, employment does not include performing or participating in third-party audits pursuant to § 68.58 or § 68.60.

(1) The auditor shall have written policies and procedures to ensure that all personnel comply with the competency and independence requirements of this section.

(d) **Third party auditor responsibilities.** The owner or operator shall ensure that the third party auditor:

- (1) Manages the audit and participates in audit initiation, design, implementation, and reporting;
- (2) Determines appropriate roles and responsibilities for the audit team members based on the qualifications of each team member;
- (3) Prepares the audit report and where there is a team, documents the full audit team's views in the final audit report;
- (4) Certifies the final audit report and its contents as meeting the requirements of this section; and
- (5) Provides a copy of the audit report to the owner or operator.

(e) **Audit report.** The audit report shall:

- (1) Identify all persons participating on the audit team, including names, titles, employers and/or affiliations, and summaries of qualifications. For third-party auditors, include information demonstrating that the competency requirements in paragraph (c)(1) of this section are met;
- (2) Describe or incorporate by reference the policies and procedures required under paragraph (d)(5) of this section;
- (3) Document the auditor's evaluation for each covered process, of the owner or operator's compliance with the provisions of this subpart to determine whether the procedures and practices developed by the owner or operator under this rule are adequate and being followed;
- (4) Document the findings of the audit, including any identified compliance or performance deficiencies;
- (5) Summarize any significant revisions (if any) between draft and final versions of the report; and
- (6) Include the following certification, signed and dated by the third-party auditor or third-party audit team member leading the audit:

I certify that this RMP compliance audit report was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information upon which the audit is based. I further certify that the audit was conducted and this report was prepared pursuant to the requirements of subject C of 40 CFR part 65 and all other applicable audits, competencies, independence, impartiality, and conflict of interest standards and protocols. Based on my personal knowledge and experience, and integrity of personnel involved in the audit, the information submitted herein is true, accurate, and complete.

(f) **Third-party audit findings—(1) Findings response report.** As soon as possible, but no later than 90 days after receiving the final audit report, the owner or operator shall determine an appropriate response to each of the findings in the audit report, and develop a findings response report that includes:

- (i) A copy of the final audit report;
- (ii) An appropriate response to each of the audit report findings;
- (iii) A schedule for promptly addressing deficiencies; and
- (iv) A certification, signed and dated by a senior corporate officer, or an official in an equivalent position, of the owner or operator of the stationary source, stating:

I certify under penalty of law that I have engaged a third party to perform or lead an audit team to conduct a third-party audit in accordance with the requirements of 40 CFR 68.58 and that the attached RMP compliance audit report was received, reviewed, and responded to under my direction or supervision by qualified personnel. I further certify that appropriate responses to the findings have been identified and deficiencies were corrected, or are being corrected, consistent with the requirements of subject C of 40 CFR part 65, as documented herein. Based on my personal knowledge and experience, or inquiry of personnel involved in evaluating the report findings and determining appropriate responses to the findings, the information submitted herein is true, accurate, and complete. I am aware that there are significant penalties for making false material statements, representations, or certifications, including the possibility of fines and imprisonment for knowing violations.

(2) **Schedule implementation.** The owner or operator shall implement the schedule to address deficiencies identified in the audit findings response report in paragraph (f)(1)(iii) of this section and document the action taken to address each deficiency, along with the date completed.

(3) **Submission to Board of Directors.** The owner or operator shall immediately provide a copy of each document required under paragraphs (f)(1) and (2) of this section, when completed, to the owner or operator's

I certify under penalty of law that I have engaged a third party to perform or lead an audit team to conduct a third-party audit in accordance with the requirements of 40 CFR 68.58 and that the attached RMP compliance audit report was received, reviewed, and responded to under my direction or supervision by qualified personnel. I further certify that appropriate responses to the findings have been identified and deficiencies were corrected, or are being corrected, consistent with the requirements of subject C of 40 CFR part 65, as documented herein. Based on my personal knowledge and experience, or inquiry of personnel involved in evaluating the report findings and determining appropriate responses to the findings, the information submitted herein is true, accurate, and complete. I am aware that there are significant penalties for making false material statements, representations, or certifications, including the possibility of fines and imprisonment for knowing violations.

(2) **Schedule implementation.** The owner or operator shall implement the schedule to address deficiencies identified in the audit findings response report in paragraph (f)(1)(iii) of this section and document the action taken to address each deficiency, along with the date completed.

(3) **Submission to Board of Directors.** The owner or operator shall immediately provide a copy of each document required under paragraphs (f)(1) and (2) of this section, when completed, to the owner or operator's

I certify under penalty of law that I have engaged a third party to perform or lead an audit team to conduct a third-party audit in accordance with the requirements of 40 CFR 68.58 and that the attached RMP compliance audit report was received, reviewed, and responded to under my direction or supervision by qualified personnel. I further certify that appropriate responses to the findings have been identified and deficiencies were corrected, or are being corrected, consistent with the requirements of subject C of 40 CFR part 65, as documented herein. Based on my personal knowledge and experience, or inquiry of personnel involved in evaluating the report findings and determining appropriate responses to the findings, the information submitted herein is true, accurate, and complete. I am aware that there are significant penalties for making false material statements, representations, or certifications, including the possibility of fines and imprisonment for knowing violations.

(2) **Schedule implementation.** The owner or operator shall implement the schedule to address deficiencies identified in the audit findings response report in paragraph (f)(1)(iii) of this section and document the action taken to address each deficiency, along with the date completed.

(3) **Submission to Board of Directors.** The owner or operator shall immediately provide a copy of each document required under paragraphs (f)(1) and (2) of this section, when completed, to the owner or operator's

audit committee of the Board of Directors, or other comparable committee or individual, if applicable.

(g) Recordkeeping. The owner or operator shall retain at the stationary source, the two most recent final third-party audit reports, related findings response reports, documentation of actions taken to address deficiencies, and related records. This requirement does not apply to any document that is more than five years old.

■ 10. Amend § 68.60 by:

- a. Revising paragraph (a);
- b. Redesignating paragraphs (c) through (f) as paragraphs (d) through (g);
- c. Adding a new paragraph (h); and
- d. Revising the newly designated paragraphs (d) and (g).

The revisions and additions read as follows:

§ 68.60 Incident investigation.

(a) The owner or operator shall investigate each incident that:

(1) Resulted in a catastrophic release (including when the affected process is decommissioned or destroyed following, or as the result of, an incident); or

(2) Could reasonably have resulted in a catastrophic release (i.e., was a near miss).

(c) An incident investigation team shall be established and consist of at least one person knowledgeable in the process involved and other persons with appropriate knowledge and experience to thoroughly investigate and analyze the incident.

(d) A report shall be prepared at the conclusion of the investigation. The report shall be completed within 12 months of the incident, unless the implementing agency approves, in writing, an extension of time. The report shall include:

(1) Date, time, and location of incident;

(2) Date investigation began;

(3) A description of the incident, in chronological order, providing all relevant facts;

(4) The name and amount of the regulated substance involved in the release (e.g., fire, explosion, toxic gas loss or containment) or near miss and the duration of the event;

(5) The consequences, if any, of the incident including, but not limited to: injuries, fatalities, the number of people evacuated, the number of people sheltered in place, and the impact on the environment;

(6) Emergency response actions taken;

(7) The factors that contributed to the incident including the initiating event,

direct and indirect contributing factors, and root causes. Root causes shall be determined by conducting an analysis for each incident using a recognized method; and

(8) Any recommendations resulting from the investigation and a schedule for addressing them.

(g) Incident investigation reports shall be retained for five years.

■ 11. Amend § 68.65 by revising the first sentence of paragraph (a) and the note to paragraph (b) to read as follows:

§ 68.65 Process safety information.

(a) The owner or operator shall complete a compilation of written process safety information before conducting any process hazard analysis required by the rule, and shall keep process safety information up-to-date.

(b) \* \* \*

Note to paragraph (b) Safety Data Sheets (SDS) meeting the requirements of 29 CFR 1910.1201(c) may be used to comply with this requirement to the extent they contain the information required by paragraph (b) of this section.

■ 12. Amend § 68.67 by:

- a. Revising paragraph (c)(2);
- b. Amending paragraph (c)(6) by removing the word "and";
- c. Amending paragraph (h)(2) by removing the period at the end of the paragraph and adding "; and" in its place; and
- d. Adding paragraph (c)(a).

The revisions and additions read as follows:

§ 68.67 Process hazard analysis.

(2) The findings from all incident investigations required under § 68.61, as well as any other potential failure scenarios:

(10) For processes in NARCS 322, 324, and 325, safer technology and alternative risk management measures applicable to eliminating or reducing risk from process hazards

(i) The owner or operator shall consider, in the following order of preference inherently safer technology or design, passive measures, active measures, and procedural measures. A combination of risk management measures may be used to achieve the desired risk reduction.

(ii) The owner or operator shall determine the practicability of the inherently safer technologies and designs considered.

■ 13. Amend § 68.71 by adding paragraph (d), to read as follows:

§ 68.71 Training.

(d) For the purposes of this section, the term employee also includes supervisors with process operational responsibilities.

■ 14. Amend § 68.79 by revising paragraph (a) and adding paragraphs (f) through (h) to read as follows:

§ 68.79 Compliance audits.

(a) The owner or operator shall certify that they have evaluated compliance with the provisions of this subpart for each covered process, at least every three years to verify that the procedures and practices developed under the rule are adequate and are being followed. When required as set forth in paragraph (f) of this section, the compliance audit shall be a third-party audit.

(f) Third-party audit applicability.

The next required compliance audit shall be a third-party audit when one of the following conditions apply:

(1) An accidental release meeting the criteria in § 68.42(a), from a covered process at a stationary source has occurred; or

(2) An implementing agency requires a third party audit due to conditions at the stationary source that could lead to an accidental release of a regulated substance, or when a previous third party audit failed to meet the competency or independence criteria of § 68.40(c).

(g) Implementing agency notification and appeals. (1) If an implementing agency makes a preliminary determination that a third-party audit is necessary pursuant to paragraph (f)(2) of this section, the implementing agency will provide written notice to the owner or operator that describes the basis for this determination.

(2) Within 30 days of receipt of such written notice, the owner or operator may provide information and data to, and may consult with, the implementing agency on the determination. Thereafter, the implementing agency will provide a final determination to the owner or operator.

(3) If the final determination requires a third-party audit, the owner or operator shall comply with the requirements of § 68.80, pursuant to the schedule in paragraph (c) of this section.

(4) Appeals. The owner or operator may appeal a final determination made by an implementing agency under paragraph (g)(3) of this section within

30 days of receipt of the final determination. The appeal shall be made to the RPA Regional Administrator, or for determinations made by other implementing agencies, the administrator or director of such implementing agency. The appeal shall contain a clear and concise statement of the issues, facts in the case, and any relevant additional information. In reviewing the appeal, the implementing agency may request additional information from the owner or operator. The implementing agency will provide a written final decision on the appeal to the owner or operator.

(b) *Schedule for conducting a third-party audit.* The audit and audit report shall be completed as follows, unless a different timeframe is specified by the implementing agency:

(1) For third-party audits required pursuant to paragraph (f)(1) of this section, within 12 months of the release; or

(2) For third-party audits required pursuant to paragraph (f)(2) of this section, within 12 months of the date of the final determination pursuant to paragraph (g)(3) of this section. However, if the final determination is appealed pursuant to paragraph (g)(4) of this section, within 12 months of the date of the final decision on the appeal.

■ 75. Section 60.80 is added to subpart D to read as follows:

**§ 60.80 Third-party audits.**

(a) *Applicability.* The owner or operator shall engage a third-party to conduct an audit that evaluates compliance with the provisions of this subpart in accordance with the requirements of this section when either criterion of § 60.79(f) is met.

(b) *Third-party auditors and auditing terms.* The owner or operator shall either:

(1) Engage a third-party auditor meeting all of the competency and independence criteria in paragraph (c) of this section; or

(2) Assemble an auditing team, led by a third-party auditor meeting all of the competency and independence criteria in paragraph (c) of this section. The team may include:

(i) Other employees of the third-party auditor firm meeting the independence criteria of paragraph (c)(2) of this section; and

(ii) Other personnel not employed by the third-party auditor firm, including facility personnel.

(c) *Third-party auditor qualifications.* The owner or operator shall determine and document that the third-party auditor(s) meet the following

competency and independence requirements:

(1) *Competency requirements.* The third-party auditor(s) shall be:

(i) Knowledgeable with the requirements of this part;

(ii) Experienced with the stationary source type and processes being audited and applicable recognized and generally accepted good engineering practices; and

(iii) Trained or certified in proper auditing techniques.

(2) *Independence requirements.* The third-party auditor(s) shall:

(i) Act impartially when performing all activities under this section.

(ii) Receive no financial benefit from the outcome of the audit, apart from payment for auditing services. For purposes of this paragraph, retired employees who otherwise satisfy the third-party auditor independence criteria in this section may qualify as independent if their sole continuing financial attachments to the owner or operator are employer-financed or managed retirement and/or health plans;

(iii) Not have conducted past research, development, design, construction services, or consulting for the owner or operator within the last two years. For purposes of this requirement, consulting does not include performing or participating in third-party audits pursuant to § 60.58 or § 60.80. An audit firm with personnel who, before working for the auditor, conducted research, development, design, construction, or consulting services for the owner or operator within the last two years as an employee or contractor may meet the requirements of this subsection by ensuring such personnel do not participate in the audit, or manage or advise the audit team concerning the audit;

(iv) Not provide other business or consulting services to the owner or operator, including advice or assistance to implement the findings or recommendations in an audit report, for a period of at least two years following submission of the final audit report;

(v) Ensure that all third-party personnel involved in the audit sign and file a conflict of interest statement documenting that they meet the independence criteria of this paragraph; and

(vi) Ensure that all third-party personnel involved in the audit do not accept future employment with the owner or operator of the stationary source for a period of at least two years following submission of the final audit report. For purposes of this requirement, employment does not include

performing or participating in third-party audits pursuant to § 60.58 or § 60.80.

(3) The auditor shall have written policies and procedures to ensure that all personnel comply with the competency and independence requirements of this section.

(d) *Third-party auditor responsibilities.* The owner or operator shall ensure that the third-party auditor:

(1) Manage the audit and participate in audit initiation, design implementation, and reporting;

(2) Determine appropriate roles and responsibilities for the audit team members based on the qualifications of each team member;

(3) Prepare the audit report and where there is a team, document the full audit team's views in the final audit report;

(4) Certify the final audit report and its contents as meeting the requirements of this section; and

(5) Provide a copy of the audit report to the owner or operator.

(e) *Audit report.* The audit report shall:

(1) Identify all persons participating on the audit team, including names, titles, employers and/or affiliations, and summaries of qualifications. For third-party auditors, include information demonstrating that the competency requirements in paragraph (c)(1) of this section are met;

(2) Describe or incorporate by reference the policies and procedures required under paragraph (c)(3) of this section;

(3) Document the auditor's evaluation, for each covered process, of the owner or operator's compliance with the provisions of this subpart to determine whether the procedures and practices developed by the owner or operator under this rule are adequate and being followed;

(4) Document the findings of the audit, including any identified compliance or performance deficiencies;

(5) Summarize any significant revisions (if any) between draft and final versions of the report; and

(6) Include the following certification, signed and dated by the third-party auditor or third-party audit team member leading the audit:

I certify that this KCP compliance audit report was prepared under my direction or supervision, in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information upon which the audit is based. I further certify that the audit was conducted and this report was prepared pursuant to the requirements of subpart D of 40 CFR part 60 and all other applicable auditing



competency, independence, impartiality, and conflict of interest standards and protocols. Based on my personal knowledge and experience, and inquiry of personnel involved in the audit, the information submitted herein is true, accurate, and complete.

(1) **Third-party audit findings—(i) Findings response report.** As soon as possible, but no later than 90 days after receiving the final audit report, the owner or operator shall determine an appropriate response to each of the findings in the audit report, and develop a findings response report that includes: (i) A copy of the final audit report; (ii) An appropriate response to each of the audit report findings; (iii) A schedule for promptly addressing deficiencies; and (iv) A certification, signed and dated by a senior corporate officer, or an official in an equivalent position, of the owner or operator of the stationary source, stating:

I certify under penalty of law that I have engaged a third-party to perform or lead an audit team to conduct a third-party audit in accordance with the requirements of 40 CFR 63.80 and that the attached RMP compliance audit report was received, reviewed, and responded to under my direction or supervision by qualified personnel. I further certify that appropriate responses to the findings have been identified and deficiencies were corrected, or are being corrected, consistent with the requirements of subpart D of 40 CFR part 63, as documented herein. Based on my personal knowledge and experience, or inquiry of personnel involved in evaluating the report findings and determining appropriate responses to the findings, the information submitted herein is true, accurate, and complete. I am aware that there are significant penalties for making false material statements, representations, or certifications, including the possibility of fines and imprisonment for knowing violations.

(2) **Schedule implementation.** The owner or operator shall implement the schedule to address deficiencies identified in the audit findings response report in paragraph (f)(1)(iii) of this section and document the action taken to address each deficiency, along with the date completed.

(3) **Submission to Board of Directors.** The owner or operator shall immediately provide a copy of each document required under paragraphs (f)(1) and (2) of this section, when completed, to the owner or operator's audit committee of the Board of Directors, or other comparable committee or individual, if applicable.

(g) **Recordkeeping.** The owner or operator shall retain at the stationary source the two most recent final third-party audit reports, related findings response reports, documentation of

actions taken to address deficiencies, and related records.

■ 16. Amend § 63.81 by revising paragraphs (a), (d) introductory text, (d)(1), (d)(3) through (5), and adding paragraphs (d)(6) through (8) to read as follows:

**§ 63.81 Incident investigation.**

(a) The owner or operator shall investigate each incident that: (1) Resulted in a catastrophic release (including when the affected process is decommissioned or destroyed following, or as the result of, an incident); or (2) Could reasonably have resulted in a catastrophic release (i.e., was a near miss).

(d) A report shall be prepared at the conclusion of the investigation. The report shall be completed within 12 months of the incident, unless the implementing agency approves, in writing, an extension of time. The report shall include:

- (1) Date, time, and location of incident;
- (2) A description of the incident, in chronological order, providing all relevant facts;
- (3) The name and amount of the regulated substance involved in the release (e.g., fire, explosion, toxic gas loss of containment) or near miss and the duration of the event;
- (4) The consequences, if any, of the incident including, but not limited to: injuries, fatalities, the number of people evacuated, the number of people sheltered in place, and the impact on the environment;
- (5) Emergency response actions taken;
- (6) The factors that contributed to the incident including the initiating event, direct and indirect contributing factors, and root causes. Root causes shall be determined by conducting an analysis for each incident using a recognized method; and
- (7) Any recommendations resulting from the investigation and a schedule for addressing them.

■ 17. Revise § 63.82 to read as follows.

**§ 63.82 Applicability.**

(a) **Responding stationary source.** Except as provided in paragraph (b) of this section, the owner or operator of a stationary source with Program 2 and Program 3 processes shall comply with the requirements of §§ 63.83, 63.95, and 63.96.

(b) **Non-responding stationary source.** The owner or operator of a stationary

source whose employees will not respond to accidental releases of regulated substances need not comply with § 63.95 of this part provided that:

- (1) For stationary sources with any regulated toxic substance held in a process above the threshold quantity, the stationary source is included in the community emergency response plan developed under 42 U.S.C. 17003;
- (2) For stationary sources with only regulated flammable substances held in a process above the threshold quantity, the owner or operator has coordinated response actions with the local fire department;
- (3) Appropriate mechanisms are in place to notify emergency responders when there is a need for a response;
- (4) The owner or operator performs the annual emergency response coordination activities required under § 63.93; and
- (5) The owner or operator performs the annual notification exercises required under § 63.95(a).

■ 18. Section 63.83 is added to subpart E to read as follows.

**§ 63.83 Emergency response coordination activities.**

The owner or operator of a stationary source shall coordinate response needs with local emergency planning and response organizations to determine how the stationary source is addressed in the community emergency response plan and to ensure that local response organizations are aware of the regulated substances at the stationary source, their quantities, the risks presented by covered processes, and the resources and capabilities at the stationary source to respond to an accidental release of a regulated substance.

- (a) Coordination shall occur at least annually and more frequently if necessary, to address changes at the stationary source; in the stationary source's emergency response and/or emergency action plan; and/or in the community emergency response plan.
- (b) Coordination shall include providing to the local emergency planning and response organizations: The stationary source's emergency response plan if one exists; emergency action plan; updated emergency contact information; and any other information that local emergency planning and response organizations identify as relevant to local emergency response planning. For responding stationary sources, coordination shall also include consulting with local emergency response officials to establish appropriate schedules and plans for field and tabletop exercises required under § 63.96(b). The owner or operator

shall request an opportunity to meet with the local emergency planning committee (or equivalent) and the local fire department as appropriate to review and discuss these materials.

(c) The owner or operator shall document coordination with local authorities, including the names of individuals involved and their contact information (phone number, email address, and organizational affiliations); dates of coordination activities; and nature of coordination activities.

■ 18. Amend § 68.95 by-

- a. Revising paragraph (a)(1)(i);
- b. Adding a sentence to the end of paragraph (a)(4); and
- c. Revising paragraph (c).

The revisions and addition read as follows:

**68.95 Emergency response program.**

- (a) \* \* \*
- (1) \* \* \*

(i) Procedures for informing the public and the appropriate Federal, state, and local emergency response agencies about accidental releases.

- (4) \* \* \*

The owner or operator shall review and update the plan as appropriate based on changes at the stationary source or new information obtained from coordination activities, emergency response exercises, incident investigations, or other available information, and ensure that employees are informed of the changes.

(c) The emergency response plan developed under paragraph (a)(1) of this section shall be coordinated with the community emergency response plan developed under 42 U.S.C. 11068. Upon request of the LEPC or emergency response officials, the owner or operator shall promptly provide to the local emergency response officials information necessary for developing and implementing the community emergency response plan.

■ 20. Section 68.95 is added to subpart E to read as follows:

**§ 68.95 Emergency response exercises.**

(a) *Notification exercises.* At least once each calendar year, the owner or operator of a stationary source with any Program 2 or Program 3 process shall conduct an exercise of the stationary source's emergency response notification mechanisms required under § 68.90(a)(2) or § 68.93(a)(1)(i) as appropriate. Owners or operators of responding stationary sources may perform the notification exercise as part of the tabletop and field exercises

required in paragraph (b) of this section. The owner/operator shall maintain a written record of each notification exercise conducted over the last five years.

(b) *Emergency response exercise program.* The owner or operator of a stationary source subject to the requirements of § 68.93 shall develop and implement an exercise program for its emergency response program, including the plan required under § 68.95(a)(1). Exercises shall involve facility emergency response personnel and, as appropriate, emergency response contractors. When planning emergency response field and tabletop exercises, the owner or operator shall coordinate with local public emergency response officials and invite them to participate in the exercise. The emergency response exercise program shall include:

(1) *Emergency response field exercises.* The owner or operator shall conduct field exercises involving the simulated accidental release of a regulated substance (i.e., toxic substance release or release of a regulated flammable substance involving a fire and/or explosion).

(c) *Frequency.* As part of coordination with local emergency response officials required by § 68.93, the owner or operator shall consult with these officials to establish an appropriate frequency for field exercises, but at a minimum, shall conduct a field exercise at least once every ten years.

(ii) *Scope.* Field exercises shall include: Tests of procedures to notify the public and the appropriate Federal, state, and local emergency response agencies about an accidental release; tests of procedures and measures for emergency response actions including evacuations and medical treatment; tests of communications systems; mobilization of facility emergency response personnel, including contractors, as appropriate; coordination with local emergency responders; emergency response equipment deployment; and any other action identified in the emergency response program, as appropriate.

(2) *Tabletop exercises.* The owner or operator shall conduct a tabletop exercise involving the simulated accidental release of a regulated substance.

(i) *Frequency.* As part of coordination with local emergency response officials required by § 68.93, the owner or operator shall consult with these officials to establish an appropriate frequency for tabletop exercises, but at a minimum, shall conduct a field exercise at least once every three years.

(i) *Scope.* The exercise shall include discussions of: Procedures to notify the public and the appropriate Federal, state, and local emergency response agencies; procedures and measures for emergency response including evacuations and medical treatment; identification of facility emergency response personnel and/or contractors and their responsibilities; coordination with local emergency responders; procedures for emergency response equipment deployment; and any other action identified in the emergency response plan, as appropriate.

(3) *Documentation.* The owner/operator shall prepare an evaluation report within 90 days of each exercise. The report shall include: A description of the exercise scenario; names and organizations of each participant; an evaluation of the exercise results including lessons learned; recommendations for improvement or revisions to the emergency response exercise program and emergency response program; and a schedule to promptly address and resolve recommendations.

(c) *Alternative means of meeting exercise requirements.* The owner or operator may satisfy the requirement to conduct notification, field and/or tabletop exercises through

(1) Exercises conducted to meet other Federal, state or local exercise requirements, provided the exercise meets the requirements of paragraphs (a) and/or (b) of this section, as appropriate.

(2) Response to an accidental release, provided the response includes the actions indicated in paragraphs (a) and/or (b) of this section, as appropriate. When used to meet field and/or tabletop exercise requirements, the owner or operator shall prepare an after-action report comparable to the exercise evaluation report required in paragraph (b)(3) of this section, within 90 days of the incident.

■ 21. Amend § 68.130 by

- a. In Table 1, "List of Regulated Toxic Substances and Threshold Quantities for Accidental Release Prevention", under second column entitled "CAS No.", removing the number "107-18-87" adding "107-10-1" in its place; and
- b. Revising Table 4, "List of Regulated Flammable Substances and Threshold Quantities for Accidental Release Prevention".

The revisions read as follows:

**§ 68.130 List of substances.**

\* \* \* \* \*

TABLE 4 TO § 69.130—LIST OF REGULATED FLAMMABLE SUBSTANCES<sup>1</sup> AND THRESHOLD QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION  
[CAS Number Order—83 Substances]

CAS No.	Chemical name	Threshold quantity (lbs)	Basis for listing
00-29-7	Ethyl ether [Ethane, 1,1'-oxybis-]	10,000	f
74-82-8	Methane	10,000	f
74-84-0	Ethane	10,000	f
74-85-1	Ethylene [Ethene]	10,000	f
74-85-2	Acetylene [Ethyne]	10,000	f
74-89-5	Methylamine [Methanamine]	10,000	f
74-98-6	Propane	10,000	f
74-99-7	Propyne [1-Propyne]	10,000	f
75-03-3	Ethyl chloride [Ethane, chloro-]	10,000	f
75-01-4	Vinyl chloride [Ethene, chloro-]	10,000	f, l
75-02-5	Vinyl fluoride [Ethene, fluoro-]	10,000	f
75-04-7	Ethylamine [Ethanamine]	10,000	f
75-07-2	Acetaldehyde	10,000	g
75-09-1	Ethyl mercaptan [Ethanethiol]	10,000	g
75-13-4	Cyclopropane	10,000	f
75-29-5	Isobutane [Propane, 2-methyl]	10,000	f
75-29-6	Isopropyl chloride [Propane, 2-chloro-]	10,000	g
75-31-5	Isopropylamine [2-Propanamine]	10,000	g
75-35-4	Vinylidene chloride [Ethene, 1,1-dichloro-]	10,000	g
75-37-6	Difluoroethane [Ethane, 1,1-difluoro-]	10,000	f
75-38-7	Vinylidene fluoride [Ethene, 1,1-difluoro-]	10,000	f
75-50-3	1,1-Dimethylethane [Methanamine, N,N-dimethyl-]	10,000	f
75-76-3	Tetramethylsilane [Silane, tetramethyl-]	10,000	g
78-79-4	Isopentane [Pentane, 2-methyl-]	10,000	g
78-79-5	Isoprene [1,3-Butadiene, 2-methyl-]	10,000	g
79-38-9	Trifluorochloroethylene [Ethene, chlorotrifluoro-]	10,000	f
106-97-9	Butane	10,000	f
106-98-9	1-Butene	10,000	f
106-99-0	2-Butene	10,000	f
107-90-6	Ethyl acetylene [1-Butyne]	10,000	f
107-91-7	2-Butene	10,000	f
107-25-5	Vinyl methyl ether [Ethene, methoxy-]	10,000	f
107-31-3	Methyl formate [Formic acid, methyl ester]	10,000	g
109-66-0	Pentane	10,000	g
109-87-1	1-Pentene	10,000	g
109-92-2	Vinyl ethyl ether [Ethene, ethoxy-]	10,000	g
109-95-5	Ethyl prolate [Nitrous acid, ethyl ester]	10,000	f
115-07-1	Propylene [1-Propene]	10,000	f
115-10-6	Methyl ether [Methane, oxybis-]	10,000	f
115-11-7	2-Methylpropene [1-Propene, 2-methyl-]	10,000	f
116-14-3	Tetrafluoroethylene [Ethene, tetrafluoro-]	10,000	f
124-40-3	Dimethylamine [Methanamine, N-methyl-]	10,000	f
460-19-6	Cyclohexane [Ethane, cyclohexylidene]	10,000	f
463-49-0	Propylene [1,2-Propadiene]	10,000	f
463-50-1	Carbon oxysulfide [Carbon oxide sulfide (COS)]	10,000	f
463-82-1	2,2-Dimethylpropane [Propane, 2,2-dimethyl-]	10,000	f
504-90-0	1,3-Pentadiene	10,000	f
55-78-2	2-Chloropropylene [1-Propene, 2-chloro-]	10,000	g
56-34-5	3-Methyl-1-butene	10,000	f
583-46-2	2-Methyl-1-butene	10,000	g
590-10-1	2-Butene cis	10,000	f
590-21-6	1-Olefinpropylene [1-Propene, 1-chloro-]	10,000	g
598-73-2	Bromobenzene [Benzene, bromo-]	10,000	f
624-84-0	2-Pentene-trans [2-Butene, (E)]	10,000	f
627-20-3	2-Pentene (Z)	10,000	g
644-94-8	2-Pentene (E)	10,000	g
699-97-4	Vinyl acetylene [1-Buten-3-yne]	10,000	f
1333-74-0	Hydrogen	10,000	f
4109-86-0	Dichloroethane [Ethane, dichloro-]	10,000	f
7781-21-1	Chlorine monoxide [Chlorine oxide]	10,000	f
7803-62-5	Silane	10,000	f
10025-78-2	Tetrachlorosilane [Silane, tetrachloro-]	10,000	g
25167-67-3	Octene	10,000	f

<sup>1</sup> A flammable substance when used as a fuel or held for sale as a fuel at a retail facility is excluded from all provisions of this part (see § 69.126).

Note: Basis for Listing

<sup>a</sup> Mandated for listing by Congress

<sup>f</sup> Flammable gas.

<sup>g</sup> Volatile flammable liquid.

■ 22. Amend § 69.150 by adding paragraphs (j)(21) and (22) to read as follows:

§ 69.150 Registration.

(b) . . .

(21) Method of communication and location of the notification that chemical hazard information is



available to the public, pursuant to § 68.210(c); and

(22) Whether a public meeting has been held following an RMP reportable accident, pursuant to § 68.210(e).

■ 23. Amend § 68.170 by revising paragraphs (i) and (j), to read as follows:

**§ 68.170 Prevention program/Program 2.**

(i) The date of the most recent compliance audit, the expected date of completion of any changes resulting from the compliance audit, and identify whether the most recent compliance audit was a third-party audit, pursuant to §§ 68.58 and 68.59.

(j) The completion date of the most recent incident investigation and the expected date of completion of any changes resulting from the investigation.

■ 29. Amend § 68.175 by

a. Revising the introductory text of paragraph (e), and paragraphs (e)(1), (5), and (6);

b. Adding paragraph (e)(7); and

c. Revising paragraphs (k), and (l).

The revisions and addition read as follows:

**§ 68.175 Prevention program/Program 3.**

(4) The most recent process hazard analysis (PHA) or PHA update and revalidation information, pursuant to § 68.67, including:

(1) The date of completion of the most recent PHA or update and the techniques used;

(6) Monitoring and detection systems in use;

(6) Changes since the last PHA; and

(7) Inherently safer technology or design measures implemented since the last PHA, if any, and the technology category (substitution, minimization, simplification and/or moderation).

(k) The date of the most recent compliance audit, the expected date of completion of any changes resulting from the compliance audit, and identify whether the most recent compliance audit was a third-party audit, pursuant to §§ 68.74 and 68.80.

(l) The completion date of the most recent incident investigation and the expected date of completion of any changes resulting from the investigation.

■ 25. Revise § 68.180 to read as follows:

**§ 68.180 Emergency response program and exercises.**

(a) The owner or operator shall provide in the RMP:

(1) Name, organizational affiliation, phone number, and email address of local emergency planning and response organizations with which the stationary source last coordinated emergency response efforts, pursuant to § 68.10(f)(3) or § 68.93;

(2) The date of the most recent coordination with the local emergency response organizations, pursuant to § 68.93 and

(3) A list of Federal or state emergency plan requirements to which the stationary source is subject.

(b) The owner or operator shall identify in the RMP whether the facility is a responding stationary source or a non-responding stationary source, pursuant to § 68.50.

(1) For non-responding stationary sources, the owner or operator shall identify:

(i) For stationary sources with any regulated toxic substances held in a process above the threshold quantity, whether the stationary source is included in the community emergency response plan developed under 42 U.S.C. 11003, pursuant to § 68.90(b)(1).

(ii) For stationary sources with only regulated flammable substances held in a process above the threshold quantity, the date of the most recent coordination with the local fire department, pursuant to § 68.10(h)(2);

(iii) What mechanisms are in place to notify the public and emergency responders when there is a need for emergency response; and

(iv) The date of the most recent notification exercise, as required in § 68.96(a).

(2) For responding stationary sources, the owner or operator shall identify:

(i) The date of the most recent review and update of the emergency response plan, pursuant to § 68.95(a)(4);

(ii) The date of the most recent notification exercise, as required in § 68.96(a);

(iii) The date of the most recent field exercise, as required in § 68.96(b)(1); and

(iv) The date of the most recent tabletop exercise, as required in § 68.96(b)(2).

■ 26. Amend § 68.190 by adding a sentence at the end of paragraph (c) to read as follows:

**§ 68.190 Upstream.**

(c) \* \* \* Prior to the registration the owner or operator shall meet applicable reporting and incident investigation requirements in accordance with §§ 68.42, 68.60, and/or 68.81.

■ 27. Revise § 68.200 to read as follows:

**§ 68.200 Recordkeeping.**

The owner or operator shall maintain records supporting the implementation of this part at the stationary source for five years, unless otherwise provided in subpart D of this part.

■ 28. Revise § 68.210 to read as follows:

**§ 68.210 Availability of information to the public.**

(a) *RMP availability.* The RMP required under subpart G of this part shall be available to the public under 42 U.S.C. 7414(j) and 40 CFR part 1400.

(b) *Chemical hazard information.* The owner or operator of a stationary source shall provide, upon request by any member of the public, the following chemical hazard information for all regulated processes, as applicable:

(1) Regulated substances information. Names of regulated substances held in a process;

(2) Safety data sheets (SDS). SDSs for all regulated substances located at the facility;

(3) Accident history information. Provide the five-year accident history information required to be reported under § 68.42;

(4) Emergency response program. The following summary information concerning the stationary source's compliance with § 68.10(f)(3) or the emergency response provisions of subpart E:

(i) Whether the stationary source is a responding stationary source or a non-responding stationary source;

(ii) Name and phone number of local emergency response organizations with which the owner or operator last coordinated emergency response efforts, pursuant to § 68.180; and

(iii) For stationary sources subject to § 68.96, procedures for informing the public and local emergency response agencies about accidental releases;

(5) Exercises. A list of scheduled exercises required under § 68.96; and

(6) LEPC contact information. Include LEPC name, phone number, and web address as available.

(c) *Notification of availability of information.* The owner or operator shall provide ongoing notification on a company Web site, social media platforms, or through other publicly accessible means that:

(1) Information specified in paragraph (b) of this section is available to the public upon request. The notification shall

(i) Specify the information elements, identified in paragraph (b) of this section, that can be requested, and

(ii) Provide instructions for how to request the information (e.g. email).

(mailing address, and/or telephone or Web site request);

(2) Identify where to access information on community preparedness, if available, including shelter in place and evacuation procedures.

(2) *Timeframe to provide requested information.* The owner or operator shall provide the requested information under paragraph (b) of this section within 45 days of receiving a request from any member of the public.

(e) *Public meetings.* The owner or operator of a stationary source shall hold a public meeting to provide information required under § 68.42 as

well as other relevant chemical hazard information such as that described in paragraph (h) of this section, no later than 90 days after any accident subject to reporting under § 68.42.

(f) *Classified information.* The disclosure of information classified by the Department of Defense or other Federal agencies or contractors of such agencies shall be controlled by applicable laws, regulations, or executive orders concerning the release of classified information.

(g) *CBI.* An owner or operator asserting CBI for information required under this section shall provide a sanitized version to the public.

Assertion of claims of CBI and substantiation of CBI claims shall be in the same manner as required in §§ 68.151 and 68.152 for information contained in the RMP required under subpart C of this part. As provided under § 68.151(b)(3), an owner or operator of a stationary source may not claim five-year accident history information as CBI. As provided in § 68.151(c)(3), an owner or operator of a stationary source asserting that a chemical name is CBI shall provide a generic category or class name as a substitute.

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# **LEGISLATIVE HISTORY**

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101st CONGRESS  
1st Session

SENATE

REPORT  
101-228

CLEAN AIR ACT AMENDMENTS OF 1989

REPORT

OF THE

COMMITTEE ON  
ENVIRONMENT AND PUBLIC WORKS  
UNITED STATES SENATE

together with

ADDITIONAL AND MINORITY VIEWS

TO ACCOMPANY

S. 1630



December 20, 1989.—Ordered to be printed

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**CONTENTS**

	Page
General Statement.....	1
Discussion of provisions:	
Title I—Attainment and maintenance of ambient air quality standards:	
Introduction.....	3
Designation of areas (section 101).....	13
Enhanced monitoring and inventories (section 102).....	16
Transportation guidelines (section 103).....	18
General planning requirements (section 104).....	19
Federal facilities (section 105).....	23
General provisions for nonattainment (section 109).....	25
Additional requirements for ozone nonattainment areas (section 107).....	30
Additional requirements for carbon monoxide nonattainment areas (section 108).....	52
Additional requirements for PM-10 nonattainment areas (section 109).....	88
Interstate pollution (section 110).....	75
Outer continental shelf activities (section 117).....	75
Indian tribes (section 118).....	75
Miscellaneous and conforming amendments (section 113).....	80
Secondary standards (section 114).....	81
Title II—Mobile source controls:	
Manufacturing.....	92
Emission standards for certain motor vehicles (section 201).....	85
Carbon monoxide emissions at cold temperatures (section 202).....	92
Control of vehicle refueling emissions (section 203).....	94
Evaporative emissions (section 204).....	94
Onboard emission diagnostic systems (section 205).....	94
Emissions of carbon dioxide from passenger cars (section 206).....	94
Low-polluting vehicles (section 207).....	101
Light duty vehicle useful life (section 208).....	102
Warranties (section 209).....	102
Non-road engines (section 210).....	103
Prohibition on production of engines requiring heated gasoline (section 211).....	105
Motor vehicle testing and certification (section 212).....	106
In-use compliance—recalls (section 213).....	107
Fuel volatility (section 214).....	109
Desulfurization (section 215).....	110
Lead phasedown (section 216).....	112
Fuel quality (section 217).....	116
Oxygenated fuels (section 218).....	118
Nitrogen (section 219).....	120
Urban buses (section 220).....	121
Enforcement (section 221).....	122
Consideration of Federal transportation and environmental policies (section 222).....	127
Title III—Air toxics:	
Background discussion.....	127
Hazardous air pollutants (section 302).....	147
Marine manufacturing (section 303).....	202
Dual regulation of radionuclides (section 304).....	205
Prevention of sudden, accidental releases (section 305).....	205
Municipal waste combustion: Air emissions (section 306).....	251
Municipal waste combustion: Air disposal (section 307).....	257

iii

IV

	Page
Discussion of provisions—Continued	
Title III—Air toxics—Continued	
Consultation (section 308)	360
Title IV—Acid deposition control:	
Background	361
Acid deposition control (section 401)	362
Regional of pollutant reduction (section 402)	367
Federal facilities (section 403)	368
Acid deposition standard (section 404)	341
National acid depositions registry (section 405)	344
Industrial sulfur dioxide emissions (section 406)	344
Sense of the Congress on certain reduction tools (section 407)	346
Continuation of the Acid Deposition Assessment Program (section 408)	345
Title V—Permitting	
Introduction	346
Title VI—Enforcement and authorization:	
Introduction	357
Section 118 enforcement (section 601)	358
Reviewability of administrative orders (section 602)	356
Compliance certification (section 603)	358
Contractor inspections (section 604)	358
Administrative enforcement subpoenas (section 605)	365
Emergency orders (section 606)	370
Contractor listings (section 607)	371
Judicial review pending reconsideration of regulation (section 608)	372
Citizens suits and petitions (section 609)	372
Enhanced implementation and enforcement of new source review requirements (section 610)	376
Movable stationary sources (section 611)	376
Authorizations (section 612)	376
Title VII—The Stratospheric Ozone and Climate Protection Act:	
Introduction	377
Hearings	402
Markups	402
Rollcall votes	402
Evaluation of regulatory impact	403
Cost of legislation	403
Additional views of:	
Senator Mitchell	404
Senator Lautenberg	406
Senator Caputo	410
Senator Warren	412
Minority views of Senator Syttus	415
Changes in existing law	428



Calendar No. 427

101st Congress 2nd Session	SENATE	REPORT 101-228
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CLEAN AIR ACT AMENDMENTS OF 1989

November 20, 1989.—Ordered to be printed.

Mr. BURDICK, from the Committee on Environment and Public Works, submitted the following

REPORT

together with

ADDITIONAL AND MINORITY VIEWS

(To accompany S. 1630)

The Committee on Environment and Public Works, to which was referred the bill (S. 1630) to amend the Clean Air Act to provide for attainment and maintenance of health protective national ambient air quality standards, and for other purposes having considered the same, reports favorably thereon with an amendment and recommends that the bill as amended do pass.

GENERAL STATEMENT

The Clean Air Act is the first modern environmental law to be enacted. It was first signed into law by President Johnson in 1963, replacing previous Federal air pollution legislation. In 1965 hearings before the Special Subcommittee on Air and Water Pollution, the Assistant Secretary of the Department of Health, Education, and Welfare testified:

[S]erious air pollution problems arise; from the ever-increasing use of motor vehicles, [and] our rising demands for the energy derived from burning of sulfur-bearing fuels . . . The national importance of resolving these problems is beyond dispute. They are among the most significant factors in the growing and worsening air pollution problems currently faced by thousands of American communities . . .

the Board are not subject to the direction of officers in any other department or agency.

The Board is to report annually on its activities to the President and to the Congress. The report shall include:

- (1) a review of the accident investigations conducted during the previous fiscal year;
- (2) a summary of the recommendations including proposed rules or orders made by the Board as the result of such investigations;
- (3) an accounting of the actions taken by the Administrator of the Environmental Protection Agency in response to recommendations of the Board during the previous fiscal year;
- (4) a list of the recommendations by the Board which have not been acted upon by the Administrator;
- (5) recommendations for legislation or regulatory changes which would prevent or mitigate accidents; and
- (6) a description of the future research program of the Board.

Subsection (e) includes an annual authorization of \$12 million for each of the fiscal years 1990 through 1994 to carry out the duties assigned to the Board.

**Accident prevention.**—Subsection (f) of the new section 112 provides the Administrator with authority to promulgate regulations to prevent, detect and correct accidental releases from all devices and systems at facilities which manufacture, store or process extremely hazardous substances including those listed pursuant to subsection (c) in more than threshold amounts. The Administrator may list substances with respect to which the regulations will apply at the time requirements are promulgated (if the substances have not been listed previously under subsection (c)) or may promulgate general requirements applicable to facilities handling substances not listed under subsection (c).

The authority provided here is to be broadly construed. It is intended to allow the development and implementation of requirements that will prevent the sudden, accidental release of extremely hazardous substances and to mitigate the hazard presented should a release occur. Authority to prevent routine process releases (including small leaks and drips or normal process vents) of air pollutants which may cause chronic adverse health effects or acute effects which are not life threatening is provided under section 112.

The requirements issued under this subsection shall apply to any and all devices and systems used to produce, process, handle or store extremely hazardous substances. Examples of the type of requirements that might be promulgated are listed and include monitoring, record-keeping, reporting, training, vapor recovery, secondary containment and other design, equipment, work practice and operational requirements.

The authority to issue accident prevention requirements is not linked to the listing of substances under subsection (c). The only provisions which are mandatory upon the listing of a substance are the hazard assessment required by subsection (d), the leak detection requirements established by subsection (g) and the reporting requirements to be included in any State program approved under section 112. Considering the history of section 112, it is apparent that mandating comprehensive regulations applicable to all facili-

238

ties handling a substance shortly after it is listed serves only to discourage the listing of the substance.

It is to be noted that the Chemical Safety and Hazard Investigation Board may recommend to the Administrator various requirements to be promulgated under authority of this section. The principal function of the Board is to establish a foundation for regulatory action that will trigger rule-making on an appropriate schedule without prescribing the exact content and deadlines for various rules in the statutory language.

The legislation might have directed the Administrator to issue release prevention, detection and correction regulations for specific industries or extremely hazardous substances by a date certain as has been done frequently in other environmental statutes. That is the "prescriptive" path and it has benefits when an environmental problem is well understood and there is consensus on the measures which should be applied to achieve a solution. Regulatory deadlines allow the Congress to establish priorities among the many competing demands on the Agency's resources and shield Agency actions from political pressures which may be brought to bear on the regulatory agenda. Furthermore, the deadlines allow citizens to participate in "oversight" of the process by providing cause for a citizen suit to compel action when there has been a failure to perform a non-discretionary duty.

In this instance, however, a different methodology has been chosen to assure that an adequate and timely regulatory response is made to a problem which has been identified as a high priority. The Board is designed as an independent agency with special expertise in the investigation and prevention of chemical accidents. Its recommendations require a formal response from the Administrator, and although the Administrator may decline to issue a recommended requirement for good cause, it is expected that in most instances the Board's recommendations will be implemented in a timely way. In an area of great complexity such as is addressed here, the Committee intends that this institutional mechanism will overcome the regulatory inertia which so frequently plagues an Agency with too many assignments and too few resources, and does so without the inflexibility associated with detailed statutory prescriptions, deadlines and sanctions.

The interim report by the Environmental Protection Agency entitled *Review of Emergency Systems* which was required by section 305(b) of the Emergency Planning and Community Right-to-Know Act of 1986 and was published in May of 1987 mentions four categories of technologies or techniques that give preliminary definition to the prevention authority provided here:

(1) *Hazard evaluation*, that is, quantitative and qualitative techniques for determining what series of events could result in an accidental release;

(2) *Pre release prevention*, that is, intrinsic and extrinsic systems to reduce the probability that the primary containment of a chemical in a process line will be breached (often called "loss of containment");

(3) *Post-release protection*, that is, control techniques such as flares, scrubbers, or holding ponds to contain, de-

stry or reduce the quantity of the substance before it is subject to release; and

(4) *Post-release mitigation*, that is, measures that can be taken after a release to the environment has occurred to limit the spread of the released chemical and minimize damage to public health and the environment.

Hazard evaluation is discussed above in the context of hazard assessments which are required for all facilities producing, processing, handling or storing extremely hazardous substances listed pursuant to subsection (c) in more than threshold amounts.

Pre-release prevention systems are intended to assure that primary containment of a chemical process will not be breached. Pre-release systems include those designed into a process (called "intrinsic systems" by EPA) to control the flow, pressure, temperature and concentration of a process. They may specify fabrication and other design standards for equipment including pipes, vessels, valves, etc. They may also include redundancy and back-up systems. Prevention systems may also be required outside of the process (called "extrinsic systems" by EPA) and as a retrofit to existing systems and may include modifications to equipment or process parameters (including substitution of less hazardous substances). Of course, management and operating procedures play an important role in preventing accidental releases through operator training, the development of emergency procedures and maintenance and safety reviews.

Pre-release protection systems are intended to contain, destroy or reduce the quantity of extremely hazardous substances before they move off-site. Pre-release protection technologies include flares, scrubbers, absorbers, double walled construction of process and storage vessels and other types of secondary containment. They are designed to destroy the hazardous substance through combustion or chemical neutralization or contain the substance until remedial action can be taken. Back-up systems of this type offer important safeguards for some accidental releases, but as the events in Bhopal demonstrated, can be overwhelmed by large releases. In response to the Bhopal tragedy, effective prevention for methyl isocyanate releases has been provided at one site by modifications in the production process which have greatly reduced the quantity of the chemical held at any point during the series of reactions leading to the final product. Similarly, prevention technologies are to be generally preferred to protection technologies where prevention eliminates the possibility of a serious event.

Post-release mitigation measures are used after loss of containment has occurred to reduce the hazard before the substance moves off-site. They include dikes and berms and methods to cover free liquids and the use of foam and other agents to prevent fire, explosion, or volatilization of free liquids.

The interim report required by section 305(b) of title III of SARA (the Emergency Planning and Community Right-to-Know Act of 1986) emphasized technologies to be used in accident prevention and mitigation. It also described the process EPA would use in surveying the chemical industry to determine the availability and effectiveness of such technologies. EPA's final report on this survey

effort, (also entitled) *Review of Emergency Systems*, issued in June of 1988 indicated that technological "fixes" to prevent chemical accidents such as those described above may not be widely available. Rather, the problem of (accidental) releases must be addressed in facility-specific, management programs which integrate measures in a number of areas (documentation, training, maintenance, investigations and audits, as well as, technological systems for release prevention).

Overall, the section 305(b) review indicated that there is no single method or technology that works best in every situation. In each area considered in this review, the determination of what constitutes a "state-of-the-art" technology for a particular facility depends on the individual circumstances of the facility—its location and layout, its process, the chemicals handled, and the hazards associated with the specific chemicals and processes . . .

Recognizing the elements of truth in this statement, it is still possible to identify generic management measures or technology standards which can be employed to reduce the likelihood of chemical accidents and mitigate the effects should they occur. A review of the literature and State programs to prevent accidents has indicated that each of the following eleven program elements may be appropriate in accident prevention efforts and should be considered by the Administrator when establishing requirements for facilities handling extremely hazardous substances under the authority of this section.

**Hazard Evaluation.**—This element was discussed at length above as hazard assessments are to be prepared by every facility handling extremely hazardous substances listed under subsection (c) in more than threshold amounts. In the final report entitled *Review of Emergency Systems* EPA concluded:

The facility questionnaire responses indicate that ongoing efforts to inform chemical facilities about hazard evaluation techniques need to be expanded. Although almost all of the respondents stated that they use hazard evaluation methods, only half are using the AICHE-recognized techniques. The other facilities listed less formal techniques or techniques not generally considered to be hazard evaluations.

**Maintain process safety documentation.**—Each facility should maintain information including basis diagrams on process design, documentation on maximum and minimum operating parameters and information (physical, chemical and toxicity data) on materials used as feedstocks or produced in the process. The documentation should be available to personnel with control over day-to-day operation and should be updated whenever fundamental aspects (including, but not limited to, feedstocks, catalysts, operating conditions, equipment, product specifications, by-products and waste products, or inventories) of the process change.

**Regular Safety Review of New and Existing Equipment.**—This program element is to include formal management procedures to review any changes made in the facility or the process. New equip-



ment should be evaluated against industry codes and standards and critical equipment should be "state-of-the-art" for the particular application. In this regard, EPA's *Review of Emergency Systems* includes the following caution:

... a number of widely accepted codes, standards and recommendations provide minimum safety standards for equipment design, procedures and systems. It should be stressed that these standards and codes are minimums ... for the most part, meeting the minimum safety requirements is not sufficient for facilities handling extremely hazardous substances.

There are, however, codes for use with respect to specific extremely hazardous substances, for instance *Safety Requirements for the Storage and Handling of Anhydrous Ammonia* developed by the American National Standards Institute, which can serve as a reliable guide to process safety for extremely hazardous substances in some cases.

The State of New Jersey, as part of its Toxic Catastrophe Prevention Act program, requires that newly installed, critical equipment (equipment which is part of a system to contain the release of an extremely hazardous substance) be "state-of-the-art".

New Jersey also suggests that existing equipment be reviewed annually to assure that it continues to be operated as was intended in the original facility design and that any discrepancies (between design and operating parameters) be corrected.

The safety review element of an accident prevention program should also include quality assurance provisions to check on the fabrication, construction and installation of new equipment before it is put into service.

**Operating procedures.**—A fourth element in a management program to prevent accidental releases is written operating procedures for the process or facility covering startup, shutdown and emergency response in addition to normal operating conditions. These written procedures should include clear instructions for operator response to deviations from normal process parameters. Operating procedures may also include safety measures and management items such as control of access to the facility and reporting and record-keeping responsibilities.

**Operator training.**—Operator training is an important element of every accident prevention program. EPA's ARIP data base indicates that 81 percent of the serious events which it investigated were caused by operator errors.

Operator training may include orientation sessions, intensive process and safety training, training in handling extremely hazardous substances, refresher courses and mandatory pass/fail tests for operator certification.

**Preventive maintenance.**—EPA's ARIP data base also indicates that a program of preventive maintenance is essential to accident prevention. The ARIP update published in July of 1989 indicated that:

Equipment failure was the primary cause of approximately 66 percent of the ARIP surveyed releases. This large percentage was not surprising because many factors



E532

242

contribute to equipment failures: lack of preventive maintenance, lack of equipment inspections, improper operation of equipment, poor equipment design, and age . . . Only 4 percent [of those experiencing a reportable release] indicated that they performed preventive maintenance on the failed equipment or system [prior to the event].

Among the measures suggested in the literature or mandated in State programs are: inspection, testing and repair of critical equipment according to a written schedule; following industry codes or design specifications for maintenance; training maintenance personnel; documenting maintenance as it is completed; and replacing critical equipment before the end of its useful life.

Equipment for which preventive maintenance programs are essential include pressure vessels and storage tanks; critical piping; relief and vent systems and devices; emergency shutdown systems; and critical controls, alarms and interlocks.

*Release prevention measures.*—Various release prevention systems were described above in the review of EPA's interim report under section 305(b) of SARA. They include, but are not limited to:

- (1) backup, redundant and interlock systems in the process design;
- (2) the substitution of less hazardous materials;
- (3) reduction in process severity (temperature and pressure) or complexity;
- (4) smaller volumes of extremely hazardous substances in storage;
- (5) process monitors to detect deviations from normal operating parameters;
- (6) protection systems like scrubbers and flares; and
- (7) post-release mitigation measures including water curtains, liquid containment and cover systems and measures to prevent fire and explosion.

*Release detection systems.*—These devices and methods will be discussed more thoroughly in the context of subsection (g) requirements below and were reviewed in detail in the EPA report *Review of Emergency Systems* prepared pursuant to section 305(b) of SARA. It is important to point out that leak detection is not as effective in reducing the threat of chemical accidents as are the prevention systems and measures described above. Leak detection can, in some instances, alert system operators to the presence of small amounts of extremely hazardous substances before a process upset becomes a run-away catastrophe. However, for events that develop quickly, corrective action and emergency response measures may not be implemented in time to prevent serious damage, injury or death. Unlike programs to control the slow release of harmful materials (for instance, the underground storage tank program) detection is not a satisfactory substitute for prevention in the case of large spills and vapor releases of extremely hazardous substances.

*Upset and accident release investigations.*—Facility owners and operators should conduct a timely (commencing within 48 hours) investigation of each upset or accidental release which has the potential for causing substantial harm or being the precursor of such an event. The investigations should be documented in written re-

A633

243

parts including recommendations for equipment or operational changes. The investigations should be conducted by knowledgeable persons with access to process information and the results should be communicated to process operators when the investigation is completed.

*Alert systems and emergency response plans.*—Techniques to alert the public in the event of an accidental release and to implement emergency response plans have been reviewed as the result of the Emergency Planning and Community Right-to-Know Act of 1986. The requirements of that legislation are described in the introductory material to this title and technologies for alert systems are reviewed in EPA's Section 805(b) Report. The important elements are: 1) written operating procedures containing the necessary information to notify emergency response personnel at the facility and in the community; 2) advance information available to community emergency response officials to facilitate implementation of their plans; 3) exercises in the implementation of the plan; and 4) regular testing of notification equipment and the maintenance of backup systems in the event that the primary system is damaged by the accidental release.

*Program audits.*—Each of the elements of the accident prevention program outlined above should be audited on an annual basis by company personnel (other than those directly responsible for the process unit) or outside consultants with access to process information at the facility to assure that each element is up-to-date and to identify corrective measures that are needed.

These eleven elements have been described to indicate the range of authorities which are available to the Administrator under subsection (f). It is not intended that the Administrator be limited to these authorities or that each element be required in every case or immediately. They do reflect recommended elements for accident programs identified by several expert or regulatory sources.

Subsection (f) of the new section 129 would also authorize the Administrator to require that the owner or operator of any facility handling an extremely hazardous substance prepare a risk management plan. This provision is modeled on the New Jersey Toxic Catastrophe Prevention Act which requires the preparation of such a plan for each facility in New Jersey handling any one of the extremely hazardous substances which the State has listed. The New Jersey plans are required to include eight of the elements which were described above (safety reviews of new and existing equipment; standard operating procedures; preventive maintenance; operator training; accident investigation; hazard evaluation; emergency response planning; and annual audits). In the New Jersey program, these plans are submitted to a State agency for review and may be returned to the owner or operator for corrective action.

Under the proposed legislation, the Administrator may require that such plans be reviewed by an independent engineer (knowledgeable in these fields) who is not otherwise employed by the facility owner or operator. The independent engineer must certify on the plan or return it to the owner or operator with recommended changes. Corrective actions recommended by the independent engineer must be implemented by the facility owner or operator. A

ADD-109

8584

244

similar review provision has been included in the SPCC program under section 311 of the Clean Water Act.

The risk management planning requirement may be different from other requirements imposed under this subsection in that it requires a comprehensive plan covering the whole facility (rather than any specific piece of equipment, substance or process) and is reviewed independently with corrective action mandated.

The Administrator is to coordinate actions under this authority with actions taken by the Occupational Safety and Health Administration so that requirements imposed by both agencies to accomplish the same purpose are not unduly burdensome or duplicative. This requirement for coordination in no way diminishes the Administrator's authority to act and does not imply that requirements under this section must be set aside or delayed where OSHA is acting with respect to the same hazard. Quite often protection technologies which are appropriate for workers on-site (protection clothing, respirators, etc.) and which may be required by OSHA would not be effective to prevent death or injury among the general public residing or working near a facility.

It is not a purpose of this subsection to impose additional penalties on the owners or operators of facilities where a single event violates requirements imposed both under this section and by OSHA. In response to those events a single enforcement strategy should be developed through consultation between the two agencies.

Testimony at hearings before the Committee by representatives of the chemical manufacturing industry indicated a belief that OSHA may be a more appropriate lead agency than EPA to implement some of the authorities granted in the proposed section 159. Accidental releases with the potential to cause injury and death outside the boundaries of a facility handling extremely hazardous substances would typically present an equal or greater threat to the health and safety of workers working at the facility during the event. OSHA is charged with assuring that the health and safety of workers is protected from the adverse effects of such events. And OSHA already has authority to implement requirements similar to those described here.

But it must be noted that OSHA has not chosen to act on these authorities even in light of the evidence from its own post-Rhodes study (the Chemical Special Emphasis Program) which indicated that existing OSHA regulations are not effective in preventing or mitigating the threat of catastrophic chemical accidents.

A private consulting organization has circulated a proposed accident prevention program which is prepared for consideration and promulgation by OSHA (see Organization Resource Counselors, Inc. (ORC) "Memorandum of the Vice President dated December 9, 1988"). Although there is much to commend in this proposal, it would not, if promulgated as written, satisfy the intent of this legislation with respect to accident prevention. It proposes to preempt all State and local government action in this area. The bill, by contrast, contemplates a cooperative Federal-State program employing the strengths of each governmental level to prevent accidents. The ORC proposal, by definition, declares all hazards evaluation material to be confidential and subject to trade secret protection and is,

ADD-110

Thus, contrary to the purpose of the hazard assessment requirement imposed here (and to the provisions of current law which authorize local emergency planning commissions to request such information from facility operators). Finally, the proposed rule would impose only vague performance standards on facility owners and operators which would be essentially unenforceable with respect to any specific element in the recommended program.

In respect to the balance of responsibility between EPA and OSHA in this area, it must also be noted that EPA has been assigned significant responsibilities in emergency planning and the coordination of reporting and record-keeping requirements for releases of extremely hazardous substances under CERCLA and SARA. As the result of these authorities, EPA has developed considerable expertise in the area of accident prevention. For instance, the substances proposed to be listed under the ORC document cited above are drawn from the list of substances promulgated by EPA under section 302(a) of SARA.

The current language of section 112 of the Clean Air Act may be read to authorize a program to prevent the release of extremely hazardous substances to the air. Section 112 contains no language limiting the regulatory authority to the establishment of standards for routine, process releases only. Section 112(a)(1) of the Clean Air Act defines a hazardous air pollutant as an air pollutant which may reasonably be anticipated to result in "an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness." On its face, this definition applies equally to an acutely dangerous pollutant which can cause death or serious illness due to an accidental release and to a chronically dangerous pollutant which can cause death or serious illness after prolonged routine emissions. Thus, the bill does not create entirely novel authorities for EPA; nor does it move the Agency into a field fully and effectively occupied by OSHA standards.

Subsection (f) does not authorize the Administrator to promulgate requirements which would be applicable to the accidental release of radionuclides from a facility which is licensed by the Nuclear Regulatory Commission.

No specific compliance deadline is established under this subsection for the accidental prevention requirements which may be imposed by the Administrator. The Administrator is to establish an effective date for each regulation at the time it is promulgated. The effective date may be different for new and existing facilities and requirements for new facilities may be applicable to facilities which begin construction at any time after the requirement is first proposed. Generally, requirements which only mandate changes in procedure can be implemented by new and existing facilities almost immediately. However, other changes which involve capital investment or the development of specialized programs may require more time to implement at existing facilities. As noted above, the Board may include in its recommendations for proposed rules compliance schedules taking into consideration these factors.

Accident prevention requirements promulgated pursuant to subsection (f) may be enforced by the Administrator under section 113 of the Clean Air Act.

*Detection.*--Subsection (g) of the proposed section 129 requires that regulations promulgated under subsection (f) include leak detection requirements for any facility handling an extremely hazardous substance (in more than threshold amounts) which has been listed under subsection (c). The regulations must provide for the monitoring of all devices and systems, storage facilities and transfer points at which listed substances are present. Furthermore, such monitoring systems must be continuous in nature, that is, they must have the capability to provide immediate detection and notification to the facility operator that an accidental release of a covered substance is occurring.

Continuous monitoring technology is available to provide an early warning of unplanned releases before they threaten catastrophic results. Such technologies have been installed voluntarily by a number of domestic and foreign semiconductor firms. These systems permit the monitoring of as many as 25 different gases at as many as 50 different points in the facility, with analysis of samples from each location during each thirty minute interval. Low level alarms as well as high level alerts can be triggered when an accidental release occurs, to notify the plant operator of the occurrence so that it can be corrected as soon as possible.

Requirements under this subsection may permit the use of a variety of continuous monitoring systems. This will depend on the specific circumstances of the each covered facility, including its size and type, as well as the quantity and characteristics of the hazardous substances present. The advantages and disadvantages of various detection systems are discussed in the EPA report, *Review of Emergency Systems*, published in June of 1988. EPA noted in the report that additional research and development needs to be conducted to improve the performance and lower the cost of some system designs before they can be widely useful in accident prevention programs. The Administrator should actively support such research with the research and development authorities granted under this section.

*Order authority.*--Subsection (h) of the new section 129 authorizes the Administrator to secure action through district courts which will abate any threat of imminent and substantial endangerment of public health, welfare or the environment due to the release or potential release of an extremely hazardous substance. The Administrator may also issue orders (including requirements for modifications in equipment, processes, training and procedures) and take other actions which may be necessary to protect human health, welfare or the environment. Persons failing to comply with an order may be subject to a fine of up to \$25,000 per day for each day of non-compliance.

These authorities are not unlike the powers granted to the Administrator under other statutes including section 808 of the Clean Air Act and section 106 of CERCLA. The Administrator is directed to publish guidance for the use of subsection (h) in concert with these other authorities.

The provisions of this subsection are very similar to those of section 106 of the Comprehensive Environmental Response, Compensation and Liability Act which have been reviewed by the courts on several occasions. See especially *B.F. Goodrich v. Murtha*, 687 F.



Supp. 89; *United States v. Conservation Chemical Co.*, 619 F. Supp. 162; *United States v. Olati and Goss*, 630 F. Supp. 1361; and *United States v. Northeastern Pharmaceutical and Chemical Company*, F. Supp. 832.

The *Conservation Chemical* case includes the most extensive discussion of these provisions and will be quoted here at length to establish the intent of the legislation with respect to this subsection.

First, "the United States does not have to prove that 'an imminent and substantial endangerment' actually exists. The statute clearly authorizes the United States to obtain relief when 'there may be an imminent and substantial endangerment'". *United States v. Conservation Chemical Co.*, 619 F. Supp. at 192.

Second, "the United States does not have to show that people may be endangered . . . [the statute] authorizes relief where there may be endangerment to the 'public health or welfare or the environment.' Use of the disjunctive 'or' mandates the conclusion that possible endangerment to the public welfare alone, or a possible endangerment to the environment alone, will warrant relief." Furthermore, "the term 'public welfare' is exceptionally broad, and encompasses 'health and safety, recreational, aesthetic, environmental and economic interests.'" *City of El Paso v. Reynolds*, 397 F. Supp. 694." *United States v. Conservation Chemical Co.*, 619 F. Supp. at 192.

Third, as to the nature of the endangerment which may give rise to action under this subsection, the Court said (of the comparable use of the term in CERCLA) that "an endangerment need not be an emergency in order for it to be 'imminent and substantial'". *United States v. Conservation Chemical Co.*, 619 F. Supp. at 192. "[The United States need not qualify the risk of harm in order to establish an endangerment. Both the courts and Congress have recognized that the evaluation of a risk of harm involves medical and scientific conclusions that 'clearly lie on the frontiers of scientific knowledge,' such that 'proof with certainty is impossible.'" Further, "an endangerment need not be an emergency in order for it to be 'imminent and substantial'". *United States v. Conservation Chemical Co.*, 619 F. Supp. at 192.

In the application of the general standard both in the context of court action and when issuing orders, the Court recognized (by citing the legislative history of the Safe Drinking Water Act) that Congress intended for the Administrator to act in favor of protecting health, welfare and the environment rather than to interpret the authority of the statute narrowly. "Congress' emphasis on the protection of health and the environment, and especially its approval of the use of nondefinitive data in risk assessment, means that if an error is to be made in applying the endangerment standard, the error must be made in favor of protecting public health, welfare and the environment. Thus, just as the word 'imminent' does not require proof that harm will occur tomorrow, and the word 'endangerment' does not require quantitative proof of actual harm, the word 'substantial' does not require quantification of the endangerment . . . Instead the decisional precedent demonstrates that an endangerment is substantial if there is reasonable cause for concern that someone or something may be exposed to a risk of harm by a release, or a threatened release, of a hazardous substance



2588

248

if remedial action is not taken, keeping in mind that protection of the public health, welfare and the environment is of primary importance." *United States v. Conservation Chemical Co.*, 519 F. Supp. at 194.

Finally, it is important to note in this context that harm or threatened harm may be present even when only very small amounts of an extremely hazardous substance may be released. Although the Administrator may establish threshold amounts of substances which are listed under subsection (c) for the purpose of indicating which facilities handling these substances must conduct hazard assessments pursuant to subsection (d), the presence of substances in amounts greater than such threshold amounts shall not be a necessary condition for taking action under this subsection. A substantial endangerment may occur in the presence of lesser amounts.

The Administrator may seek injunctive or other relief from a court or issue an administrative order when extremely hazardous substances whether or not they are listed under subsection (c) may be presenting a threat or when listed substances in quantities less than threshold amounts may present a threat. This is especially important in light of the evidence from the Acute Hazardous Events Data Base cited above which indicates that 67 percent of the injury events recorded in that data base involved the release of substances in amounts less than the reportable quantity under CERCLA. Therefore, threshold quantities listed here may be different from reportable quantities under CERCLA.

It is not intended that the Administrator use the order authority available under this paragraph to conduct a plant-by-plant safety review of the chemical industry as is provided in the New Jersey Toxic Catastrophic Prevention Act. Although such an approach may be effective when implemented by an agency with significant expertise, the development of facility-specific risk reduction work plans is currently beyond the capability of the Environmental Protection Agency. EPA may conduct audits and investigations as part of an enforcement scheme for requirements promulgated under subsection (f), but it is not intended that a top-to-bottom investigation of every site handling an extremely hazardous substance will be conducted on a routine schedule. Such audits are the responsibility of the owners and operators of these facilities.

However, when a facility experiences an accidental release which causes death, serious injury or substantial property damage, it, *prima facie*, presents a threat of imminent and substantial endangerment to public health. In other industries (as with pipeline operations under the Hazardous Liquid Pipeline Safety Act) facilities experiencing such accidents are only allowed to go back into operation pursuant to an order (like that which may be issued under subsection (b)) which assures that conditions contributing to the accidental release have been corrected. The authorities of subsection (b) can be implemented to include a prohibition on restarting a facility where an accident has occurred until corrective action pursuant to an order to remove the imminent endangerment has been taken.

Enforcement.—Subsection (i) of the new section 123 includes a cross reference to other sections of the Act to provide for enforce-

ment (section 113), information gathering (section 114), judicial review (section 307) and citizen suits (section 304) with respect to any standard or requirement promulgated under section 129 in the same manner as any standard or requirement that is promulgated under section 112 would be treated under such sections.

*Presidential review.*—Subsection (j) of the new section 129 requires the President to conduct a review of the accident prevention, mitigation and response authorities of the Federal Government to determine whether reorganization would facilitate more effective administration and implementation of such authorities. The review would include programs at the Environmental Protection Agency, the Department of Labor, the Department of Transportation, the Nuclear Regulatory Commission, the Federal Emergency Management Administration, and other agencies and departments. As many as 14 different departments and agencies have participated in the work of the National Response Teams which have been organized in the aftermath of chemical and petroleum accidents.

The President may utilize the Chemical Safety Board authorized by subsection (e) as the agency to conduct the review required by this subsection. Employing the Board for such a purpose would facilitate an early integration of the Board's functions with those of other Federal agencies and may provide a continuing point of contact and coordination for this purpose after the initial review is complete. Testimony from the chemical industry to the Committee in hearings indicated support by the regulated community for a coordinated Federal approach to accident prevention and suggested that an agency like the Board might most effectively carry out that responsibility.

The President is to transmit a message on Federal authorities for release prevention, mitigation and response to the Congress not later than 24 months after the enactment of this legislation containing a report on the report on the review which has been conducted and including any recommendations for legislative change in authorities which the President deems appropriate including the development of new authorities to assure a effective and efficient Federal response to catastrophic chemical accidents.

Nothing in this section would authorize the President to reassign responsibilities for accident prevention or mitigation delegated to a specific agency by statute.

*State authority.*—The new section 129 of the Clean Air Act is intended to create a comprehensive Federal scheme for the prevention of accidental releases of extremely hazardous substances. Under the provisions of section 112 (as amended by S. 1680), States may participate in this regulatory program. On other occasions when similar schemes have been enacted, Federal courts have concluded that the Federal law is preemptive of some State and local authorities even when the preemption was not explicitly stated or intended. To assure that such a preemption of State or local law, whether statutory or common, does not occur, environmental legislation enacted by the Congress has consistently evidenced great care to preserve State and local authority and the consequent remedies available to citizens injured by the release of harmful substances into the environment.

8712

372

ment clarifies that in such situations EPA can define the facility to be the office of the convicted company. In this fashion, all the company's operations will be affected by the hearing. Discretionary rather than mandatory listing of additional facilities provides the flexibility necessary for the EPA to consider variations in the structure of violating industries.

**JUDICIAL REVIEW PENDING RECONSIDERATION OF REGULATION  
(SECTION 306)**

**SUMMARY**

Section 306 of the bill amends section 307 of the Act by providing that petitions for reconsideration of final actions by the Administrator shall not render those actions non-final for purposes of judicial review, nor extend the time within which petitions for review can be filed, nor postpone the effectiveness of the action for which reconsideration is sought.

**DISCUSSION**

The purpose of this amendment is to clarify and confirm that under section 307(b), as under section 307(d)(7)(B), a petition for Agency reconsideration does not render Agency action non-final for purposes of judicial review, and does not toll the 60-day time period for seeking judicial review. This amendment is designed to ensure prompt judicial review of final actions by EPA, and to assure that the pendency of a petition for reconsideration does not delay that review or limit the effectiveness or enforceability of EPA's action pending reconsideration or judicial review. Notwithstanding this amendment, however, the courts retain the discretion to stay consideration of the appeal pending reconsideration by EPA, as well as to stay implementation of the rule.

This amendment overrules *West Penn Pottery Co. v. EPA*, 660 F.2d 661 (3d Cir. 1988), which held that the pendency of a petition for agency reconsideration rendered the challenged agency action non-final for purposes of judicial review. Contrary to the analysis and decision in that case, this amendment reaffirms what both the language and the legislative history of section 307(b) demonstrate, this is, that Congress intended EPA rulemaking action to be final upon final promulgation, not upon a decision on reconsideration. EPA rulemaking under the Act is reviewable in the Federal courts of appeal only if review is sought within the Act's 60-day review period. This provision is essential to the efficient implementation of the Act's regulatory program. Allowing *West Penn* to stand would delay judicial review of EPA actions, and would encourage the filing of petitions for reconsideration as a delay tactic.

**CITIZEN SUITS AND PENALTIES (SECTION 308)**

**SUMMARY**

Section 308 of the bill amends section 304 of the Act in a number of respects.

First, the bill amends section 304(a) of the Act by authorizing the Federal district courts to apply civil penalties in citizen suits,

ADD-116

which penalties shall be payable into a special fund created in new subsection 304(g).

Second, the amendment adds new subsection 304(g), which provides that penalties assessed in citizen suits shall be deposited in a special fund in the United States Treasury. The bill further provides that this special fund shall remain available for use by EPA to finance air compliance and enforcement activities.

Third, the bill amends section 304(c) of the Act to authorize EPA to intervene at any time, as a matter of right, in any citizen suit brought under the Act. In addition, the bill provides that EPA can substitute itself for the plaintiff in those actions with regard to any claims for civil penalties.

Fourth, the bill further amends section 304(a) of the Act by providing that a citizen suit may be brought against the Administrator where there is alleged a failure to act that violates one or more of the standards set out in section 307(d)(9) of the Act, or that constitutes unreasonable delay. In addition, section 304(a) is amended to make clear that the court's power to compel the Administrator to take an action specified in the Act is not dependent upon whether the Administrator has published a determination in the Federal Register that threshold preconditions to that action are met.

Fifth, a new paragraph is added to section 304(c) of the Act which provides that plaintiffs initiating citizen suits must serve a copy of their complaint upon the Attorney General of the United States and upon the Administrator. The bill further provides that the United States must be given advance notice of, and an opportunity to comment upon, any consent judgment proposed to be entered in a citizen suit.

Sixth, section 307(b) of the Act is amended to authorize challenges to EPA decisions to defer action under the Act. The bill provides that such challenges may be brought either pursuant to section 307(b)(1), or in an action to compel performance in Federal district court under 304(a)(2).

Seventh, section 307 of the Act is amended by adding a new subsection that allows any person to petition EPA to issue, amend, reconsider, or repeal any regulation or order issued under the Act. The section further provides that the Administrator shall either grant or deny any such petition within twelve months, unless the petition arises under section 307(d)(7)(b), in which case the time limit is four months. Finally, the section provides that the Administrator shall take final action "within a reasonable time" on petitions that are granted.

#### DISCUSSION

These amendments make several important changes and clarifications in the citizen enforcement provision of the Act.

As is the case in section 505 of the Clean Water Act and in section 7002 of the Resource Conservation and Recovery Act, the amendment would authorize Federal district courts to assess civil penalties in citizen suits. The assessment of civil penalties for violations of the Act is necessary for deterrence, restitution and retribution. Such penalties must be paid into a special fund in the United States Treasury.