Emergency Response and Planning Requirements Applicable to Unpermitted Air Pollution Releases

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§ 1. INTRODUCTION

Environmental law, as it has evolved over the past thirty-five years, is primarily aimed at those who routinely dispose of wastes to the air, land, and water. Environmental law usually requires dischargers to obtain a permit that limits their emissions or effluent discharges. Enforcement programs are used to ensure that pollution releases stay within these legal limits. However, public health is also threatened by discharges that are not controlled by the laws aimed at routine releases or planned waste disposal practices.

Nonroutine releases, whether accidental, negligent, or due to intentional conduct, are not as amenable to legal control as are routine releases. Therefore, nonroutine releases are subjected to different legal requirements involving notification, clean-up, and compensation programs. Such releases have received additional attention in the post-September 11, 2001, era because biological, chemical, and radiological weapons are primarily an air pollution threat.

This Article focuses on the legal regimes established by federal environmental laws to deal with unpermitted releases. Notification requirements are especially important because owners or operators of a facility may be punished both for an unpermitted discharge and for the failure to report it. For the government, proving that an illegal discharge occurred can be more difficult than proving a failure to notify. In such circumstances, the notification requirements become an important part of

1. See, e.g., Federal Water Pollution Control Act (CWA) § 402, 33 U.S.C. § 1342 (2000) (regulating the discharge of pollutants into waters of the United States); CWA § 404, 33 U.S.C. § 1344 (requiring permits for the discharge of dredged and fill material into wetlands); Resource Conservation and Recovery Act (RCRA) § 3005, 42 U.S.C. § 6924 (2000) (requiring a permit for the treatment, storage, or disposal of a hazardous waste); Clean Air Act (CAA) § 110, 42 U.S.C. § 7410 (providing for the creation of state implementation plans to control the amount of criteria pollutants, among others, released into the ambient air).


5. See, e.g., id.

6. See generally Arnold W. Reitze, Jr., Criminal Enforcement of Pollution Control Laws, 9 ENVTL. LAW. 1 (2002).
the government’s program to protect the public from unpermitted pollutant releases, especially in the case of air pollutant releases that disperse quickly.\footnote{See generally id.} To avoid increased penalties, it is important for those responsible for unpermitted releases to notify the proper authorities in a timely fashion.

§ 2. THE NATIONAL RESPONSE CENTER

The National Response Center (NRC) is the national recipient, or “point of contact,”\footnote{NRC, NRC Background (2002), http://www.nrc.uscg.mil/nrcback.html [hereinafter NRC Background]; see 40 C.F.R. § 300.125(a) (2004).} for federally mandated reports of “oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.”\footnote{NRC Background, supra note 8. The National Oil and Hazardous Substances Pollution Contingency Plan of 1973 (NCP) established the National Response Center at U.S. Coast Guard Headquarters in Washington, D.C. NRC, Legislative Requirements (2002), http://www.nrc.uscg.mil/nrclegal.html. The NRC reports and coordinates responses to pollution from oil and hazardous substances. Id.} NRC is the operations and communications center for the National Response Team (NRT), which is the planning, policy-making, and coordinating organization for discharge incidents. NRT member agencies include the Environmental Protection Agency (chair), the U.S. Coast Guard (vice chair), and fourteen other federal departments and agencies.\footnote{The remaining NRT member agencies are the Department of Agriculture, the Department of Commerce (via the National Oceanic and Atmospheric Administration (NOAA)), the Department of Defense (DOD), the Department of Energy, the Department of Health and Human Services, the Department of the Interior (DOI), the Department of Justice (DOJ), the Department of Labor, the Department of State, the Department of Transportation (DOT), the Department of Treasury, the Federal Emergency Management Agency (FEMA), the General Services Administration, and the Nuclear Regulatory Commission.} In addition, NRC

The NRC also collects and disseminates spill data for Federal On-Scene Coordinators (FOSCs) and serves as the communications and operations center for the National Response Team (NRT). The NRC performs a variety of services on behalf of the Coast Guard and other entities within the DOT. It provides information to the “White House, Secretary of Transportation, and Chiefs of Modal Administrations [such as the Federal Highway Administration, the Federal Railroad Administration, the Federal Transit Administration, the Federal Aviation Administration, and the Maritime Administration] regarding all significant transportation emergencies reported to the Center.”\footnote{NRC Background, supra note 8. The NRC “provides information to the DOT and the Coast Guard’s Office of Marine Safety, Security, and Environmental Protection as needed for a variety of reports, studies, or Congressional Inquiries.” Id.} It also furnishes agencies within the DOT with incident reports and gives notice of transportation related incidents, which are reportable under the Hazardous Materials Transportation Act, to the DOT and the National Transportation Safety Board.
distributes reported release information to any federal entity that has concluded a written agreement or understanding with NRC.\footnote{40 C.F.R. § 300.125(a). According to the NRC Internet website, the NRC provides the following services to enhance the NRS found at 40 C.F.R. pt. 300 (2004): For Environmental Protection Agency, the NRC receives incident reports under . . . \cite{NRS Website} . . . \cite{40 C.F.R. § 300.120.} For the Federal Emergency Management Agency, the NRC acts as a 24-hour contact point to receive earthquake, flood, hurricane, and evacuation reports; For the Nuclear Regulatory Commission . . . and the Department of Energy, the NRC makes telephonic notification of all incidents involving radioactive material releases to the environment; For the Department of Interior, the NRC receives reports of incidents involving Trans-Alaskan Pipeline Oil and electronically forwards the reports to the appropriate DOI representative; For the Department of Defense, incidents involving transportation emergencies with DOD munitions or explosives are recorded and referred for action to the Army Operations Center. Any transportation anomalies involving hypergolic rocket fuels and oxidizers are recorded and immediately passed to the Air Force Operations Center; . . . For the Department of Health and Human Services, releases of etiological and biological agents are recorded at the NRC and referred to the Centers for Disease Control; \cite{40 C.F.R. § 300.120.} For the Federal Railroad Administration, the NRC maintains the 24-hour Rail Emergency Hotline (1-800–525-0210) to take reports of railroad incidents involving hazardous materials, grade crossing fatalities, accidents resulting in injury or death of railroad employees, and the refusal of railroad employees to submit to required toxicological testing. NRC Background, \textit{supra} note 8 (italics omitted).} NRC is also the contact point for activation of the NRT\footnote{NRC Background, \textit{supra} note 8; see also 40 C.F.R. §§ 300.110, .115, .120. The Plan establishes four special force components: the Coast Guard National Strike Force (NSF), the Coast Guard Public Information Assist Team (PIAT), the EPA Environmental Response Team (ERT), and the Scientific Support Coordinators (SSCs). NRS Website, \textit{supra} note 10; see also 40 C.F.R. § 300.145.} and provides facilities for the NRT to use in coordinating a national response action when required.\footnote{NRC Background, \textit{supra} note 8; see also 40 C.F.R. § 300.125. The NRT “consists of 16 federal agencies with interest and expertise in various aspects of emergency response to pollution incidents.” NRS Website, \textit{supra} note 10; see also 40 C.F.R. § 300.110. The NRT itself is not directly involved in incident response activities. \textit{See id.} Instead, the NRT “is a planning, policy, and coordinating body [that provides] national level policy guidance prior to an incident.” NRS Website, \textit{supra} note 10. Details of the NRT responsibilities are found at 40 C.F.R. § 300.110 and 40 C.F.R. pt. 300, app. E (2004). Further information can be found on the Internet. U.S. National Response Team, \textit{Ensuring Effective National Oil & Hazardous Substances Preparedness & Response}, http://www.nrt.org (follow “About NRT” hyperlink) (last visited Dec. 15, 2005).} The National Oil and Hazardous Substances Pollution
Contingency Plan (NCP) contains detailed provisions regarding NRC’s duties and organizational structure.\textsuperscript{14}

Coast Guard personnel and civilian employees staff NRC’s operations center and provide callers with around-the-clock assistance and information services.\textsuperscript{15} When a telephone call or web-based notification is received, an NRC Duty Officer asks the caller a detailed set of standardized questions in order to obtain the maximum amount of available information concerning the incident.\textsuperscript{16} NRC personnel then enter information regarding releases to the environment directly into an online database (IRIS), where it is distributed electronically through the NRS.\textsuperscript{17} Within fifteen minutes of receiving a notification of a spill or release, NRC notifies the proper federal agency based on (1) the material involved; (2) the mode of transportation used; and (3) any injuries, damage, and fatalities incurred.\textsuperscript{18} Data collected by NRC is available to the general public under the Freedom of Information Act (FOIA).\textsuperscript{19} NRC also makes its spill data available via the Internet.\textsuperscript{20} However, if the data is intended for use in a legal proceeding, a formal request must be mailed to the Coast Guard.\textsuperscript{21}
§ 2(a). What Information Does NRC Need?

When reportable incidents occur, the responsible parties should immediately contact NRC via its toll-free number. Parties are encouraged to report an oil spill or chemical release with whatever information they may have, even if they do not have a legal obligation to report the incident.

The following information must be reported to NRC: (1) who—the name, address, and phone number of the reporting party as well as the name, address, and phone number of the responsible party, if known (anonymous calls are accepted); (2) what—what material was released and in what quantity; (3) where—city, county, state, location, street corner or landmark nearest to the incident; (4) when—when the release happened and/or when it was discovered; and (5) why—what caused the discharge. Furthermore, notifications made via the web-based forms are broken down into ten categories: aircraft, platform, continuous release, railroad, fixed, mobile, storage tank, unknown sheen, pipeline, and vessel.

§ 2(b). Reporting to NRC Under Other Statutes

The primary statute requiring reporting of releases is the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This statute’s requirements are covered in detail in the following section.

Other environmental statutes also have reporting requirements. The Clean Water Act section 311 requires a responsible party to immediately notify NRC as soon as the party has “knowledge of an oil spill from a vessel or facility” (1) operating in or along U.S. navigable waters, waters of the contiguous zone, the outer continental shelf, or at a deep water port; or (2) subject to the Magnuson Fishery Conservation and

22. Reporting a Spill, supra note 17. The telephone number is (800) 424-8802. Id.
23. Id.
24. Id.
25. Id.
Management Act.\textsuperscript{27} Discharges are covered if they are released in “harmful” quantities as determined under the CWA.\textsuperscript{28}

Transporters of hazardous waste, including radioactive substances, are subject to the DOT’s Hazardous Materials Transportation Regulations.\textsuperscript{29} Carriers must report discharges to NRC when, as a direct result of the materials, (1) a death or injury requiring hospitalization occurs, (2) property damage exceeds $50,000, or (3) “[f]ire, breakage, . . . or spillage of an etiologic agent occurs.”\textsuperscript{30} Notification requirements for bulk shipments by water are the same as those for oil and hazardous substances under 33 C.F.R. § 153.203.\textsuperscript{31}

The responsible party must telephone NRC when a pipeline system failure results in a release of a hazardous liquid or carbon dioxide that causes any of the following: (1) an explosion or fire, (2) an escape to the atmosphere of more than five barrels a day of a highly volatile liquid or carbon dioxide, (3) a death or injury, (4) property damage exceeding $50,000, (5) pollution of any body of water, or (6) an incident deemed significant by the operator.\textsuperscript{32}

Releases of any liquefied natural gas (LNG), other gas from an LNG facility, or toxic, corrosive, or flammable gas must be reported to NRC by the responsible party under any of the following circumstances: (1) a death or injury involving hospitalization, (2) an incident causing more than $50,000 worth of property damage (including the cost of lost gas), (3) a release resulting in the “emergency shutdown of an LNG facility,” or (4) an incident deemed significant by the operator.\textsuperscript{33}

Pursuant to the Resource Conservation and Recovery Act (RCRA), discharges from a hazardous waste treatment or storage facility that create an emergency situation must be reported by the facility’s


\textsuperscript{28} CWA § 311(b)(4), 33 U.S.C. § 1321(b)(4). “Harmful” discharges are those that “[v]iolate applicable water quality standards; or (b) [c]ause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.” 40 C.F.R. § 110.3 (2004).

\textsuperscript{29} See 49 C.F.R. §§ 171.1, 171.8 (2004).

\textsuperscript{30} Id. § 171.15(a)(1), (3).

\textsuperscript{31} 40 C.F.R. § 263.30(d).

\textsuperscript{32} 49 C.F.R. § 195.52.

\textsuperscript{33} Id. §§ 191.5, 191.3 (defining “incident” under that section).
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emergency coordinator to the on-scene coordinator or NRC.34 The content of the notice is specified in the regulation.35

§ 3. REPORTING REQUIREMENTS UNDER CERCLA

The Comprehensive Environmental Response, Compensation, and Liability Act36 addresses part of the hazardous pollution problem through a comprehensive and uniform system of notification, emergency governmental response, enforcement, and liability assessment.37 The reporting obligation found in section 103 of CERCLA38 is an essential part of that system because it provides for timely notice to the government for quick response and containment of dangerous releases.39 CERCLA’s reporting requirements add to those imposed by section 304 of the Emergency Planning and Community Right-to-Know Act (EPCRA).40

To prove a violation of CERCLA’s section 103(a), the government must establish six elements.41 First, there must be a “release . . . of a hazardous substance.”42 Second, the release must be “in quantities equal to or greater than”43 the reportable quantity (RQ) for the substance.44

34. RCRA § 3004(a), 42 U.S.C. § 6924(a) (2000); 40 C.F.R. § 264.56(a), (d). Interim status TSD facilities have the same requirement. RCRA § 3005(c), 42 U.S.C. § 6925(c); 40 C.F.R. § 265.56(d)(2). Releases from a generator of hazardous waste must also be reported to the NRC. RCRA § 3002(a), 42 U.S.C. § 6922(a); 40 C.F.R. § 262.34(d)(iv). Emergency reporting for used oil processors and re-refiners is also required. RCRA § 3006(h), 42 U.S.C. § 6929(h); 40 C.F.R. § 279.52(b)(6).
35. 40 C.F.R. § 264.56(d)(2).
39. CERCLA § 103(a), 42 U.S.C. § 9603(a); 40 C.F.R. § 302.6(a). The three dedicated phone numbers at the NRC are (800) 424-8802, (202) 426-2675, and (202) 267-2675. The facsimile number for the NRC is (202) 267-2165, and the telex number is 892427. Administrative Reporting Exemptions for Certain Radionuclide Releases, 63 Fed. Reg. 13,460, 13,460 (Mar. 19, 1998); 40 C.F.R. § 302.6(a).
41. United States v. Laughlin, 10 F.3d 961, 966 (2d Cir. 1993) (interpreting the reporting requirements of section 103(a) of CERCLA).
42. CERCLA § 103(a), 42 U.S.C. § 9603(a).
43. Id.
Third, the release must come from a “vessel or facility.” Fourth, the hazardous substance must be released “into the environment.” Fifth, the defendant must be a person “in charge of a vessel or . . . facility.” Sixth, the defendant must have failed to “immediately notify” the National Response Center (NRC) of the release “as soon as he [or she] has knowledge” of it. These elements involve two major issues: whether the release in question is a reportable release under CERCLA, and, if so, when the report to NRC must be made.

§ 3(a). Reportable Releases

Only a “release” of a “hazardous substance” in excess of the reportable quantity (RQ) for that substance must be reported to NRC. Therefore, the question of whether a release must be reported to NRC usually hinges on (1) what constitutes a release into the environment, and (2) whether the substance was released in a quantity meeting or exceeding the substance’s RQ.

§ 3(a)(1). What constitutes a release to the environment

Persons in charge of a facility must report releases of hazardous substances “into the environment” to NRC. Release is defined broadly as “any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment.”
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environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any hazardous substance or pollutant or contaminant)." The “environment” includes the following: navigable waters, the waters of the contiguous zone, the ocean waters in the exclusive economic zone of the United States, any other surface water, ground water, drinking water supply, land surface or subsurface strata, and the “ambient air.” Only an actual release, not the mere threat of a release, triggers the duty to report under CERCLA. For example, the placement of an RQ of a hazardous substance into an enclosed container has been held not to constitute a release unless the substance escapes from the container into the environment. However, this interpretation is contrary to the statutory definition of the term “release.”

Additionally, to be subject to CERCLA notification requirements, the release must have originated from a vessel or facility. CERCLA defines “facility” as

(A) any building, structure, installation, equipment, pipe or pipeline (including any pipe into a sewer or publicly owned treatment works), well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, or aircraft, or (B) any site or area where a hazardous substance has been deposited, stored, disposed of, or placed,

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60. CERCLA § 101(22), 42 U.S.C. § 9601(22).
64. CERCLA § 101(8), 42 U.S.C. § 9601(8); 40 C.F.R. § 302.3 (2004).
65. CERCLA § 101(8), 42 U.S.C. § 9601(8).
66. See Fertilizer Inst. v. EPA, 935 F.2d 1303, 1310 (D.C. Cir. 1991) (vacating an EPA final rule requiring parties to report the placement of a reportable quantity (RQ) of a hazardous substance into an unenclosed containment structure).
67. Id. at 1309–10.
68. CERCLA § 101(22), 42 U.S.C. § 9601(22).
69. CERCLA § 103(a), 42 U.S.C. § 9603(a).
or otherwise come to be located; but does not include any consumer product in consumer use or any vessel.70

The following occurrences are specifically exempted from the definition of release and, thus, are not reportable to NRC: (1) “any release which results in exposure to persons solely within a workplace,” (2) “emissions from the engine exhaust of a motor vehicle, rolling stock, aircraft, vessel, or pipeline pumping station engine,” (3) “release of source, byproduct, or special nuclear material from a nuclear incident,” and (4) “the normal application of fertilizer.”71 In addition, section 103(e) of CERCLA exempts pesticides that are registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) from the reporting requirements during application, handling, or storage by an agriculture producer.72

Releases resulting in exposure to persons solely within the workplace are excluded because such releases are covered by state and federal occupational safety and health laws.73 However, the reach of this exception is constrained by the statute’s use of the term “solely.”74 For instance, the exception does not apply if a release in the workplace moves into the environment (by absorption into the ground or evaporation into the ambient air).75 In addition, “federally permitted release[s]”76 and stable “continuous release[s]”77 are exempted from the reporting requirement under section 103(a) of CERCLA.78

70. CERCLA § 101(9), 42 U.S.C. § 9601(9); 40 C.F.R. § 302.3 (2004).
72. CERCLA § 103(e), 42 U.S.C. § 9603(e); see also Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) §§ 1–31, 7 U.S.C. §§ 136–136y (2000). The exemption of pesticides applies only to the notification requirements of section 103 of CERCLA. See CERCLA § 103(e), 42 U.S.C. § 9603(e).
74. CERCLA § 101(22), 42 U.S.C. § 9601(22).
75. See Notification Requirements; Reportable Quantity Adjustments, 48 Fed. Reg. 23,352, 23,555 (May 25, 1983); Douglas E. Kliever et al., Release Reporting Requirements Under CERCLA and EPCRA, 27 ENV’T REP. (BNA) 1171, 1172 (1996). The EPCRA exclusion for releases in the workplace is broader because it excludes releases that result in exposure to persons and the environment exclusively within the fence line boundaries of the facility. See 40 C.F.R. § 355.40(a)(2)(i). Therefore, if a release at a facility can be contained before it migrates beyond the fence line through groundwater or the ambient air, for instance, no reporting may be required under section 304 of EPCRA. 40 C.F.R. § 355.40(a).
76. CERCLA § 103(a), 42 U.S.C. § 9603(a).
§ 3(a)(2). Determining whether a hazardous substance of a reportable quantity was released

CERCLA’s release reporting requirements apply to releases of any “hazardous substance.” Hazardous substances are defined by reference to substances identified in sections 307(a) and 311(b)(2)(A) of the Clean Water Act (CWA), section 112 of the Clean Air Act (CAA), section 3001 of the Resource Conservation and Recovery Act (RCRA), section 7 of the Toxic Substances Control Act (TSCA), and any substance designated as hazardous pursuant to section 102 of CERCLA by the Administrator. Wastes found to be characteristic wastes under RCRA regulations are also subject to reporting if their CERCLA RQs are met. Hazardous substances used to neutralize other hazardous substances are not excluded from the CERCLA reporting requirements unless they interact to form a nonhazardous substance prior to release.

The term hazardous substance under CERCLA does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under this paragraph, and natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).

77. CERCLA § 103(f)(2), 42 U.S.C. § 9603(f)(2); see also 40 C.F.R. § 302.8 (setting forth the requirements necessary to establish a continuous release).
78. See CERCLA §§ 103(a), 103(f)(2), 42 U.S.C. §§ 9603(a), 9603(f)(2).
79. CERCLA § 101(14), 42 U.S.C. § 9601(14); CERCLA § 103(a), 42 U.S.C. § 9602(a).
82. CERCLA § 102(a), 42 U.S.C. § 9602(a).
84. 40 C.F.R. §§ 261.20–24.
85. 40 C.F.R. § 302.4(b); see also 40 C.F.R. §§ 261.20–261.24.
This petroleum exclusion also excludes from the reporting requirement hazardous substances normally found in crude oil, petroleum feedstocks, and refined petroleum products.89

The hazardous substances under CERCLA and their designated RQs are found in the “List of Hazardous Substances and Reportable Quantities” at 40 C.F.R. § 302.4.90 The table includes the RQs established by Congress in section 102(a) of CERCLA91 or by an EPA rule.92 RQs for radionuclides are listed in 40 C.F.R. § 302.4, Appendix B.93 Delays occur between the addition of a new chemical to the regulatory requirements of an environmental statute and the addition of that compound to the 40 C.F.R. § 302.4 list.94 Because a CERCLA “hazardous substance”95 is defined by reference to other environmental statutes,96 it may be necessary to check those statutes97 and their implementing regulations to determine the RQ.98
An RQ is based on all releases to any environmental media over a twenty-four-hour period.\textsuperscript{99} Thus, all releases of a given substance in twenty-four hours should be aggregated even if the releases occurred “in different forms and to different media.”\textsuperscript{100} This measuring period does not provide a grace period for reporting.\textsuperscript{101} The duty to report is triggered as soon as there is knowledge that a release meets the RQ of a given substance.\textsuperscript{102}

Determining whether a release of an RQ of a regulated substance has occurred can be difficult.\textsuperscript{103} Complex calculations are often involved in accurately determining the quantity of a substance that has evaporated or dissipated into the soil.\textsuperscript{104} These calculations become even more complex when mixtures of hazardous substances are involved.\textsuperscript{105} The rule for calculating the RQ of mixtures, other than mixtures including radionuclides, is found at 40 C.F.R. § 302.5.\textsuperscript{106} For mixtures consisting of known quantities of hazardous substances, the release must be reported if it equals or exceeds any substance’s RQ.\textsuperscript{107} For mixtures consisting of unknown quantities of one or more hazardous substances, the release must be reported if the total amount of the release exceeds the RQ for any one of the substances.\textsuperscript{108}

\begin{itemize}
\item \textsuperscript{99} 40 C.F.R. § 302.6(a).
\item \textsuperscript{100} Kliever, supra note 75, at 1174.
\item \textsuperscript{101} Id. at 1175.
\item \textsuperscript{102} CERCLA § 103(a), 42 U.S.C. § 9603(a).
\item \textsuperscript{104} Id.
\item \textsuperscript{105} Id.
\item \textsuperscript{106} 40 C.F.R. § 302.5 (2004).
\item \textsuperscript{107} Id. § 302.6(b)(1)(i).
\item \textsuperscript{108} Id. § 302.6(b)(1)(ii). The determination of when notification is required for releases of mixtures of radionuclides is even more complicated. Radionuclide releases fall into three categories: (1) those for which both the identity and quantity of each radionuclide released are known; (2) those for which the identity is known, but the quantity of one or more is not; and (3) those for which the identity of one or more is unknown. Id. § 302.6(b)(2). For those releases in which both the identity and quantity are known, one must first determine the ratio between the amount (in curies) released and the RQ for each radionuclide. Id. § 302.6(b)(2)(i). Reporting is required only for those releases in which the sum of these ratios equals or exceeds the value one. Id. For those releases in which the identity of all radionuclides is known, but the amount of one or more is not, reporting is required only if the total amount released (in curies) equals or exceeds the RQ of any radionuclide in the mixture. Id. § 302.6(b)(2)(ii). For those releases in which the identity of at least one radionuclide is unknown, notification is required if the total amount released (in curies) equals or exceeds the lower of either one curie, or the lowest RQ of any radionuclide in the mixture. Id. § 302.6(b)(2)(iii).
\end{itemize}
$3(a)(3).$ The federally permitted release exception

CERCLA exempts federally permitted releases from the reporting requirements of section 103(a).109 This allows releases permitted under other environmental statutes to be governed exclusively by those statutes.110 Section 101(10) of CERCLA identifies eleven statutory “federally permitted release” provisions under various permit programs,111 yet, despite a detailed definition and the exception’s relatively simple purpose,112 determining its applicability is often difficult.113 In an attempt to alleviate this difficulty, EPA released interim guidance on CERCLA section 101(10)(H) on Dec. 21, 1999.114 In June of 2000, EPA issued a notice announcing its intent to revise the Interim Guidance on CERCLA 101(10)(H).115 In April of 2002, EPA published its guidance for certain air emissions.116 EPA’s enforcement cases117 are guides to EPA’s interpretation of the exemption as it applies to the various types of statutory exemptions.

Additionally, the Atomic Energy Act requires notification to be provided to the Nuclear Regulatory Commission in cases of human radiation exposure, or loss or theft of regulated radioactive material. See 10 C.F.R. §§ 20.2201–2202 (2004).

109. CERCLA § 103(a), 42 U.S.C. § 9603(a) (2000) (requiring reporting of releases “other than a federally permitted release”); 40 C.F.R. § 302.6(a). The Ninth Circuit has construed the federally permitted release exception as an affirmative defense rather than an element of the offense. United States v. Freter, 31 F.3d 783, 788 (9th Cir. 1994). The burden is on the alleged violator to establish that the release falls within the exception. Id. However, the defendant in a section 103 CERCLA criminal case bears only the burden of production to show sufficient evidence that the exception is an issue and is applicable to him or her. Id. at 789 n.6. The burden then shifts to the government to prove the “inapplicability of the defense beyond a reasonable doubt.” Id. (citing United States v. Guess, 629 F.2d 573, 577 n.4 (9th Cir. 1980)).


111. CERCLA § 101(10), 42 U.S.C. § 9601(10).

112. See id.

113. See In re Mobil Oil Corp., 5 E.A.D. 490 (EAB 1994) (commenting that the federally permitted release exception applies only in those situations wherein the release is in compliance with a permit).


§ 3(a)(3)(A). Exemption for releases covered by the CAA. In the context of hazardous emissions to the air, section 101(10)(H) of CERCLA defines “federally permitted release” to include “any emission into the air subject to a permit or control regulation” from a new stationary source or hazardous air pollutant source, emissions controlled under the new source review program, and emissions regulated by a state implementation plan submitted in accordance with section 110 of the CAA “including any schedule or waiver granted, promulgated, or approved under these sections.” EPA has consistently taken the position that the language “subject to a permit or control regulation” requires the facility to be “in compliance with” the permit or control regulation in order to take advantage of the reporting exemption. The Environmental Appeals Board (EAB) upheld that position in In re Mobil Oil Corp., holding that the exemption is “limited to releases in conformance with permit and regulatory requirements.”

In applying the exception to hazardous air emissions, EPA also distinguishes between regulations governing proper operation of a facility and those governing emissions limitations for the facility. For example, in In re Borden Chemicals & Plastics Co., regulations applicable to the facility exempted “unpreventable emergency relief valve releases” from constituting facility operations in violation of, and subject to, EPA enforcement. The Administrative Law Judge (ALJ) held that the question of whether the release was “unpreventable,” and therefore exempt from EPA enforcement for failure to operate the facility properly, is distinct from the question of whether the release exceeds the

119. Id.; see also CAA § 111(a)(2), 42 U.S.C. § 7411(a)(2).
120. See 40 C.F.R. §§ 51.166, 52.21 (2004).
121. CAA § 110, 42 U.S.C. § 7410.
123. Id.
126. Id.
128. Id.
relevant emissions standard. Because the release exceeded the emissions standard and was above the RQ for vinyl chloride, the facility was obligated to report the release by section 103 of CERCLA.

§ 3(a)(3)(B). Exemption for releases covered by RCRA. Section 101(10)(E) of CERCLA defines the federally permitted exception for releases covered by RCRA. EPA interpreted this section to mean that the exception applies where (1) the facility has a final permit for “treatment, storage or disposal” of RCRA hazardous waste; (2) the permit specifically identifies and controls the substances released; and (3) the release is in compliance with the terms of the permit. The exception is inapplicable to facilities that are not required to have a Part B permit under the statute or have only an interim status. Releases reported to the NRC pursuant to the RCRA subtitle C regulations are also exempt from the reporting requirements of section 103(a) of CERCLA.

130. See In re Borden Chems., 1993 WL 70228 at *5–6.
131. Id. at *6; see also CERCLA § 103, 42 U.S.C. § 9603.
134. 40 C.F.R. § 270.1(b). An RCRA permit application consists of two parts. Id. § 302.3(5). Part A is a short form requesting only basic information such as name, address, and the nature of the business. Id. § 270.13(a)–(b). Part B requires detailed information that demonstrates compliance with the technical standards for treatment, storage, and disposal (TSD) facilities. Id. § 270.14–27. A TSD facility that was in existence on November 19, 1980, or on the date of any statutory or regulatory change that makes the facility subject to RCRA, need only file a Part A application to obtain interim status and then continue operations. Id. § 270.1(b).
§ 3(a)(3)(C). Exemption for releases covered by the CWA. Federally permitted releases into the water are defined as

(A) discharges in compliance with a [National Pollutant Discharge Elimination System (NPDES)] permit . . . , (B) discharges resulting from circumstances identified and reviewed and made part of the public record with respect to a permit issued or modified under [section 402 of the CWA] and subject to a condition of such permit, (C) continuous or anticipated intermittent discharges from a point source, identified in a permit or permit application under [section 402 of the CWA], which are caused by events occurring within the scope of relevant operating or treatment systems, [and] (D) discharges in compliance with a legally enforceable permit under [section 404 of the CWA].

A discharge is “in compliance with an NPDES permit” if the permit contains either a specific effluent limitation or an indicator parameter for the hazardous substance released, and the discharge is within such limits. If the discharge exceeds the effluent limitation by more than the RQ for the given substance over a twenty-four-hour period, then the release must be reported to the NRC.

§ 3(a)(3)(D). Other exemptions. Reporting is not required for releases of radionuclides that (1) “occur naturally in the soil from land holdings such as parks, golf courses or other large tracts of land;” (2) occur “naturally from the disturbance of land” such as farming, construction, “and land disturbance incidental to extraction during mining;” (3) are the result of the “dumping of coal and coal ash;” or (4) are “releases of radionuclides from coal and coal ash piles.” In addition, certain metals are exempt from reporting requirements if the average diameter of the released particles is larger than 100 micrometers.

141. Id. at 27,272; see also CERCLA § 103(a), 42 U.S.C. § 9603(a).
142. 40 C.F.R. § 302.6(c).
143. Administrative Reporting Exemptions for Certain Radionuclide Releases, 63 Fed. Reg. 13,460, 13,475 (Mar. 19, 1998) (codified at 40 C.F.R. pt. 302.6). EPA expanded the exemption to include “[r]eleases of naturally occurring radionuclides from land disturbance activities, including farming, construction, and land disturbance incidental to extraction during mining activities, except that which occurs at uranium, phosphate, tin, zircon, hafnium, vanadium, monazite, and rare earth mines.” Id.
144. 40 C.F.R. § 302.6(c). The prior rule covered only those facilities with coal-fired boilers. Id.
and the metals are not radioactive. These metals include antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, selenium, silver, thallium, and zinc. Finally, no reporting is required for “continuous releases,” releases that occur “without interruption or abatement,” or releases that are “routine, anticipated, and intermittent and incidental to normal operations or treatment processes.” However, these releases must comply with pollution discharge laws.

§ 3(b). When the NRC Must Be Notified

Under section 103(a) of CERCLA, a “person in charge” must “immediately” notify the NRC as soon as he or she has “knowledge” of a reportable release. Each of these terms—“person in charge,” “knowledge,” and “immediately”—is critical to determining liability under section 103.

§ 3(b)(1). “Person in charge”

Section 103(a) of CERCLA requires that only persons “in charge” of a facility report a hazardous release. The term “in charge” is not defined in CERCLA or its implementing regulations. The legislative history does not define “person in charge,” but it does indicate that the term was modeled after section 311 of the CWA. Therefore, legislative history and judicial interpretations of section 311 may

145. Id. § 302.6(d).
146. Id. § 302.6(c).
147. Id. § 302.8(b).
148. Id.
150. CERCLA § 103(a), 42 U.S.C. § 9603(a); see also In re Mobil Oil Corp., 5 E.A.D. 490 (EAB 1994).
151. See CERCLA § 103(a), 42 U.S.C. § 9603(a); see also In re Mobil Oil, 5 E.A.D. at 509.
152. CERCLA § 103(a), 42 U.S.C. § 9603(a).
153. Id. A person is defined in CERCLA as “an individual, firm, corporation, association, partnership, consortium, joint venture, commercial entity, United States Government, State, municipality, commission, political subdivision of a State, or any interstate body.” CERCLA § 101(21), 42 U.S.C. § 9601(21).
156. See United States v. Carr, 880 F.2d 1550 (2d Cir. 1989); see also In re Mobil Oil, 5 E.A.D. at 490.

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be used to determine the meaning of the term “in charge” under CERCLA.

The legislative history of section 311 of the CWA states that “[t]he term ‘person in charge’ [was] deliberately designed to cover only supervisory personnel who have the responsibility for the particular vessel or facility and [does] not . . . include other employees.”157 In United States v. Mobil Oil Corp.,158 the Fifth Circuit held that the term “person in charge” as defined in section 311 applies “only to persons who occupy positions of responsibility and power” and not to “every person who might have knowledge” of a release. 159 The Second Circuit addressed this issue in United States v. Carr160 but imposed a less restrictive test, holding that the reporting requirements of section 103 of CERCLA extended to persons even of relatively low rank who are “in a position to detect, prevent, and abate a release of hazardous substances.”161

Although the scope of the term “in charge” will vary depending on the facts of a particular case, the key factors in making such a determination are “responsibility” and “power.”162 If an employee has job responsibilities placing her in a position to make timely discovery of a release and has the authority or power to prevent and abate the release, then the employee will be considered a person in charge of the facility for purposes of section 103 of CERCLA.163 Employees who might have knowledge of a release but who do not occupy some position of responsibility and power at the facility are not persons in charge under CERCLA.164 For instance, in In re Thoro Products Co.,165 an ALJ held that a receptionist who was the first to detect a chlorine release when she arrived at work had no obligation to report the release because no evidence was introduced to show that she “possessed any . . . supervisory

157. H.R. REP. NO. 91-940, at 34.
158. 464 F.2d 1124 (5th Cir. 1972).
159. Id. at 1128.
160. 880 F.2d 1550 (2d Cir. 1989).
161. Id. at 1554.
162. Mobil Oil, 464 F.2d at 1128.
163. Id.; see CERCLA § 103(a), 42 U.S.C. § 9603(a) (2000).
164. Mobil Oil, 464 F.2d at 1128; see also CERCLA § 103(a), 42 U.S.C. § 9603(a).
responsibility and power” that could qualify her as a person in charge for purposes of section 103(a) of CERCLA.\textsuperscript{166}

The term “person in charge” also may be affected by changes made to section 113(h) by the Clean Air Act Amendments of 1990.\textsuperscript{167} These changes evidence congressional intent to include as operators “any person who is senior management personnel or a corporate officer.”\textsuperscript{168} Unless there is a knowing and willful violation, a mere employee carrying out his or her normal activities is not subject to the enforcement process.\textsuperscript{169}

§ 3(b)(2). *When does a person in charge have “knowledge”* 

A person in charge must immediately notify the NRC as soon as he or she has “knowledge” of a reportable release.\textsuperscript{170} Knowledge is a condition precedent to the duty to report immediately.\textsuperscript{171} Once the time of knowledge is established, the court can determine whether the report was timely made in accordance with CERCLA’s mandate.\textsuperscript{172} The delay between the time a person in charge has knowledge of a reportable release and the time that person notifies the NRC also may be a factor at the penalty assessment stage.\textsuperscript{173}

Knowledge under section 103 of CERCLA can be “actual” or “constructive.”\textsuperscript{174} Thus, a person in charge of a facility has knowledge

\textsuperscript{166}. Id. at *12.


\textsuperscript{168}. See CAA § 113(h), 42 U.S.C. § 7413(b).

\textsuperscript{169}. Id.

\textsuperscript{170}. CERCLA § 103(a), 42 U.S.C. § 9603(a).


\textsuperscript{172}. CERCLA § 103(a), 42 U.S.C. § 9603(a).


\textsuperscript{174}. In re Morton Int’l, Inc., Nos. PCRA/[CERCLA]-VII-96E-218, CWA-VII-97-W-0008, 1997 WL 821128, at *6–7 (Dec. 12, 1997); see also In re Thoro Prods., 1992 WL 143993, at *11. EPCRA places the duty to report on the “owner or operator of a facility.” EPCRA § 304(a)(1), 42 U.S.C. § 11044(a)(1). Under EPCRA, the knowledge element is met if the owner or operator has “actual” or “constructive” knowledge, or if the person in charge of the facility (other than the owner/operator) possesses knowledge of a release which may be imputed to the owner or operator. See id.; Extremely Hazardous Substances List and Threshold Planning Quantities; Emergency Planning and Release Notification Requirements, 52 Fed. Reg. 13,378, 13,385, 13,393 (April 22, 1987) (explaining that knowledge of a release includes constructive knowledge, and CERCLA and EPCRA knowledge requirements are parallel); see also In re Mobil Oil Corp., 5 E.A.D. 490, 509 (EAB 1994).
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that a reportable release has occurred when she actually knew of, or should have known of, the release. 175 “Constructive knowledge” has been defined in the reporting context as

knowledge of such circumstances as would ordinarily lead upon investigation, in the exercise of reasonable diligence which a prudent person ought to exercise, to a knowledge of actual facts. The failure to know what could have been known in the exercise of due diligence amounts to knowledge in the eyes of the law. 176

Knowledge of a reportable release does not require absolute certainty as to the quantity released. 177 Rather, it can consist merely of the information that a release occurred, plus some assurance, based on “perception by the senses, or intuition,” that the release equals or exceeds the RQ. 178 The statute allows facility personnel some latitude in interpreting available data before making a report. 179 The personnel are not charged with knowledge until they have "some degree of certainty that a reportable release has occurred." 180 However, knowledge is deemed to exist when the facility has "enough information that it could reasonably be said that it knew that the releases were at or above reportable quantities even though it did not know the exact quantities released." 181

Once a release is discovered, facility personnel must make a diligent effort to determine whether the release is reportable. 182 A facility cannot shield itself from knowledge of the release by slowly investigating the situation while it focuses on normal business operations. 183 The investigation must be given priority and may not be placed “on a timetable that is convenient for the facility.” 184 Under some circumstances, “the nature of the information can be such that the failure to give notice is indicative of the company not knowing the requirements

175. In re Thoro Prods., 1992 WL 143993, at *11; see also In re Mobil Oil, 5 E.A.D. at 509.
178. In re Thoro Prods., 1992 WL 143993, at *9 n.6 (citing 51 C.J.S. Knowledge (1967)).
182. In re Mobil Oil, 5 E.A.D. at 511–12.
183. Id.
184. Id. at 512.
or being hostile or indifferent to them, rather than of any uncertainty that a release in reportable quantities had taken place.\footnote{185}

Determining the point in time at which a person in charge acquired knowledge of a release is a fact-dependent inquiry.\footnote{186} Consequently, a court’s interpretation of the standard may vary from one case to another.\footnote{187} Resolution of a case may require a determination of the proper testing methods that the violator should have used under the circumstances, the length of time expected to complete the tests, the nature of the release and complexity of the necessary calculations, and the extent to which the release may have appeared to fall within the “federally permitted release” exception.\footnote{188} If a person in charge first gains knowledge of a release after the episode has ended, when no response action can be taken, such a fact should not be a factor in establishing the time the person acquired knowledge.\footnote{189} The decisions in

\footnote{185. Genicom I, 1992 WL 204414, at *4.}
\footnote{186. In re Mobil Oil, 5 E.A.D. at 512–13 (concluding that the corporation had sufficient knowledge of the release, enabling it to report prior to the notification actually given to the local emergency planning commission (LEPC)); see also In re Thoro Prods. Co., No. EPCRA VIII-90-04, 1992 WL 143993 (EPA May 19, 1992) (concluding that the president of the corporation possessed actual knowledge of the release but failed to contact the proper authorities for two hours after the knowledge was acquired).
\footnote{187. See In re Mobil Oil, 5 E.A.D. at 510–12; see also In re Thoro Prods., 1992 WL 143993.
\footnote{188. See In re Mobil Oil, 5 E.A.D. at 501–02, 510–12.
\footnote{189. Genicom II, 4 E.A.D. at 432–33.
It would seriously weaken the emergency notification provisions if the longer the delay in discovery and notification of a release, and the higher likelihood that any adverse effects had already occurred, the lower the penalty on the grounds that there is nothing left for the public authorities to do at the time of notification. 

Id.

In In re Thoro Products Co., a 1992 case, a manufacturer of chlorine solutions and liquid ammonia products was found liable under CERCLA for failing to notify the NRC immediately. 1992 WL 143993. On the morning of March 22, 1990, chlorine released from the Thoro facility generated a fog-like chlorine cloud that required the evacuation of several area businesses and the closing of major commuter routes. Id. A secretary at Thoro detected a strong chlorine odor at the facility and telephoned the president of Thoro, Mr. Newman. Id. When Mr. Newman arrived at the plant at 9:00 a.m., he “suspected” that a chlorine release above the RQ had occurred. Id. However, he did not know the actual amount of the release until approximately 4:00 p.m. that day. Id. Mr. Newman then waited to notify the NRC until sometime around 4:40 p.m. the following day, March 23. Id.

Despite the EPA’s argument that Mr. Newman had knowledge of the time he suspected a release exceeding the RQ had occurred, the court did not consider Mr. Newman to have knowledge until 4:00 p.m. on the day of March 22, when he had actual knowledge that the release exceeded the RQ. Id. The court did not believe that imposing liability at an earlier time would make a difference in this case because the earliest time that Newman could even be said to have constructive knowledge was when he arrived at the facility at 9:00 a.m., after the chlorine cloud had dissipated

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In re Mobil Oil Corp. and In re Genicom Corp. highlight the issue of acquiring knowledge and provide some guidance as to the facts and circumstances that meet the “knowledge” requirement.

§ 3(b)(2)(A). In re Mobil Oil Corporation. The Mobil Oil case involved an accidental release of sulfur dioxide (SO₂) from a refinery during regeneration of a sulfur recovery unit. After several employees complained of an odor problem, Mobil employees temporarily stopped the regeneration process. A Mobil engineer performed an initial calculation that revealed that the facility was close to, but not over, its permit limit for SO₂. Relying on the “federally permitted release” exemption, the facility manager chose to complete the regeneration process before conducting further calculations. The regeneration project was completed approximately five days after the release. A second calculation was then performed, which suggested that the release had exceeded the facility’s CAA permit. The manager then ordered a third calculation to verify that the release was reportable.

EAB concluded that Mobil had sufficient information and knowledge under CERCLA at the time when the second calculation and the incident was basically over. The court believed that imposing knowledge earlier would not affect the penalty in this case because the focus of the penalty must be upon the potential consequences of the failure to report. In this case, the earliest that Mr. Newman could be said to have even constructive knowledge was after the incident had ended.

The Thoro court’s reliance on the time at which the episode had ended was misplaced. In Genicom II, the Environmental Appeals Board (EAB) stated that the presiding officer in Thoro acted erroneously in failing to consider the adverse impact that failure to report sooner has on the statutory purposes of CERCLA and EPCRA. Genicom II, 4 E.A.D. at 432. Thus, the fact that an episode has ended is not relevant to the determination of when the person in charge acquired knowledge.

190. In re Mobil Oil, 5 E.A.D. at 510–12.
194. Id.
195. Id. at 493.
196. Id.
197. CERCLA § 103(a), 42 U.S.C. § 9603(a).
198. In re Mobil Oil, 5 E.A.D. at 493–95 n.6.
199. Id. at 493–95.
200. Id. at 495.
201. Id. at 494–96.
was completed.²⁰³ The third calculation, according to the EAB, was unnecessary.²⁰⁴ Such exactitude, EAB stated, was unnecessary for purposes of gaining knowledge of a reportable release; once Mobil’s process engineer confirmed a likely permit exceedance in her calculations . . . , Mobil was not justified in further delaying its report . . . while it fine-tuned its calculations, possibly in an attempt to show that a violation did not in fact occur.²⁰⁵

In addition, EAB found that Mobil failed to perform the investigation diligently.²⁰⁶ According to EAB, Mobil’s reliance on the federally permitted release exception was misplaced.²⁰⁷ Mobil should have focused on completing the investigation rather than completing the regeneration.²⁰⁸ Had it done so, Mobil could have completed the second calculation at least two days earlier.²⁰⁹ Based on the fact that the company took two days to perform the first calculation and three days to perform the second, EAB concluded that Mobil could have had (and was therefore deemed to have) sufficient knowledge of the release five days after it occurred.²¹⁰ The company was thus found to be in violation for five of the ten days it had waited to report the release.²¹¹

§ 3(b)(2)(B). In re Genicom Corporation. In In re Genicom Corp.,²¹² a structural failure at a plating plant resulted in two releases of spent cyanide solution to an effluent channel that discharged into a nearby river.²¹³ The first release occurred on October 11, 1990, and the second on October 30, 1990.²¹⁴ The facility received its first indication that a release had occurred on October 30 from a lab report that showed a high

²⁰³. In re Mobil Oil, 5 E.A.D. at 512.
²⁰⁴. Id.
²⁰⁵. Id.
²⁰⁶. Id. at 511–13.
²⁰⁷. Id. at 498–509.
²⁰⁸. Id. at 511.
²⁰⁹. Id. at 512–13.
²¹⁰. Id.
²¹¹. Id. at 517–18.
²¹³. Id. at *1. Spent cyanide plating bath solutions are an F007 waste under RCRA and, therefore, a CERCLA “hazardous substance” as defined in section 101(14) of CERCLA. Id. at *2.
²¹⁴. Id.
level of cyanide in an effluent sample taken on October 11. The morning of October 31, Genicom Corporation employees noticed a rusty-red liquid coming from a covered trench through which a pipe carrying wastewater passed from the plating room to the treatment tanks. The employees analyzed the liquid and found that it contained cyanide.

EPA argued that Genicom had knowledge of both releases on the morning of October 31, 1990, when employees discovered the rusty-red discharge. The ALJ disagreed, finding that although Genicom had discovered the release at 9:00 a.m., there was insufficient information to determine whether the release was of a reportable quantity until 4:00 p.m. According to the ALJ, the company did not have the requisite knowledge until it determined the volume of waste pumped through the broken pipeline, discovered the rusty-red discharge, determined that it contained cyanide, and received the lab report showing a high cyanide concentration in the effluent. The ALJ also found it significant that Genicom notified the State Water Control Board about the discharge at 4 p.m., two hours before it informed NRC. However, there was no indication that the company had any greater knowledge at 6:00 p.m. than it had at 4:00 p.m. Thus, the ALJ held Genicom was in violation of section 103 of CERCLA for the two hours between 4:00 p.m. and 6:00 p.m.

The question of when knowledge is acquired is far from resolved in this area. The enforcement cases discussed above provide only limited guidance. Because the resolution of this issue will depend on the facts and circumstances of each case, continued litigation in this area is likely.

215. Id. at *3.
216. Id.
217. Id.
218. Id.
219. Id. at *3–4.
220. Id. at *3–4 n.18.
221. Id. at *4.
222. Id. at *4 n.19.
223. Id.; see also CERCLA § 103(a), 42 U.S.C. § 9603(a) (2000).
§ 3(b)(3). The duty to report “immediately”

Once the time of knowledge is established, the court must then determine whether NRC was notified “immediately.” The requirement to report immediately has been strictly interpreted by both the courts and EPA. Generally, a delay in notifying NRC after acquiring knowledge of a reportable release should not exceed fifteen minutes. As discussed above, the Genicom Corporation was held in violation for waiting two hours before notifying NRC after it obtained knowledge of a reportable release.

Once a person in charge obtains the requisite degree of knowledge, it is advisable for that person to report the release to NRC without further study or delay. Because it is unclear at what point a court or EPA will consider a facility to have sufficient knowledge for the purposes of section 103 of CERCLA, it is best to err on the side of early reporting. However, reporting a release prematurely—without establishing with some certainty that the facility is actually obligated to report under CERCLA—can also put a facility at a disadvantage because, in all likelihood, EPA will penalize the facility for the release. In addition, the report may prompt EPA to increase surveillance and enforcement efforts aimed at the facility. The failure


226. In re Mobil Oil, 5 E.A.D. at 509–10; see CERCLA § 103(a), 42 U.S.C. § 9603(a).
227. See CERCLA § 103(a), 42 U.S.C. § 9603(a).
229. See CERCLA § 103(a), 42 U.S.C. § 9603(a).
232. In re Mobil Oil, 5 E.A.D. at 512 (rejecting “the notion that facilities are free to place the acquisition of certainty on a timetable that is convenient for the facility”); see CERCLA § 103(a), 42 U.S.C. § 9603(a).
234. See generally Enforcement Response Policy, supra note 230, at 9, 11.
236. Which, in turn, may lead to further violations and more substantial penalties due to the prior history of violations factor in penalty assessment. See Enforcement Response Policy, supra note 230, at 25–26.
to report immediately, however, also can involve serious penalties. It should be noted that the person in charge must actually notify NRC; a good faith effort that does not result in actual notification is not sufficient to relieve one of liability under section 103(a) of CERCLA.

§ 3(c). Penalties

Failure to comply with section 103(a) of CERCLA can result in the imposition of criminal, civil, and administrative penalties.

§ 3(c)(1). Criminal penalties

Criminal penalties can be imposed on persons for knowingly failing to immediately notify NRC in accordance with section 103(a) of CERCLA or knowingly submitting “false or misleading” information. However, the government may not criminally prosecute a person using information provided or derived from a proper notification, “except a prosecution for perjury or for giving a false statement.” Section 103(b) of CERCLA provides for imprisonment of up to three years for a first conviction under this section and up to five years for a second and subsequent convictions. Courts have held that the knowledge element of a section 103(a) violation requires only that the defendant be aware of his acts. Specific “knowledge of the regulatory requirements of CERCLA” is not required for a criminal conviction under section 103 of CERCLA.
§ 3(c)(2). Civil administrative penalties

A Class I administrative penalty of not more than $25,000 per violation may be assessed under section 109(a) of CERCLA.\textsuperscript{246} Section 109(b)(1) authorizes a Class II administrative penalty of not more than $25,000 per day for each day that the violation continues; continuing violations are subject to the penalty for each day of violation.\textsuperscript{247} For repeat offenders, the statute provides a penalty of up to $75,000 per day for every day that the violation continues.\textsuperscript{248} Separate penalties are assessed for each violation of the section 103 reporting requirement even if the violator acquires knowledge of multiple releases at the same time.\textsuperscript{249} Civil penalties under environmental laws were increased by ten percent in 1997 and by thirty percent on February 13, 2004, so that the basic daily penalty is currently $32,500.\textsuperscript{250}

On September 30, 1999, EPA issued a final Enforcement Response Policy (or “Penalty Policy”) for sections 304, 311, and 312 of EPCRA and section 103 of CERCLA.\textsuperscript{251} This Enforcement Response Policy superseded EPA’s June 1990 Final Penalty Policy for addressing such violations.\textsuperscript{252} The 1999 Penalty Policy is used by EPA personnel to calculate proposed penalties for civil administrative action negotiations.\textsuperscript{253} Under the Penalty Policy, proposed penalties are calculated in two stages.\textsuperscript{254} First, a “base penalty” is calculated.\textsuperscript{255} Second, the base penalty may be increased or decreased based on various adjustment factors applicable to the specific violator.\textsuperscript{256} In accordance

\hspace{1cm}

\begin{itemize}
  \item CERCLA § 109(a)(1), 42 U.S.C. § 9609(a)(1).
  \item Id. Class I administrative penalties are assessed by the President and are appealable to a federal district court. CERCLA § 109(a)(1), (4), 42 U.S.C. § 9609(a)(1), (4). Class II administrative penalties are assessed by the President and are appealable to the U.S. Court of Appeals for the D.C. Circuit. CERCLA § 109(b), (c), 42 U.S.C. § 9609(b), (c).
  \item CERCLA § 109(b), 42 U.S.C. § 9609(b).
  \item Enforcement Response Policy, supra note 230, at 1.
  \item Id. at 3.
  \item Id.
  \item Id. at 9.
  \item Id.
  \item Id.
\end{itemize}
with 40 C.F.R. § 22.27(b), a Presiding Officer\(^{257}\) is required to consider EPA’s Penalty Policy but is not required to follow it\(^{258}\).

\[\text{§ 3(c)(2)(A). Calculation of the base level penalty.}\]

The base penalty is calculated upon consideration of the “nature, circumstances, extent, and gravity of the violation.”\(^{259}\) The Penalty Policy defines violations of section 103(a) of CERCLA as Emergency Response Violations.\(^{260}\) The “extent” of a violation is measured in terms of the “timeliness” of the notification rather than the harm caused by the release.\(^{261}\) This approach is taken because the purpose of the notification requirement is to ensure that “public authorities are notified of every potentially hazardous release as soon as possible,” allowing them to decide the seriousness of the threat and the appropriate response.\(^{262}\) The Penalty Policy identifies three “extent” levels for a section 103(a) violation.\(^{263}\) Level One applies if the person in charge failed to notify the NRC within two hours of acquiring knowledge of the release of an RQ of a hazardous substance.\(^{264}\) Level Two is triggered for delays of more than one but less than two hours.\(^{265}\) Level Three applies for a delay of less than one hour but more than fifteen minutes.\(^{266}\)

The “gravity” of the situation is determined by measuring the amount of the substance released relative to its RQ and the amount of the chemicals stored on site.\(^{267}\)

The RQ scale itself is a relative measure of the hazards posed by the chemical and therefore the potential threat to human health and the environment; the lower the RQ, the greater the potential threat to

\(^{257}\) 40 C.F.R. § 22.27(b). The Presiding Officer is typically an Administrative Law Judge (ALJ). \textit{In re} Mobil Oil Corp., 5 E.A.D. 490, 491 n.3 (EAB 1994).

\(^{258}\) \textit{Id.} at 514–15.


\(^{260}\) Enforcement Response Policy, \textit{supra} note 230, at 10.

\(^{261}\) \textit{Id.} at 11.

\(^{262}\) \textit{Id.}

\(^{263}\) \textit{Id.} at 12–13.

\(^{264}\) \textit{Id.} at 12.

\(^{265}\) \textit{Id.} at 13.

\(^{266}\) \textit{Id.}

\(^{267}\) \textit{Id.} at 15.
human health and the environment. The greater the amount released over the RQ, the greater the potential risk from failure to notify.268

Violations are placed into one of three gravity levels: Level A for releases greater than ten times the RQ; Level B for releases greater than five but less than or equal to ten times the RQ; and Level C for releases greater than one but less than or equal to five times the RQ.269

EPA uses the “circumstances” factor to measure the “actual or potential consequences” that result from a failure to notify the appropriate authorities, including the potential for harm to human health and the environment.270

The potential for harm may be measured by: the potential [harm] for emergency personnel, the community, and the environment . . . ; the adverse impact noncompliance has on the integrity of the CERCLA section 103/EPCRA program; the relative proximity of the surrounding population; the effect noncompliance has on the LEPC’s271 ability to plan for chemical emergencies; and any actual problems that first responders and emergency managers encountered because of the failure to notify (or submit reports) in a timely manner.272

When notification is provided by persons who are not required by law to report the release to NRC, EPA may consider in its penalty determination what might have happened in the absence of such fortuitous responses by third parties, rather than what actually did happen.273

After the extent and gravity levels are determined, EPA uses a penalty assessment matrix to provide a dollar range for the base penalty.

268. Id.
269. Id. at 15–16.
270. Id. at 17.
271. EPCRA requires states to create state emergency response commissions (SERCs), which in turn create local emergency planning commissions (LEPCs). EPCRA § 1301(a)–(c), 42 U.S.C. § 11001(a)–(c) (2000). LEPCs must create emergency plans to identify facilities that use extremely hazardous substances, other facilities that are at risk due to their proximity to such facilities, and transportation routes used for such extremely hazardous substances. EPCRA § 303(c)(1), 42 U.S.C. § 11003(c)(1). LEPC emergency plans must also designate emergency coordinators; detail procedures for release detection, response, and public notification; coordinate emergency equipment and personnel; and plan evacuation and training for chemical emergency response. EPCRA § 303(c)(2)–(9), 42 U.S.C § 11003(c)(2)–(9).
272. Enforcement Response Policy, supra note 230, at 17 (citation not in original).
273. All Regions Chem. Labs, Inc. v. EPA, 932 F.2d 73, 76 (1st Cir. 1991).
Requirements for Unpermitted Air Pollution Releases

amount.\textsuperscript{274} The Agency then utilizes the circumstances factor to arrive at a precise dollar amount within the range assigned to that cell of the matrix.\textsuperscript{275}

§ 3(c)(2)(B). Adjustment factors. Once the base penalty amount is determined, the figure may be adjusted upward or downward based on violator-specific factors set forth in section 109(a)(3) of CERCLA.\textsuperscript{276} These factors evaluate the “ability to pay, prior history of such violations, the degree of culpability, economic benefit or savings, and other matters as justice may require.”\textsuperscript{277} In determining an appropriate penalty, EPA also will consider the size of the business,\textsuperscript{278} attitude of the violator,\textsuperscript{279} willingness to undertake Supplemental Environmental Projects (SEPs),\textsuperscript{280} and whether notification was made through voluntary disclosure.\textsuperscript{281}

Calculation of the base penalty assumes “that the violator has the ability to pay.”\textsuperscript{282} If a respondent believes that the proposed penalty exceeds its ability to pay, the burden is on the respondent to prove its

\textsuperscript{274} Enforcement Response Policy, supra note 230, at 9–22.

\textsuperscript{275} Id. at 17–22.

\textsuperscript{276} Id. at 9.

\textsuperscript{277} Id. The duty to consider these factors is mandatory, but there is no affirmative duty to adjust the penalty based on these factors. See In re Mobil Oil Corp., 5 E.A.D. 490, 514–15 (EAB 1994).

\textsuperscript{278} Enforcement Response Policy, supra note 230, at 31. The proposed base penalty may be reduced by fifteen percent for first-time violators who employ one hundred or fewer people and have annual sales less than $20 million. Id.

\textsuperscript{279} Id. The two components of the attitude adjustment are: “(1) cooperation and (2) willingness to settle.” Id. EPA may reduce the penalty up to thirty-five percent based on attitude. Id.

\textsuperscript{280} Id. at 31–32. Supplemental Environmental Projects (SEPs) are environmentally beneficial projects to which a respondent agrees to undertake in settlement of an environmental enforcement action, but which the defendant is not otherwise legally required to perform. In return, some percentage of the cost of the SEP is considered as a factor in establishing the final penalty to be paid by the respondent.

\textsuperscript{281} Enforcement Response Policy, supra note 230, at 32. “Facilities that conduct an audit and voluntarily self-disclose any violations of EPCRA §§ 304, 311, 312, or CERCLA § 103 . . . may be eligible for a 100% reduction in the gravity-based penalty, if they meet the nine criteria established in the policy.” Id.

\textsuperscript{282} Id. at 24.
inability to pay the penalty. The Penalty Policy lists information that the respondent will be required to submit to make such a demonstration, including three to five years of tax returns, balance sheets, and other financial documents. EPA’s ABEL model is one of the computer models the Agency may use to calculate the ability to pay.

The base penalty matrix is based on the assumption that the respondent is a first-time violator. Therefore, a penalty may be adjusted upward for repeat offenders who have had a prior violation within five years of the date of the current violation. For second or subsequent violations of section 103 of CERCLA and section 304 of EPCRA, the penalty may be increased by up to three times the base penalty. “[E]vidence of a prior violation [may consist of] a consent agreement and final order . . . executed by a Regional Administrator . . . or the [EAB], a federal court judgment, a default judgment, a final administrative judgment, or a consent decree.” Violations that took place at different facilities of the same corporation (or by different subsidiaries of a parent corporation) may be deemed prior violations for that corporation unless the facilities are in “substantially different lines of business” or are “substantially independent of one another in their management and in the functioning of their Boards of Directors.” Violations of EPCRA may be adjusted to reflect the culpability of the offender, based on the “violator’s knowledge of the particular [legal] requirement, and . . . the degree of the violator’s control over the violative condition.”

283. Id.
284. Id. at 24–25.
285. Id. at 24 n.7 (“ABEL is the Agency’s computer model that helps perform a preliminary analysis of ability to pay for compliance, clean-up, and/or penalties.”).
286. Id. at 25.
287. Id.
288. Id. at 26.
289. Id. at 25–26.
290. Id. at 26.
291. Id. Three levels of culpability are designated in the penalty policy. Id. at 26, 28. Level One allows an upward adjustment of twenty-five percent for willful violations. Id. at 26. Level Two applies to violators who had “sufficient knowledge to recognize the hazard” or “significant control over the situation,” but whose reporting failure was not due to wilfulness. Id. at 28. No adjustments are made to the penalty at this level. Id. Level Three provides for a twenty-five percent downward adjustment if “[t]he violator lacked sufficient knowledge of the potential hazard” and “lacked control over the situation to prevent occurrence of the violation.” Id.
§ 3(d). Continuous Releases Subject to CERCLA

Section 103 of CERCLA requires that reportable quantities of specified hazardous substances released into the environment must be reported to the National Response Center (NRC) as soon as the person in charge of the facility or vessel has knowledge of the release.\textsuperscript{292} EPA, through its rulemaking power, subjects CERCLA hazardous substance releases that are continuous and stable in quantity and rate of release to a less rigorous standard of notification than described in section 103 of CERCLA for accidental or intentional releases.\textsuperscript{293} The rules governing continuous releases aim to keep EPA aware of the releases without requiring repetitive notifications from a facility. As long as the release is continuous and stable in quantity and rate of release, the notification scheme described in CERCLA section 103 is not required and alternative notification procedures may be used.\textsuperscript{294} To qualify as a continuous release, the release must either occur without interruption or be “routine, anticipated, and intermittent and incidental to normal operations or treatment processes.”\textsuperscript{295} A routine release is defined as “a release that occurs during normal operating procedures or processes.”\textsuperscript{296} Thus, CERCLA section 103(f)(2) provides an alternative notification procedure for hazardous substance releases that fail to qualify for the federally permitted release exemption of CERCLA section 101(10)(H) but that are “continuous” and “stable in quantity and rate.”\textsuperscript{297}

A person in charge of a facility or vessel may use “release data, engineering estimates, knowledge of operating procedures, or best professional judgment” to determine whether a release qualifies as continuous.\textsuperscript{298} The release also may be reported to NRC “for a period sufficient to establish the continuity and stability of the release.”\textsuperscript{299} Multiple concurrent releases of the same substance occurring at various locations upon contiguous properties that are under common ownership may be considered separately or may be added together to determine if a

\textsuperscript{293} CERCLA § 103(f), 42 U.S.C. § 9603(f); 40 C.F.R. § 302.8.
\textsuperscript{294} 42 U.S.C. § 9603(f); see 40 C.F.R. § 302.8(a).
\textsuperscript{295} 40 C.F.R. § 302.8(b).
\textsuperscript{296} Id.
\textsuperscript{297} CERCLA § 103(f)(2), 42 U.S.C. § 9603(f)(2).
\textsuperscript{298} 40 C.F.R. § 302.8(d)(1).
\textsuperscript{299} Id. § 302.8(d)(2).
release is a continuous release.\textsuperscript{300} Whichever approach is used to determine initially if a release is continuous must also be used to determine whether a change in the release is taking place.\textsuperscript{301}

Once a person in charge determines that a release is continuous, that person must contact NRC by telephone and identify the release as an initial continuous release.\textsuperscript{302} The initial report must include “the name and location of the facility or vessel” and “the name(s) and identity(ies) of any hazardous substance(s) being released.”\textsuperscript{303} Under EPCRA section 304, if the release contains extremely hazardous substances, notice must be given to the local emergency planning committee (LEPC) and the state emergency planning commission (SERC).\textsuperscript{304} EPCRA section 304(c) also requires a facility to provide a follow-up written notice with specified information.\textsuperscript{305} Within thirty days of the initial telephone notification,\textsuperscript{306} written notification must be given to the EPA Regional Office where the releasing facility or vessel is located.\textsuperscript{307}

\begin{itemize}
\item\textsuperscript{300} \textit{Id.} § 302.8(k)(1).
\item\textsuperscript{301} \textit{Id.}
\item\textsuperscript{302} \textit{Id.} § 302.8(d)(3).
\item\textsuperscript{303} \textit{Id.} In addition to the requirements of CERCLA § 103, EPCRA § 304 requires similar initial telephone contact with state and local agencies to report continuous releases. 42 U.S.C. § 11004(b)(1).
\item\textsuperscript{304} EPCRA § 304(b)(1), 42 U.S.C. § 11004(b)(1). The Extremely Hazardous Substances (EHS) are listed in 40 C.F.R. pt. 355 apps. A & B.
\item\textsuperscript{305} EPCRA § 304(c), 42 U.S.C. § 11004(c).
\item\textsuperscript{306} 40 C.F.R. § 302.8(e)(1). Such written notification must include the following:
\begin{itemize}
\item The name of the facility or vessel; the location, including the latitude and longitude; the case number assigned by the National Response Center or the Environmental Protection Agency; the Dun and Bradstreet number of the facility, if available; the port of registration of the vessel; the name and telephone number of the person in charge of the facility or vessel.
\item The population density within a one-mile radius of the facility or vessel, described in terms of the following ranges: 0-50 persons, 51-100 persons, 101-500 persons, 501-1,000 persons, more than 1,000 persons.
\item The identity and location of sensitive populations and ecosystems within a one-mile radius of the facility or vessel (e.g., elementary schools, hospitals, retirement communities, or wetlands).
\end{itemize}
\item\textsuperscript{307} \textit{Id.} § 302.8(e). In addition, initial written notifications of continuous releases must be sent to state and local agencies pursuant to EPCRA section 304. \textit{Id.} § 355.40(a)(2)(iii). Pursuant to CERCLA section 103(f)(2), the following information is to be supplied:
\begin{itemize}
\item The name/identity of the hazardous substance; the Chemical Abstracts Service Registry Number for the substance (if available); and if the substance being released is a mixture, the components of the mixture and their approximate concentrations and quantities, by weight.
\end{itemize}
\end{itemize}
Requirements for Unpermitted Air Pollution Releases

Within thirty days of the first anniversary of the initial written notification, the person in charge of the facility or vessel must submit a follow-up written report that includes an update of the information provided in the initial written notification. In lieu of an initial written notification or a follow-up report, facilities required to submit Toxic Release Inventory (TRI) reports pursuant to section 313 of EPCRA may submit a copy of the TRI reports to the appropriate EPA regional office. However, if a facility submits a TRI report to satisfy EPCRA notification requirements, supplemental information required by the initial notification and follow-up reports that are not a part of the TRI report must be included.

Any documentation that supports notification, substantiates the reported normal range of releases, provides the basis for stating that the release is continuous and stable in quantity and rate, or is used to compile information in the initial written report, the follow-up report, or the annual evaluations, must be kept on file for a period of one year. Such information is to be kept at the facility. If a vessel is involved, the information should be kept “at an office within the United States in either a port of call, a place of regular berthing, or the headquarters of the

(B) The upper and lower bounds of the normal range of the release (in pounds or kilograms) over the previous year.
(C) The source(s) of the release (e.g., valves, pump seals, storage tank vents, stacks). If the release is from a stack, the stack height (in feet or meters).
(D) The frequency of the release and the fraction of the release from each release source and the specific period over which it occurs.
(E) A brief statement describing the basis for stating that the release is continuous and stable in quantity and rate.
(F) An estimate of the total annual amount that was released in the previous year (in pounds or kilograms).
(G) The environmental medium(s) affected by the release . . . .
(H) A signed statement that the hazardous substance release(s) described is (are) continuous and stable in quantity and rate and that all reported information is accurate and current to the best knowledge of the person in charge.

Id. § 302.8(e)(1)(iv)(A)–(H).
308. Id. § 302.8(f).
309. Id. § 302.8(g).
310. Id. Such information includes local population density figures, information concerning sensitive populations and ecosystems, upper and lower bounds of the normal range of the release, frequency and period of the release, the basis for determining the release is continuous and stable in quantity and rate, and a signed statement that the hazardous substance release(s) is (are) continuous and stable in quantity and rate and that all reported information is accurate and current to the best knowledge of the person in charge. Id.
311. Id. § 302.8(k).
business operating the vessel.”\textsuperscript{312} The information must be made available to EPA upon request.\textsuperscript{313}

If a continuous release changes in source or composition, the release is considered a new release. The basis for establishing the release as continuous must be reestablished by a telephone call and subsequent written notification.\textsuperscript{314} If the release changes so that the quantity released exceeds the upper bound of the normal reported range, the release must be reported to NRC\textsuperscript{315} as a statistically significant increase, and NRC must be notified of the planned change in the normal range.\textsuperscript{316} In addition, written notification must be submitted to the appropriate EPA regional office within thirty days of the telephone notification that describes “the new normal range, the reason for the change, and the basis for stating that the release in the increased amount is continuous and stable in quantity and rate.”\textsuperscript{317} Each continuous release must be evaluated annually to verify these changed levels.\textsuperscript{318}

If a facility or vessel violates the statute’s reporting requirements, the facility or vessel will lose the right to take advantage of the continuous release reporting procedures of 40 C.F.R. § 302.8. The affected or violating facility or vessel will then have to comply with the generally applicable reporting requirements of 40 C.F.R. § 302.6 for the releases in question\textsuperscript{319} or be subject to CERCLA § 103(b)(3) penalties\textsuperscript{320} in accordance with the applicable provisions of Title 18 or imprisonment for not more than three years for a first conviction or not more than five years for second and subsequent convictions.\textsuperscript{321}

§ 4. The Emergency Planning and Community Right-to-Know Act (EPCRA)

Releases of toxic chemicals during the five years prior to 1985 caused 135 deaths and nearly 1500 injuries in 6900 incidents in the

\textsuperscript{312} Id.
\textsuperscript{313} Id.
\textsuperscript{314} Id. § 302.8(g)(1).
\textsuperscript{315} Id. § 302.8(h).
\textsuperscript{316} Id. § 302.8(g)(2).
\textsuperscript{317} Id. § 302.8(g)(2)(ii).
\textsuperscript{318} Id. § 302.8(i).
\textsuperscript{319} Id. § 302.8(m).
\textsuperscript{321} CERCLA § 103(b), 42 U.S.C. § 9603(b); 40 C.F.R. § 302.7.
United States.\textsuperscript{322} This led to a successful grassroots effort to create emergency planning programs at the state and local levels. As a result of the events in Bhopal, India—where a Union Carbide facility released the pesticide-ingredient methyl isocyanate on December 4, 1984, that killed 2500 people and injured 200,000 others—the United States Congress was influenced to enact new legislation.\textsuperscript{323} Congress included a freestanding Title III in the Superfund Amendments and Reauthorization Act of 1986 (SARA)\textsuperscript{324} that created the Emergency Planning and Community Right-to-Know Act (EPCRA).\textsuperscript{325} EPCRA has four major sections: emergency planning (sections 301–303), emergency release notification (section 304), community right-to-know reporting requirements (sections 311–312), and toxic chemical release reporting-emissions inventory (section 313).\textsuperscript{326}

\begin{itemize}
\item \textsuperscript{323} \textit{Id.} at 218–19.
\item \textsuperscript{325} EPCRA §§ 301–330, 42 U.S.C. §§ 11001–11050.
\end{itemize}
EPCRA Program Summaries

Table 1. EPCRA Chemicals and Reporting Thresholds

<table>
<thead>
<tr>
<th>Chemicals Covered</th>
<th>Section 302</th>
<th>Section 304</th>
<th>Section 311/312</th>
<th>Section 313</th>
</tr>
</thead>
<tbody>
<tr>
<td>356 extremely hazardous chemicals</td>
<td>&gt;1000 substances</td>
<td>Reportable quantity, 1–5000 pounds released in 24-hour period</td>
<td>TPQ or 500 pounds for section 302 chemicals, 10,000 pounds on site at any one time for other chemicals</td>
<td>650 toxic chemicals and categories</td>
</tr>
<tr>
<td>Threshold Planning Quantities (TPQ), 1–10,000 pounds on site at one time</td>
<td></td>
<td></td>
<td>25,000 pounds per year manufactured or processed; 10,000 pounds a year used; certain bioaccumulative toxics have lower thresholds</td>
<td></td>
</tr>
<tr>
<td>Reporting Schedule</td>
<td>One time notification to SERC</td>
<td>Each time a release above TPQ occurs, notify LEPC and SERC</td>
<td>311 – One time submission to SERC, LEPC, fire department</td>
<td>Annually by July 1 to EPA and state</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>312 – Annually by March 1 to SERC, LEPC, fire department</td>
<td></td>
</tr>
</tbody>
</table>

EPCRA requires EPA to publish a list of extremely hazardous substances and to establish a “threshold planning quantity” for each listed substance. Under section 302, EPA initially created chemical profiles for 402 “acutely toxic chemicals” in 1986. The list now contains about 356 substances subject to section 302 requirements.

Requirements for Unpermitted Air Pollution Releases

Under EPCRA, the states must establish a state emergency response commission (SERC), which in turn must create local emergency planning committees (LEPCs). EPCRA requirements deal primarily with notification requirements and post-accident response; there is little focus on accident prevention. EPCRA is a chemical “freedom of information act” that applies to the private sector. EPCRA evolved from EPA’s 1985 Chemical Emergency Preparedness Program (CEPP), numerous state programs, especially New Jersey’s 1985 Toxic Catastrophe Prevention Act, and programs developed under the Occupational Safety and Health Act (OSH Act).

Emergency planning proceeds under several statutes administered by five agencies: EPA, the Coast Guard, OSHA, DOT, and the Minerals Management Service in the Department of Interior. EPA’s approach is to use a “one-plan guidance” to meet the requirements imposed by EPCRA, the Oil Pollution Act, CAA section 112(r), and OSHA process safety standard. In addition, EPA encourages facilities to coordinate the development of a plan with state and local agencies in order to meet any additional requirements that may be imposed.

EPCRA requires the governor of each state to designate a state emergency response commission (SERC). State commissions must in turn designate local emergency planning districts and appoint local emergency planning committees (LEPC) for each district. There are

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331. EPCRA § 301, 42 U.S.C. § 11001.
333. EPCRA also is known as Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). SARA amended CERCLA, although Title III of SARA created the freestanding EPCRA.
approximately 3500 LEPCs.\textsuperscript{339} Thirty-five states designated counties as the planning district, with some states having separate districts for municipalities; ten states use substate planning districts; and five states use the entire state as a district.\textsuperscript{340} The state commission supervises and coordinates the local emergency planning committees.\textsuperscript{341}

The LEPC must include members with a variety of relevant skills, as specified in EPCRA section 301(c). Its primary responsibility is to develop an emergency response plan and review it at least annually. The plan must include provisions specified in EPCRA section 303(c).\textsuperscript{342}

Guidance in developing safety programs is available from the private sector as well as the government. The American Institute of Chemical Engineers, through its Center for Chemical Process Safety, has published documents concerning chemical process safety. The Chemical Manufacturers Association developed a Responsible Care\textsuperscript{TM} program that is required for its members. The American Petroleum Institute developed a similar program. In 1982, the European Community adopted the Seveso Directive (82/501/EEC, as amended), which has risk management requirements.\textsuperscript{343} In 1990, the National Response Team (NRT) published Developing a Hazardous Materials Exercise Program.\textsuperscript{344}

The local committees are to focus on, but are not limited to, over 350 extremely hazardous substances listed at 40 C.F.R. pt. 355, app. A. For each of these substances, EPA has developed threshold planning quantities, based largely on the physical characteristics of the chemical,

\begin{itemize}
\item \textsuperscript{339} U.S. ENVTL. PROT. AGENCY, TITLE III FACT SHEET: EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT 1 (1986) [hereinafter EPCRA FACT SHEET].
\item \textsuperscript{340} Id.
\item \textsuperscript{341} Id.
\item \textsuperscript{342} EPCRA § 303(c) requires identification of facilities using extremely hazardous substances, expected transportation routes of those substances, and other facilities at risk from such substances; identification of the methods and procedures to be used by owners, operators, emergency and medical personnel; designation of community and facility emergency coordinators; public notification procedures; identification of methods to detect and predict impact of a release; description of the emergency equipment in the community and at each facility; evacuation plans; training programs; and methods and schedules for using the emergency plan. EPCRA § 303(c), 42 U.S.C. § 11003(c) (2000).
\item \textsuperscript{344} NAT’L RESPONSE TEAM, DEVELOPING A HAZARDOUS MATERIALS EXERCISE PROGRAM: A HANDBOOK FOR STATE AND LOCAL OFFICIALS (1990), available at http://www.bts.gov/smart/cat/images/254/254CVR.GIF.
\end{itemize}
that are also found in 40 C.F.R. pt. 355, app. A. Whether chemicals at the facility exceed the threshold planning quantity is determined using the procedures found in 40 C.F.R. § 355.30(c). Any facility that has a listed chemical in greater than threshold planning quantities must notify the SERC and the LEPC within sixty days after the chemical is first present at the facility.\textsuperscript{345}

\textbf{§ 4(a). Section 304 of EPCRA}

EPCRA’s system for emergency release reporting closely tracks that of CERCLA,\textsuperscript{346} and, thus, there are many instances of overlap between the reporting requirements of the two statutes.\textsuperscript{347} However, instead of requiring that notification be made to NRC, EPCRA requires notification to the jurisdiction’s local emergency planning committee (LEPC) and the state emergency response commission (SERC).\textsuperscript{348} An owner or operator of a facility that produces, uses, or stores listed extremely hazardous substances (EHS) must provide this notification if a release of a listed substance occurs in a quantity greater than its reportable quantity.\textsuperscript{349}

If the owner and operator are separate individuals, they may make prior arrangements concerning which party will provide notification, but EPA will hold both parties jointly liable if notification is not provided.\textsuperscript{350} EPCRA does not specifically require that the owner or operator have knowledge of a release before the duty to report arises under section 304.\textsuperscript{351} EPA, however, considers knowledge to be an implicit condition for imposing these EPCRA responsibilities.\textsuperscript{352} It also is important to note that since the promulgation of Executive Order 12,856 in 1993,\textsuperscript{353}

\textsuperscript{345}. EPCRA § 302(c), 42 U.S.C. § 11002(c).
\textsuperscript{346}. Compare CERCLA § 103(a), 42 U.S.C. § 9603(a), with EPCRA § 304(a), 42 U.S.C. § 11004(a).
\textsuperscript{348}. EPCRA § 304(b)(1), 42 U.S.C. § 11004(b)(1).
\textsuperscript{351}. See EPCRA § 304(b), 42 U.S.C. § 11004(b).
\textsuperscript{352}. 52 Fed. Reg. at 13,383.
\textsuperscript{353}. Exec. Order No. 12,856, 3 C.F.R. 616 (1994).
federal agencies are considered owners or operators for the purposes of section 304 reporting requirements.354

The section 304 reporting program covers 366 substances identified on the List of Extremely Hazardous Substances and Their Threshold Planning Quantities355 and 721 substances identified on the List of Hazardous Chemicals and Reportable Quantities;356 the latter also are covered by CERCLA’s emergency notification provisions.357 RQs for these substances are listed in the same regulations.358 Most of the chemicals that appear on the List of Extremely Hazardous Substances also appear on the List of Hazardous Chemicals.359 Despite the similarities between the reporting provisions of the two statutes, EPCRA’s requirements are mandated in addition to those of CERCLA.360 Notification to NRC, therefore, does not relieve the owner or operator of EPCRA reporting obligations.361 On June 16, 1999, EPA made available Guidance Documents concerning compliance with Section 313 of EPCRA.362

§ 4(a)(1). How and what to report

EPCRA requires initial notification by telephone to the affected LEPCs and SERCs,363 but for transportation-related releases, notification may be made to the emergency 911 telephone system or local telephone operator if there is no 911 system. This initial telephone notification must include, to the extent known at the time of notice, the following information: (1) the chemical name, (2) whether the substance is extremely hazardous, (3) the approximate quantity released, (4) “[t]he time and duration of the release,” (5) the media to which the substance was released, (6) “[a]ny known or anticipated acute or chronic health

356. 40 C.F.R. § 302.4, tbl.302.4.
357. CERCLA § 103(a), 42 U.S.C. § 9603(a); EPCRA § 304(a), 42 U.S.C. § 11004(a); 40 C.F.R. § 302.4; 40 C.F.R. pt. 355, app. A.
360. See CERCLA § 103(a), 42 U.S.C. § 9603(a); EPCRA § 304, 42 U.S.C. § 11003.
361. EPCRA § 304(b), 42 U.S.C. § 11004(b).
requirements,” (7) the “[p]roper precautions to take,” and (8) “[t]he name and telephone number of the person or persons to be contacted for further information.”

Emergency telephonic notification must be followed, as soon as practicable, by written follow-up notification, which must be updated as more information becomes available. Written notification should include: “(1) actions taken to respond to and contain the release, (2) any known or anticipated acute or chronic health risks associated with the release, and (3) where appropriate, advice regarding medical attention necessary for exposed individuals.”

Although there is no federally specified format for written notification, individual LEPCs may have a required format. Transportation-related 911 telephone calls do not require written follow-up. Additionally, the follow-up emergency notice required by EPCRA must be made available to the general public by the LEPC.

Release reporting may be required even though the facility does not have threshold planning quantities (TPQs) of extremely hazardous substances on-site that would subject the facility to the planning requirements of section 303 of EPCRA. Moreover, the emergency release notification requirements apply to over 700 chemicals while planning requirements apply to approximately 366 extremely hazardous substances on the list published pursuant to section 302(a)(2) of EPCRA.

The reportable quantity of an extremely hazardous substance is one pound unless EPA promulgates a regulation that establishes a different threshold. For other substances subject to reporting obligations under section 103(a) of CERCLA, regulations promulgated under section

365. EPCRA § 304(c), 42 U.S.C. § 11004(c).
366. Id.
368. See EPCRA §§ 304(b), 327, 42 U.S.C. §§ 11004(b), 11047.
369. EPCRA § 324(a), 42 U.S.C. § 11044(a).
374. CERCLA § 103(a), 42 U.S.C. § 9603(a).
102(a) of CERCLA are used to determine reportable quantities.\textsuperscript{375} More substances are covered by EPCRA than by CERCLA;\textsuperscript{376} over 200 of the EPCRA hazardous substances, including hydrogen peroxide and sulfur dioxide, are not CERCLA hazardous substances.\textsuperscript{377} Moreover, the exclusion for petroleum included in CERCLA’s definition of hazardous substance\textsuperscript{378} does not apply to EPCRA reporting.\textsuperscript{379}

A release of a substance that is on both the EPCRA extremely hazardous substances list and CERCLA’s list at 40 C.F.R. table 302.4 requires notification to the LEPC, the SERC, and NRC.\textsuperscript{380} For a transportation release, the EPCRA notification requirements are met by providing the necessary information to the 911 operator.\textsuperscript{381} If the substance is on the EHS list but not the CERCLA list, then the LEPC and the SERC must be notified, but not NRC.\textsuperscript{382} EPCRA defines “facility” in a manner similar to the CAA to include all emission release points “on a single site or on contiguous . . . sites and which are owned or operated by the same person.”\textsuperscript{383} Thus, under EPCRA, releases of a chemical from emission points emanating from a single “facility” are aggregated to determine whether the release exceeds the RQ.\textsuperscript{384} CERCLA defines “facility” as individual emission points at a site.\textsuperscript{385} For example, under CERCLA, every “building, structure, installation, equipment, pipe or pipeline,
. . . well, pit, [or] pond” is considered an individual point.\textsuperscript{386} For purposes of emergency notification only, EPCRA defines “facility” to

\textsuperscript{375.} CERCLA §§ 102(a), 103(a), 42 U.S.C. §§ 9602(a), 9603(a); EPCRA § 304(a)(3), 42 U.S.C. § 11004(a)(3); see 40 C.F.R. § 302.4.

\textsuperscript{376.} See EPCRA § 324(a), 42 U.S.C. § 11044(a); see also CERCLA § 103(a), 42 U.S.C. § 9603(a).

\textsuperscript{377.} See 40 C.F.R. pt. 355; see also 40 C.F.R. 302.4.

\textsuperscript{378.} CERCLA § 101(14), 42 U.S.C. § 9601(14).

\textsuperscript{379.} EPCRA § 304, 42 U.S.C. § 11004; see also KUSZAJ, supra note 347, at 49; Kliever, supra note 75, at 1173. The scope of the petroleum exclusion has been the subject of extensive court interpretation. See, e.g., Cose v. Getty Oil Co., 4 F.3d 700, 703–05 (9th Cir. 1993). However, oil spill reporting is required by CWA § 311(b)(5), 33 U.S.C. § 1321(b)(5) (2000).

\textsuperscript{380.} CERCLA § 103(a), 42 U.S.C. § 9603(a); EPCRA § 304(b), 42 U.S.C. § 11004(b).

\textsuperscript{381.} 40 C.F.R. § 355.40(b)(i).

\textsuperscript{382.} Id. § 355.40(b).

\textsuperscript{383.} EPCRA § 329(d), 42 U.S.C. § 11049(d).

\textsuperscript{384.} See id.

\textsuperscript{385.} CERCLA § 101(9), 42 U.S.C. § 9601(9).

\textsuperscript{386.} Id.
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include “motor vehicles, rolling stock, and aircraft,” as does CERCLA. Each statute has slightly different interpretations concerning whether a reportable release has occurred. CERCLA and EPCRA notification obligations are both triggered by a release “into the environment.” CERCLA defines environment in legal terms. EPCRA defines environment more colloquially to include “water, air, and land and the interrelationship which exists among and between water, air, and land and all living things.” However, “any release which results in exposure to persons solely within the site or sites on which a facility is located” is not a release to the environment under EPCRA.

§ 4(a)(2). Exceptions to reporting requirements

Like CERCLA, EPCRA provides a reporting exemption for “federally permitted releases.” The statute itself does not define these releases but merely cross-references the definitions of federally permitted release contained in section 101(10) of CERCLA. EPA has been criticized for shaping the law concerning exemptions through enforcement actions in a manner that has arguably produced interpretations more stringent than is justified by the statute.

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388. CERCLA § 101(22), 42 U.S.C. § 9601(22); EPCRA § 329(8), 42 U.S.C. § 11049(8).
389. See CERCLA § 101(8), 42 U.S.C. § 9601(8). As noted before, CERCLA defines “environment” as the navigable waters, the waters of the contiguous zone, and the ocean waters of which the natural resources are under the exclusive management authority of the United States under the Magnuson-Stevens Fishery Conservation and Management Act . . . and . . . any other surface water, ground water, drinking water supply, land surface or subsurface strata, or ambient air within the United States or under the jurisdiction of the United States.

Id.
390. EPCRA § 304(a)(2)(A), 42 U.S.C. § 11004(a)(2)(A); see also discussion supra Section 3(a)(3).
391. EPCRA § 304(a)(2)(A), 42 U.S.C. § 11004(a)(2)(A); see also CERCLA §§ 101(10), 103(a), 42 U.S.C. §§ 9601(10), 9603(a); see discussion supra Section 3(a)(3).
392. Kliever, supra note 75, at 1175. In the CAA context, EPA’s Environmental Appeals Board has held that the federally permitted release exemption does not apply to releases that exceed...
In addition, EPCRA regulations adopt the list of exempted releases set forth in section 101(22) of CERCLA, which contains CERCLA’s definition of “release.” 395 Section 101(22) excludes (1) releases that occur “solely within a workplace;” (2) vehicle exhaust and pipeline pumping station engine emissions; (3) releases of nuclear material in incidents subject to Nuclear Regulatory Commission control; and (4) releases stemming from the normal application of fertilizer. 396

EPCRA regulations exclude the following items from the definition of hazardous chemicals: (1) food, drugs, and cosmetics that are regulated by the Food and Drug Administration; (2) solids in manufactured items that do not result in exposure under normal conditions; (3) substances packaged for personal or household purposes; (4) substances used in a medical facility “under the direct supervision of a technically qualified individual,” a research laboratory, or a hospital; and (5) fertilizers held for retail sale or any other substances used in routine agricultural operations. 397

§ 4(a)(3). Reportable quantities

As previously discussed, RQs for the hazardous substances listed under CERCLA are listed in a table at 40 C.F.R. § 302.4. 398 The table includes the RQs established by Congress in section 102(a) of CERCLA. 399 RQs for radionuclides are listed in 40 C.F.R. § 302.4. 400 For the purposes of EPCRA, RQs include the CERCLA RQs and the RQs for the EPCRA extremely hazardous substances. 401 They are listed at 40 C.F.R. pt. 355. 402 RQs may have been updated in subsequent Federal Register notices. 403 EPA uses the same method under EPCRA as

the quantities permitted in a state permit. In re Mobil Oil Corp., 5 E.A.D. 490, 498–509 (EAB 1994); see also discussion supra Section 3(a)(3).

396. CERCLA § 101(22), 42 U.S.C. § 9601(22).
397. 40 C.F.R. § 355.20.
398. Id. § 302.4, tbl.302.4.
400. 40 C.F.R. § 302.4, app. B.
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it does with CERCLA to determine whether an RQ of a substance has been released.\textsuperscript{404} An RQ is based on all releases of a substance to any media in a twenty-four-hour period.\textsuperscript{405} The rule for calculating RQ of mixtures is found at 40 C.F.R. § 302.6(b).\textsuperscript{406} Under 40 C.F.R. § 302.4(b), wastes that are characteristic wastes under RCRA regulations\textsuperscript{407} also are subject to reporting if RQs are met.\textsuperscript{408}

\section{Penalties}

Section 325 of EPCRA establishes civil and criminal penalties for failure to comply with the statutory reporting requirements.\textsuperscript{409} Any person who failed to comply with EPCRA’s reporting requirements prior to January 30, 1997, may be subject to civil penalties of up to $25,000 per violation or up to $25,000 per day per violation for continuing violations, with adjustments for inflation.\textsuperscript{410} For a second or subsequent violation that occurred prior to January 30, 1997, the civil penalty may be raised to $75,000 for each day the violation continued,\textsuperscript{411} which, after an adjustment for inflation, is $97,500.\textsuperscript{412} In addition, the knowing and willful failure to notify the authorities of a release can be subject to criminal penalties.\textsuperscript{413} First offenders are subject to prison sentences of up to two years and fines of up to $25,000.\textsuperscript{414} Second or subsequent offenders may receive a sentence of up to five years and fines up to $50,000.\textsuperscript{415}

\begin{footnotesize}
\begin{enumerate}
\item See EPCRA § 304(a), 42 U.S.C. § 11004(a); see also CERCLA § 102(a), 42 U.S.C. § 9602(a). However, the definition of a source may differ.
\item Id. § 302.6(a).
\item Id. § 302.6(b).
\item Id. §§ 261.20–24.
\item Id. § 302.4(b).
\item Id. § 325, 42 U.S.C. § 11045.
\item EPCRA § 325(a), (b), 42 U.S.C. § 11045(a), (b).
\item EPCRA § 325(b)(2), 42 U.S.C. § 11045(b)(2).
\item EPCRA § 325(b)(4), 42 U.S.C. § 11045(b)(4).
\item Id.
\item Id. “Any person who knowingly and willfully fails to provide notice . . . shall, upon conviction” be subject to fines, imprisonment, or both. EPCRA § 325(b)(4), 42 U.S.C. § 11045(b)(4); 40 C.F.R. § 355.50(c) (2004).
\end{enumerate}
\end{footnotesize}
§ 4(b). Section 313 Toxic Releases Under EPCRA

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) addresses both routine and accidental releases of about 650 toxic chemicals, as well as off-site transfers. That section also requires the owner or operator of facilities meeting minimum size requirements to file annual reports of such releases or transfers, provided that the quantity of chemicals involved exceeds the applicable threshold. The report, known as the Toxic Release Inventory (TRI) Form R, must be submitted to the Environmental Protection Agency (EPA) and a designated state authority on the first day of every July, and it must document any release of toxic chemicals from that facility during the previous calendar year that are subject to EPCRA reporting requirements. Threshold reporting levels are based on the amount of a chemical manufactured, imported, processed, or otherwise used, not the amount released into the environment. One expert has stated that a facility may be required to submit a Form R for a listed chemical even if the actual quantity released is zero. Note, however, that EPCRA imposes only reporting requirements, not monitoring requirements.

419. EPCRA § 313(a), 42 U.S.C. § 11023(a).
420. See EPCRA § 313(f)(1), 42 U.S.C. § 11023(f)(1); 40 C.F.R. § 372.25. However, if the facility releases less than 500 pounds of an applicable chemical, it may be able to qualify for an exemption to the TRI reporting requirements. Alternate Threshold for Facilities With Low Annual Reportable Amounts; Toxic Chemical Release Reporting; Community Right-to-Know, 59 Fed. Reg. 61,488 (Nov. 30, 1994) (codified at 40 C.F.R. pt. 372). Facilities that qualify do not have to complete a Form R, but can file a shorter certification statement form known as a Form A. Unlike Form R, the Form A does not require reporting of the amount of chemicals released to the environment or transferred to other locations. There were 10,547 submissions of Form A in 1997. U.S. ENVTL. PROT. AGENCY, 1997 TOXICS RELEASE INVENTORY PUBLIC DATA RELEASE REPORT 2-11, tbl.2-1 (1999) [hereinafter 1997 TRI REPORT], available at http://www.epa.gov/tri/tridata/tri97/pdr/index.htm.
421. KUSZAJ, supra note 347, at 193.
422. EPCRA § 313(g)(2), 42 U.S.C. § 11023(g)(2) ("Nothing in this section requires the monitoring or measurement of the quantities, concentration, or frequency of any toxic chemical released into the environment beyond that monitoring and measurement required under other provisions of law or regulation."); See William F. Pedersen, Regulation and Information Disclosure: Parallel Universes and Beyond, 25 HARV. ENVTL. L. REV. 151 (2001).
The requirements of EPCRA section 313 fall on the owners or operators of facilities that (i) manufacture, import, process, or otherwise use toxic chemicals or compounds containing toxic chemicals; (ii) employ ten or more people on a full-time basis;\(^{423}\) and (iii) are industries categorized within codes 20 through 39 of the Standard Industrial Classification (SIC) codes, plus the industries in Phase 2 discussed below.\(^{424}\) Such facilities must submit Form R reports if the amount of a listed toxic chemical that was manufactured, imported, or processed during the previous calendar year exceeded 25,000 pounds.\(^{425}\) If the listed toxic chemical is used in some fashion other than manufacturing, importing, or processing (i.e., as a catalyst in a chemical reaction), the threshold for reporting is reduced from 25,000 pounds to 10,000 pounds.\(^{426}\) Moreover, EPA may establish different threshold amounts.\(^{427}\) If a given compound contains one or more of the listed toxic chemicals, the weight of each toxin in the compound is used to calculate whether threshold quantities are met.\(^{428}\) Each listed toxic chemical that exceeds threshold quantities for the preceding year must be reported on a separate Form R.\(^{429}\)

\(^{423}\) The number of full-time employees is calculated by totaling the hours worked by all employees during the calendar year (including contract employees) and dividing that total by 2,000 hours. 40 C.F.R. § 372.3 (defining “full-time employee” under EPCRA § 313).


428. 40 C.F.R. § 372.30(b)(i).
429. EPCRA § 313(a), 42 U.S.C. § 11023(a). The following information must be included for each chemical: (1) name, location and principle business activities at the facility; (2) how the chemical is used at the facility; (3) an estimate of the maximum amount of the chemical present at the facility at any time during the preceding calendar year; (4) any waste treatment or disposal methods employed for each wastestream, and an estimate of the treatment efficiency of those methods; (5) the annual quantity of toxic chemicals released, organized by environmental medium and point versus non-point releases; (6) any recycling methods employed by the facility and an
The initial list of toxic chemicals covered by section 313 may be found in Committee Print Number 99-169 of the Senate Committee on Environment and Public Works, entitled “Toxic Chemicals Subject to Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986.”430 When the law was initially implemented in 1987, section 313 included over 300 chemicals in twenty chemical categories.431 However, EPA can add to or delete from the list by following the procedures provided in section 313(d) or by responding to a petition (based on provisions in section 313(e)) from any person.432

In 1990, the Pollution Prevention Act433 (PPA) amended EPCRA to require that TRI reporting include: (i) reporting on source reduction and recycling activities, (ii) two-year projections of expected future releases that are subject to TRI, and (iii) the development of a facility-specific toxic-chemical ratio of the production in the reporting year to production in the previous year.434

EPA adopted a three-phase approach to expanding the EPCRA section 313 reporting requirement. Phase 1 expanded the list of toxic chemicals subject to Form R reporting.435 On November 24, 1994, EPA added 286 chemicals and chemical categories because of their acute human health effects, carcinogenicity or other chronic human health effects, and/or environmental effects, to the list of toxic chemicals subject to reporting under section 313.436 On April 30, 1996, the U.S.
District Court for the District of Columbia upheld EPA’s approach for adding chemicals to the list of substances subject to the Toxic Release Inventory program. The D.C. Circuit primarily affirmed the judgment of the district court and remanded the case only with regard to the listing of two specific chemicals. EPA deferred action on forty chemicals and one chemical category until a later date. The total number of listed substances is about 650.

Phase 2 expanded the scope of industry sectors subject to EPCRA reporting. On May 1, 1997, EPA added seven industrial groups to the list of groups required to report pursuant to EPCRA section 313 as modified by section 6607 of the PPA. These groups are metal mining, coal mining, electric utilities, commercial hazardous waste treatment, chemicals and allied products-wholesale, petroleum bulk terminals and plants-wholesale, and solvent recovery services. These additions were upheld by the U.S. District Court for the District of Columbia.

Phase 3 expanded chemical use reporting. The term “chemical use” refers to information “commonly described as materials accounting data: amounts of a toxic chemical coming into a facility, amounts transformed into products and wastes, and the resulting amounts leaving the facility site.” Phase 3 allows for the collection of information on mass balance, materials accounting, or other chemical use data, in order to improve the use of the TRI as a public policy tool. EPA believes that requiring such additional reporting will provide the public with a more detailed picture of the environmental performance and the use of toxic chemicals by industries in their communities.

440. The list of chemicals is found at 40 C.F.R. § 372.65 (2004).
446. Id.
progressed slowly because industry strongly opposes chemical use reporting.447

The PPA448 requires those who file an EPCRA annual toxic chemical release form to include a toxic chemical source reduction and recycling report for the preceding calendar year.449 This report is to be publicly available but is subject to confidential business information protection.450 EPCRA requires facilities to report the releases of toxic chemicals into all air, water, and land areas.451 It also requires reports of off-site transfers of toxic chemicals for treatment or disposal pursuant to section 6607 of the PPA,452 which requires reporting the “quantity of the chemical entering any waste stream (or otherwise released into the environment) prior to recycling, treatment, or disposal.”453 The PPA also requires the amount of chemicals that are recycled to be reported.454 The reporting requirements are further expanded to require a report of toxic chemicals released from a “catastrophic event, remedial action, or other one-time event.”455 The PPA thus mandates the inclusion of considerable additional information in the Form R report.456

Because Form R contains technical information, it is generally prepared by engineers or environmental specialists at the facility. The Form R can be completed by either using the forms sent by EPA or reporting electronically using free software provided to facilities by EPA.457 A completed Form R usually is sent to a senior official at the

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449. Id. § 13106(a) (“The toxic chemical source reduction and recycling report shall cover each toxic chemical required to be reported in the annual toxic chemical release form filed by the owner or operator under section 11023(c) of this title.”).
450. Id. § 13106(e).
456. PPA § 6607(a), 42 U.S.C. § 13106(a).
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plant who reviews the reports and signs them to verify that they are accurate and complete or, in the case of electronic reporting, signs a letter verifying that they are accurate and complete.

The reports then are sent to EPA’s EPCRA Reporting Center, as well as to the appropriate state agency. Even if the reports are submitted electronically to EPA, paper copies generally are still required by the states. All estimates and calculations, along with a paper copy of each submitted Form R, must be kept at the site for a period of three years. The paper copy generated by EPA’s software is acceptable for both submission to the state agency and for retention at the site. Persons who must file a Form R are required to maintain for three years the materials and documents that were used to determine that a Form R should be filed. The records must be kept at the facility to which the report applies and must be readily available for purposes of inspection by EPA. A violation of the record-keeping requirements is a separate violation of section 313’s reporting requirements.

EPCRA section 313 does not require the owner or operator to actually measure or monitor the amount of toxic chemicals being released; an owner or operator is free to use “readily available” monitoring data. An owner or operator has no duty to install equipment for measuring releases. If data is not available, reasonable estimates of the amounts involved may be used. Unfortunately, there is little guidance as to what is meant by “reasonable estimates.” Moreover, EPCRA reporting requirements apply to less than five percent of the environmental releases of the chemicals covered by section 113.

Although the provisions of section 313 require the release of proprietary information, section 322 of EPCRA allows for the protection

458. P.O. Box 3348, Merrifield, VA 22113-3348.
459. See EPCRA § 313(a), 42 U.S.C. § 11023(a).
461. The disk containing the electronic version of the Form R should be retained.
462. 40 C.F.R. § 372.10.
463. Id. § 372.10(c).
466. Id.
467. Id.
468. Pedersen, supra note 422, at 165.
of trade secrets. Facilities claiming trade secret status must file two Form R reports for each chemical subject to EPCRA reporting requirements, one report for internal EPA use that includes full information concerning the chemical’s composition and another “sanitized” report for public dissemination that does not include the proprietary information.

On August 3, 1993, President Clinton signed Executive Order 12,856, which requires federal agencies to comply with EPCRA and the Pollution Prevention Act of 1990. In 1995, federal facilities released 6,730,862 pounds of toxics and reduced their releases almost forty-five percent to 3,707,932 pounds in 1997.

On August 8, 1995, President Clinton signed Executive Order 12,969, the Federal Acquisition and Community Right-to-Know Order. This order mandates that for new contract solicitations of $100,000 or more, each federal agency shall require its contractors to file (and continue to file for the life of the contract) a toxic chemical release form (Form R) as required by EPCRA section 313(a) and (g). Each toxic chemical manufactured, processed, or otherwise used by the federal contractor at the facility must be reported if the contractor is subject to Toxic Release Inventory reporting requirements.

EPA’s information relating to the TRI program may be accessed on the Internet. An Internet service provided by Environmental Defense (ED) makes TRI data more accessible and more useful to the public.

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470. 40 C.F.R. § 350.5(e).
472. 1997 TRI REPORT, supra note 420, at 4-16, tbl. 4-7.
474. 60 Fed. Reg. 40,989, § 3-301.
475. Id. §§ 3-302, 3-303.
477. ED’s “Chemical Scorecard” (Scorecard) site can be accessed at http://www.scorecard.org (last visited Dec. 15, 2005). The site provides a searchable database of the information submitted to EPA for the 1995 TRI by over 17,000 individual facilities in all fifty states.
§ 4(b)(1). Enforcement of EPCRA 313

EPA’s 1992 Enforcement Policy applies to section 313 reporting requirements. EPCRA’s section 313 is a strict liability program; thus, ignorance of the law is not an effective defense. EPA’s enforcement policy has been to use penalties to make compliance with EPCRA less costly than paying fines. EPCRA’s enforcement options range from no action to criminal actions depending on the circumstances of the violation. Violators also are subject to citizen suits pursuant to EPCRA section 326(a)(1). Until 1993, EPA focused EPCRA enforcement primarily at facilities that failed to file the required Form R until after an EPA inspection. Since 1993, the enforcement policy is to use Civil Administrative Complaints for a first violation of (i) late filing of Form R, (ii) data quality errors (usually errors caused by a failure to comply with explicit EPCRA requirements), (iii) failure to maintain records documenting Form R filings, and (iv) failure to notify customers when required. Any person found to be in violation of section 313 of EPCRA is subject to a maximum civil penalty of $25,000, adjusted for inflation, per day for each violation. If the Administrator determines that a facility’s claim for trade secret status is frivolous, a civil penalty may be assessed for each frivolous claim. Any person who knowingly and willfully discloses trade secrets protected by section 322 of EPCRA faces criminal penalties not to exceed $20,000, imprisonment not to exceed


479. Id. at 1.


481. Lorang, supra note 480, at 2736.

482. EPCRA SECTION 313 ERP, supra note 478, at 2–7.


484. EPCRA SECTION 313 ERP, supra note 478, at 4–7.

485. EPCRA § 325(c), 42 U.S.C. § 11045.

exceed one year, or both. However, because EPCRA does not require monitoring, inaccurate TRI reports may not lead to penalties.

EPA uses a gravity-based penalty matrix with eighteen possible penalties for each chemical per facility per year involved in a violation. The severity of the penalty is based on the “extent level” inputs: (i) whether the amount of the chemical at issue is more or less than ten times the threshold, (ii) whether sales are more or less than $10 million per year, and (iii) whether total employment is more or less than fifty employees. Six “circumstance levels” set penalties depending on the nature of the violation.

EPA makes adjustments to the gravity-based penalty based on several factors outlined in the policy. Facilities may receive adjustments under the following three circumstances: (i) up to a thirty percent “good attitude” adjustment for correcting violations after an EPA inspection (up to fifteen percent for cooperating with EPA during the compliance evaluation and enforcement process and up to a fifteen percent reduction for a good faith effort at prompt compliance); (ii) a twenty-five percent reduction for voluntary disclosures plus up to an additional twenty-five percent reduction if the voluntary disclosure was immediate (within thirty days), and was accompanied by appropriate steps to ensure future compliance, and the facility did not have violations within the past two years; and (iii) a twenty-five percent reduction for penalties associated with delisted chemicals. However, a facility

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487. EPCRA § 325(d)(2), 42 U.S.C. § 11045(d)(2). Penalties may be subject to the federal sentencing guidelines.
488. EPCRA SECTION 313 ERP, supra note 478, at 11 (Penalty Matrix); Lorang, supra note 480, at 2737. Separate penalties are calculated for each chemical for each facility. EPCRA SECTION 313 ERP, supra note 478, at 13.
489. EPCRA SECTION 313 ERP, supra note 478, at 9–11.
490. Id. at 11–13. The penalty matrix is found at id. at 11. Inflation adjustments are found at 40 C.F.R. § 19.4, tbl.1.
491. EPCRA SECTION 313 ERP, supra note 478, at 14–21.
492. Id. at 18.
493. Id. at 14–16. Voluntary disclosure reductions are available for the following violations: failure to report in a timely manner and failure by a supplier to provide required notification. Id. at 16. To be eligible for voluntary disclosure reductions the facility must submit signed written disclosure statements or Form R reports to EPA and the appropriate state agency. Id. at 14.
494. Id. at 17–18; see also Lorang, supra note 480, at 2737.
cannot get both “attitude” and “voluntary disclosure” reductions because EPA considers the two categories to be mutually exclusive.495

In addition, supplemental environmental projects (SEPs) may be used to offset penalties, usually at a rate whereby the SEP investment amount exceeds the cost of the penalty offset.496 The use of SEPs in an EPCRA section 313 or PPA section 6607 enforcement action is subject to case-by-case negotiation.497 A company also may receive a reduced fine if it can prove inability to pay.498 The guidelines in this situation are stringent. The penalty policy lists information that the respondent will be required to submit, including three to five years of tax returns, balance sheets, and other financial documents.499 Usually, companies will be required to borrow money, sell assets, cut expenses, and take other measures before EPA will reduce a fine for inability to pay.500

If a company discovers a violation, it should act immediately because fines aggregate during the time the violation is unreported. Also, not complying with section 313 requirements will increase penalties and may lead to criminal prosecution.501 In addition, a facility with a history of violations may have its penalty adjusted upward to a maximum of one hundred percent.502 Moreover, states may impose requirements more stringent than the TRI.503

495. EPCRA SECTION 313 ERP, supra note 478, at 16. The sentencing guidelines provide a greater degree of culpability reduction for self-reporting, if there also is cooperation and acceptance of responsibility, than is provided for having an effective compliance program. An effective compliance program reduces culpability by three points, but self-reporting, cooperation, and acceptance of responsibility reduces culpability by five points. U.S. SENTENCING GUIDELINES MANUAL § 8C2.5(f), (g) (2004).


497. EPCRA SECTION 313 ERP, supra note 478, at 19; Lorang, supra note 480, at 2738.


499. Id.

500. Lorang, supra note 480, at 2739.

501. EPCRA SECTION 313 ERP, supra note 478, at 14; Lorang, supra note 480, at 2738.


§ 4(c). Notification of Extremely Hazardous Substances
Under EPCRA Section 302

Section 302 of EPCRA\textsuperscript{504} requires the owner or operator of a facility that has an extremely hazardous substance (EHS), as listed by EPA at 40 C.F.R. part 355, appendices A and B,\textsuperscript{505} in amounts that exceed the chemical specific threshold planning quantity (TPQ), to notify the State Emergency Response Commission (SERC)\textsuperscript{506} that the facility is subject to EPCRA’s planning provisions.\textsuperscript{507} If a facility acquires an EHS in excess of the TPQ, or the EHS list is revised and the facility has a newly listed EHS in excess of the TPQ, the owner or operator of the facility must notify the SERC and the Local Emergency Planning Committee (LEPC)\textsuperscript{508} within sixty days after such acquisition or revision.\textsuperscript{509} Unlike EPCRA’s TRI program, there is no specific form that must be used.\textsuperscript{510} All that must be reported in the section 302 notification is that the facility has one or more of some EHSs present in excess of the TPQ.\textsuperscript{511} There is no requirement that the facility identify in the notification the specific EHS present at the facility.\textsuperscript{512} EPCRA section 303(d) requires owners or operators subject to section 302 to provide the LEPC with the name of the person who will act as the facility emergency coordinator.\textsuperscript{513}

Owners or operators must report any changes occurring at the facility that may be relevant to emergency planning to the LEPC.\textsuperscript{514} The owner or operator also is required to promptly supply information necessary to

\begin{footnotesize}
\textsuperscript{504} 42 U.S.C. § 11002 (2000).
\textsuperscript{505}  Id. § 11002(a)(2).
\textsuperscript{506}  EPCRA § 301, 42 U.S.C. § 11001, requires the Governor of each state to appoint a SERC.
\textsuperscript{507}  42 U.S.C. § 11002(b)(1), (c). A Governor or a SERC may require additional facilities to provide notification after notice and comment. EPCRA § 302(b)(2), 42 U.S.C. § 11002(b)(2).
\textsuperscript{508}  Executive Order No. 12,856, 58 Fed. Reg. 41,981 (Aug. 3, 1993), made all federal facilities “owners or operators” under EPCRA and required those facilities to submit emergency planning notification under EPCRA section 302 by March 3, 1994.
\textsuperscript{509}  The SERC is required to establish emergency planning districts and an LEPC for each district. EPCRA § 301(a), (c), 42 U.S.C. § 11001(a), (c). EPCRA section 301(c) sets out procedures for establishing the LEPC.
\textsuperscript{509}  EPCRA § 302(d), 42 U.S.C. § 11002(c); 40 C.F.R. § 355.30(b) (2004). See generally ARNOLD W. REITZE, JR., AIR POLLUTION LAW § 7-7(a) (1995).
\textsuperscript{510}  KUSZAJ, supra note 347, at 35.
\textsuperscript{511}  Id.
\textsuperscript{512}  Id.
\textsuperscript{513}  42 U.S.C. § 11003(d)(1); 40 C.F.R. § 355.30(c).
\textsuperscript{514}  EPCRA § 303(d)(2), 42 U.S.C. § 11003(d)(2); 40 C.F.R. § 355.30(d)(1).
\end{footnotesize}
develop and implement the emergency plan upon request of the LEPC.\textsuperscript{515} EPCRA section 325(a) authorizes EPA to issue orders compelling compliance.\textsuperscript{516} The U.S. District Court for the district in which the facility is located has jurisdiction to enforce EPCRA section 302(c) and section 303(d) and to assess penalties of up to $25,000 per day, adjusted for inflation, for each day of violation.\textsuperscript{517}

§ 4(d). Notification Under §§ 311 and 312 of EPCRA

The requirements of EPCRA sections 311 and 312 build on the hazard communication standard (HCS) promulgated by the Occupational Safety and Health Administration (OSHA).\textsuperscript{518} The aim of the HCS is to evaluate chemicals that are produced or imported for potential hazards and to present the information concerning those hazards to employers and employees.\textsuperscript{519} The Occupational Safety and Health Act (OSH Act)\textsuperscript{520} mandates that the workplace have a list of the hazardous chemicals present,\textsuperscript{521} that containers must be properly labeled,\textsuperscript{522} and that material safety data sheets (MSDSs) must be available.\textsuperscript{523} If a facility is required to prepare an MSDS for a hazardous chemical as mandated by the OSH Act,\textsuperscript{524} then, pursuant to EPCRA section 311, the facility must also submit an MSDS to the appropriate LEPC, SERC, and the facility’s local fire department.\textsuperscript{525} Both manufacturing and

\textsuperscript{515} EPCRA § 303(d)(3), 42 U.S.C. § 11003(d)(3); 40 C.F.R. § 355.30(d)(2).
\textsuperscript{516} 42 U.S.C. § 11045(a).
\textsuperscript{519} Id. § 1910.1200(a)(1); J. Norman Stark & M.C.D. Stark, Telling Workers About Dangerous Chemicals, TRIAL, Dec. 1986, at 29.
\textsuperscript{520} 29 C.F.R. § 1910.1200(f) (providing regulations for labels and other forms of warning).
\textsuperscript{521} Id. § 1910.1200(c)(1)(i).
\textsuperscript{522} Id. § 1910.1200(f).
\textsuperscript{523} Id. § 1910.1200(g)(8). MSDSs may be kept on computer or any other alternative to paper copies, so long as the MSDSs are readily accessible to employees. Id. A material safety data sheet’s content is described in id. § 1910.1200(g)(2).
nonmanufacturing sectors of industries where workers are exposed to hazardous chemicals are subject to these requirements.526

EPCRA uses the OSH Act’s definition of hazardous chemicals.527 The number of chemicals covered by EPCRA is therefore larger than under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or the other sections of EPCRA—approximately 500,000.528 However, some chemicals are excluded from EPCRA’s sections 311 and 312 program.529 EPCRA section 311(e) excludes five chemical categories from the definition of “hazardous chemical” and the reporting requirements under EPCRA sections 311 or 312. They are: (i) food, food additives, color additives, drugs, and cosmetics regulated by the Food and Drug Administration (FDA); (ii) solid substances present in manufactured items so long as exposure to the substance does not occur under normal operating conditions; (iii) consumer products; (iv) chemicals used in a research laboratory, hospital, or other medical facility; and (v) any substance used in routine agricultural operations or a fertilizer held for sale to the ultimate customer.530 There are five hazard categories: immediate or acute health hazard, delayed or chronic health hazard, fire hazard, sudden release of pressure hazard, and reactive hazard.531

An employer must have an MSDS for each hazardous chemical produced or imported.532 MSDSs must accompany chemicals when they are shipped and must be readily accessible to employees.533 The MSDS must include the OSH Act’s permissible exposure limits (PEL), the

527. EPCRA § 311(e), 42 U.S.C. § 11021(e) (citing 29 C.F.R. § 1910.1200(c)).
528. EPCRA FACT SHEET, supra note 339.
529. “Hazardous chemical” for the purposes of preparing an MSDS is defined under the OSH Act as “any chemical which is a physical hazard or a health hazard.” 29 C.F.R. § 1910.1200(c). Thus, the definition of hazardous chemical is much broader than the definitions in either CERCLA or in the rest of EPCRA.
530. 42 U.S.C. § 11021(c). Other exemptions under the OSH Act include: (i) tobacco or tobacco products; (ii) wood or wood products (but not wood dust); (iii) articles (defined by the OSH Act to mean items that are manufactured to a specific shape or design for an end use which does not result in a release or exposure to hazardous chemicals—a pen or pencil for example); (iv) food, drugs, cosmetics, and alcohol in certain circumstances; and (v) consumer products when used as such in the workplace. 29 C.F.R. § 1910.1200(b)(6).
531. 29 C.F.R. § 1910.1200(b)(6).
532. Id. § 1910.1200(g)(1).
533. Id.
American Congress of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV), if any, as well as other exposure limits.\textsuperscript{534} If the chemical is on the National Toxicology Program Annual Report on Carcinogens, or other official lists of carcinogens, this status must be appropriately indicated.\textsuperscript{535} In the case of chemical mixtures, an MSDS can be filed for each hazardous component of a given mixture, or an MSDS can be filed for the mixture itself.\textsuperscript{536}

In addition, pursuant to EPCRA section 312,\textsuperscript{537} facilities required to prepare MSDSs must submit the MSDSs to relevant agencies. In lieu of submitting an MSDS for every hazardous chemical at the facility, the facility may send the relevant agencies a list of chemicals at the facility.\textsuperscript{538} If a facility prepares and submits an emergency and hazardous chemical inventory form (inventory form) it must contain the Tier I information as described below.\textsuperscript{539} The form must be submitted to the following agencies: (a) the appropriate LEPC, (b) the SERC, and (c) the local fire department.\textsuperscript{540} Often, LEPCs request only lists from a facility, not the MSDSs, in order to avoid receiving a deluge of information that would be useless during an emergency.\textsuperscript{541} The LEPC must make the MSDSs available to any person upon request.\textsuperscript{542} If the LEPC does not have the MSDS in question because the facility submitted a list of hazardous chemicals rather than copies of the MSDSs, the LEPC can require the facility to submit the MSDS in question.\textsuperscript{543} The MSDS must

\textsuperscript{534} Id. § 1910.1200(g)(2)(vi).
\textsuperscript{535} Id.
\textsuperscript{536} EPCRA § 311(a)(3); 42 U.S.C. § 11021(a)(3) (2000).
\textsuperscript{537} 42 U.S.C. § 11022.
\textsuperscript{538} EPCRA § 311(a)(2)(A)(I); 42 U.S.C. § 11021(a)(2)(A)(I). Such a list must include the following as specified by EPCRA § 311(a)(2)(A):
(i) A list of the hazardous chemicals for which a material safety data sheet is required under [OSH Act], . . . grouped in categories of health and physical hazards as set forth in [OSH Act];
(ii) The chemical name or the common name of each such chemical as provided on the [MSDS]; and
(iii) Any hazardous component of each such chemical as provided on the [MSDS].
\textsuperscript{539} Id.
\textsuperscript{540} EPCRA § 312(a)(2); 42 U.S.C. § 11022(a)(2).
\textsuperscript{541} Kevin J. Finto, Regulation by Information Through EPCRA, 4 NAT. RESOURCES & ENV’T 13, 14 (Winter 1990).
\textsuperscript{542} Id.
\textsuperscript{543} Id.
be made available to the public in accordance with the procedure described in EPCRA section 324, 42 U.S.C. § 11044.544

There are two types of inventory forms: Tier I and Tier II. Rules and forms for such reporting can be found at 40 C.F.R. pt. 370. A facility subject to the requirements of section 312 must submit a Tier I form by March 1st each year.545 According to EPCRA section 312(d)(1)(B), the following information must appear on a Tier I form:

(i) An estimate (in ranges) of the maximum amount of hazardous chemicals in each category present at the facility at any time during the preceding calendar year;

(ii) An estimate (in ranges) of the average daily amount of hazardous chemicals in each category present at the facility during the preceding calendar year; and

(iii) The general location of hazardous chemicals in each category.546

If a SERC, LEPC, or the local fire department requests further information from a facility, the facility must then fill out a Tier II inventory form.547 The Tier II form deals with specific chemicals rather than the chemical categories covered in the Tier I form.548

State and local officials acting in their official capacities may access Tier II information by requesting the information from either the SERC or the LEPC.549 If the facility has not prepared a Tier II inventory form,

547. EPCRA § 312(c)(1), 42 U.S.C. § 11022(c)(1).
548. Section 312(d)(2) states that the Tier II form must include the following information:
   (A) The chemical name or the common name of the chemical as provided on the material safety data sheet.
   (B) An estimate (in ranges) of the maximum amount of the hazardous chemical present at the facility at any time during the preceding calendar year.
   (C) An estimate (in ranges) of the average daily amount of the hazardous chemical present at the facility during the preceding calendar year.
   (D) A brief description of the manner of storage of the hazardous chemical.
   (E) The location at the facility of the hazardous chemical.
   (F) An indication of whether the owner elects to withhold location information of a specific hazardous chemical from disclosure to the public under § 11044 of [§ 324 of EPCRA].
549. EPCRA § 312(e)(2), 42 U.S.C. § 11022(e)(2).
and a state or local official has requested Tier II information, the SERC or LEPC must request the facility to submit a Tier II inventory form and make it available to the official.\[^{550}\]

Any person may request Tier II information from either the SERC or the LEPC.\[^{551}\] All such requests must pertain to a specific facility and must be made in writing.\[^{552}\] If the state commission or local committee has the Tier II information in its possession at the time of the request, such information must be made available to the person making the request.\[^{553}\] If the SERC or LEPC is not in possession of the Tier II information when the request is made, it must request the facility to prepare a Tier II form if the facility has stored over 10,000 pounds of a hazardous chemical during the previous calendar year.\[^{554}\]

If the SERC or LEPC does not possess the Tier II information for the facility, and the facility did not store over 10,000 pounds of a hazardous chemical during the previous calendar year, the person requesting the information must provide a reason for needing the information requested.\[^{555}\] The SERC or LEPC then has the discretion to decide whether or not to require the facility to prepare a Tier II form.\[^{556}\]

\[\textbf{§ 4(d)(1). Penalties for violations of EPCRA §§ 311 and 312}\]

EPA may assess an administrative penalty or seek civil judicial penalties for violations of EPCRA sections 311 or 312.\[^{557}\] Violations of EPCRA section 311 can result in a maximum penalty of $11,000 per violation, adjusted for inflation.\[^{558}\] The maximum penalty for a violation of EPCRA section 312 is $25,000, plus an inflation adjustment.\[^{559}\] EPCRA section 325(c)(3) provides that each day a violation of sections 311 or 312 continues constitutes a separate violation.\[^{560}\] EPCRA does not

\[\text{\(\ldots\)}\]

\[^{550}\] Id.
\[^{552}\] Id.
\[^{554}\] Id.
\[^{555}\] EPCRA § 312(c)(3)(C), 42 U.S.C. § 11022(c)(3)(C).
\[^{556}\] Id.
\[^{557}\] EPCRA § 325(c)(4), 42 U.S.C. § 11045(c)(4).
\[^{559}\] EPCRA § 325(c)(1), 42 U.S.C. § 11045(c)(1).
\[^{560}\] 42 U.S.C. § 11045(c)(3).
provide criminal penalties for violations of EPCRA sections 311 or 312. However, a knowing failure to report may be considered concealment and may be punishable under 18 U.S.C. § 1001 as a false statement.

The penalty for violation of EPCRA sections 311 or 312 is calculated by EPA using the Interim Final Enforcement Response Policy for sections 304, 311, and 312 of EPCRA and section 103 of CERCLA (Enforcement Response Policy or Penalty Policy) issued on January 8, 1998.561 In accordance with 40 C.F.R. section 22.27(b), a Presiding Officer is required to “consider” EPA’s penalty policy, but is not required to follow it.562

Under the penalty policy, proposed penalties are calculated in two stages. First, a base penalty is calculated, and then the base penalty may be adjusted for factors applicable to the specific violator. The base penalty is determined by considering the nature, extent, gravity, and circumstances of the violation.563 The “nature” of a violation can be either an “Emergency Response Violation” or an “Emergency Preparedness/Right-to-Know Violation.”564 An EPCRA section 311 or section 312 violation is an Emergency Preparedness/Right-to-Know Violation.565

The “extent” of the violation is based on the potential negative effect the noncompliance has on those required to plan for hazardous chemical releases and the adverse impact on the public of not having the information.566 A violation of EPCRA section 311 or 312 is placed at one of three levels.567 Level One applies if the facility failed to submit or submitted an incomplete MSDS (EPCRA section 311) or inventory form (EPCRA section 312) within thirty days of the reporting deadline or government request.568 Level Two applies if the respondent reports more than twenty—but less than thirty—days after the report is required or the request for the report is made.569 Level Three applies in the case of a

564. Enforcement Response Policy, supra note 230, at 10–11.
565. Id. at 11.
566. Id. at 13.
567. Id. at 13–15.
568. Id. at 14.
569. Id.
delay of less than twenty—but more than ten—days. The “gravity” of a violation is based on the number and/or amount of the chemical(s) in excess of the threshold planning quantity (TPQ). The gravity of an EPCRA section 311 violation is placed in one of three levels: (i) Level A where the amount of the chemical present at any time was greater than ten times the TPQ; (ii) Level B for amounts greater than five but less than or equal to ten times the TPQ; and (iii) Level C for amounts greater than one but less than or equal to five times the TPQ. The gravity levels for an EPCRA section 312 violation are the same, but also provide penalties for reports which were timely submitted but do not include all of the chemicals that are required to be included in the report.

After the “extent” and “gravity” levels are determined, a matrix provides a dollar range for the base penalty amount. The “circumstances factor” is then used to arrive at the specific dollar amount within the range for that cell in the matrix. Under the “circumstances factor,” EPA measures the actual or potential consequences, including the potential for harm to human health and the environment, resulting from the failure to provide information necessary for emergency planning. The potential for harm is measured by: (i) the potential of exposing emergency personnel, the community, and the environment to the hazard; (ii) the adverse impact that noncompliance has on the integrity of the EPCRA program; (iii) the relative proximity of the surrounding population; (iv) the effect that noncompliance has on the LEPC’s ability to plan for chemical emergencies; and (v) any actual problems encountered by emergency response teams or planners because of the failure to submit reports in a timely manner.

Violations of EPCRA section 312 that occurred in the reporting year prior to the commencement of the enforcement action are not covered by the base penalty matrix. For those violations, the penalty policy provides that “a flat penalty of $1,500 per year shall be proposed, except where

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570. Id.
571. Id. at 16.
572. Id.
573. Id. at 16–17.
574. Id. at 17.
575. Id.
576. Id.
577. Id.
the facts and circumstances warrant the imposition of the full gravity based penalty.578

Once the base penalty amount has been determined, it may be adjusted upward or downward based on several factors. These include the ability of the company to pay, the prior history of such violations, the degree of culpability, the economic benefit or savings (if any) resulting from the violation,579 and such other matters as justice may require.580 EPA will also consider the size of the business,581 attitude of the business,582 supplemental environmental projects (SEPs),583 and voluntary disclosure.584

A penalty may be adjusted upward for repeat offenders with a prior violation within five years of the date of the current violation. Past consent agreements, final orders, or consent orders executed by an administrative law judge (ALJ) or EPA’s Environmental Appeals Board (EAB), a federal court judgment, a default judgment, or a consent decree are considered in order to adjust the penalty. Violations at different facilities of the same corporation (or by different subsidiaries of a parent corporation) are considered as well, unless the facilities are in

578. Id. at 23.
579. The economic benefit of noncompliance with EPCRA sections 311 and 312 is based on EPA’s estimate of the cost of rule familiarization, producing and submitting the reports, and any filing fees. Id. at 28. A detailed table of EPA’s cost estimates is provided in id. at 26–28.
580. Id. at 24.
581. The proposed base penalty may be reduced by fifteen percent for first time violators employing one hundred or fewer people and whose annual gross sales are less than $20 million. Id. at 31.
582. The two components of the attitude adjustment are (1) cooperation and (2) willingness to settle. Id. EPA may reduce the penalty up to thirty-five percent based on attitude. Id. at 28–29.
583. Id. at 31.
SEPs are environmentally beneficial projects which a respondent agrees to undertake in settlement of an environmental enforcement action, but which the defendant is not otherwise legally required to perform. In return, some percentage of the cost of the SEP is considered as a factor in establishing the final penalty to be paid by the respondent. Id. The penalty policy does not discuss the extent to which a SEP may be used to reduce the penalty. The use of SEPs for penalty reduction is discussed in EPA’s SEP Policy, U.S. ENVTL. PROT. AGENCY, OFFICE OF ENFORCEMENT AND COMPLIANCE ASSURANCE, EPA SUPPLEMENTAL ENVIRONMENTAL PROJECTS POLICY (1998), available at http://www.epa.gov/compliance/resources/policies/civil/seps/fnlsepmem.pdf.
584. Enforcement Response Policy, supra note 230, at 32. Facilities that conduct a self-audit and voluntarily disclose a CERCLA § 103 violation or a violation of EPCRA §§ 304, 311, or 312, may be eligible for a one-hundred percent reduction in the gravity-based portion of the penalty if they meet the nine criteria established in Incentives for Self-Policing: Disclosure, Correction, and Prevention of Violations, Final Policy Statement, 60 Fed. Reg. 66,706 (Dec. 22, 1995).
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substantially different lines of business or are substantially independent of one another in their management and in the functioning of their Board of Directors.\textsuperscript{585} For repeat offenders of EPCRA sections 311 and 312, the base penalty may be increased by up to twenty-five percent for second violations and up to fifty percent for third and subsequent violations, but cannot exceed the statutory maximum of $27,500, which has been adjusted for inflation to $32,500.\textsuperscript{586}

Violations of EPCRA may be adjusted for culpability of the offender, based on the violator’s knowledge of the particular requirement and the degree of the violator’s control over the violative condition.\textsuperscript{587} Three levels of culpability are designated in the penalty policy. Level One allows an upward adjustment of twenty-five percent for willful violations.\textsuperscript{588} No adjustment is made at Level Two.\textsuperscript{589} Level Three provides for a twenty-five percent downward adjustment where the violator lacked sufficient knowledge of the potential hazard and lacked control over the situation necessary to prevent the violation.\textsuperscript{590}

§ 5. ACCIDENTAL RELEASE REPORTING UNDER RCRA

The Resource Conservation and Recovery Act (RCRA) requires hazardous waste treatment, storage, and disposal (TSD) facilities to have a contingency plan.\textsuperscript{591} Because all RCRA “hazardous wastes” are “hazardous substances” under CERCLA, they are subject to the immediate notification requirements of both CERCLA and EPCRA.\textsuperscript{592} In the event of a threat to human health or the environment, the facility’s designated emergency coordinator must immediately notify either NRC

\begin{itemize}
\item \textsuperscript{585} Enforcement Response Policy, \textit{supra} note 230, at 26.
\item \textsuperscript{586} \textit{Id.}; see 40 C.F.R. \textsection 19.4, tbl.1 (2004).
\item \textsuperscript{587} Enforcement Response Policy, \textit{supra} note 230, at 26.
\item \textsuperscript{588} \textit{Id.}
\item \textsuperscript{589} \textit{Id.} at 27.
\item \textsuperscript{590} \textit{Id.}
\item \textsuperscript{591} RCRA \textsection 3004(a)(5), 42 U.S.C. \textsection 6924(a)(5) (2000); \textit{see also} 40 C.F.R. \textsection 260.10 (defining the contingency plan and its requirements). RCRA mandates the use of contingency plans for two categories of facilities: those that “accumulate hazardous waste on-site for 90 days or less without a permit,” and those treatment, storage, and disposal facilities that are subject to RCRA’s permit requirements. RCRA \textsections 3002, 3004(a), 42 U.S.C. \textsections 6922, 6924(a); \textit{see also} 40 C.F.R. \textsection 262.34. Emergency procedures are found at 40 C.F.R. pt. 264, subpt. D and 40 C.F.R. pt. 265, subpt. D.
\item \textsuperscript{592} CERCLA \textsection 101(14), 42 U.S.C. \textsection 9601(14); EPCRA \textsection 304(a), 42 U.S.C. \textsection 11004(a); \textit{see discussion} \textit{supra} section 3(b)(3).
\end{itemize}
or the regional on-scene coordinator.  The initial telephone notification must include: (1) the name and telephone number of the person making the report; (2) the name and address of the facility; (3) the type and time of the incident; (4) the name and quantity of materials released; (5) the extent of injuries, if any; and (6) the possible hazards to the environment or human health.

An owner or operator of a facility must also report any release that triggers the implementation of a facility’s contingency plan. The report must be submitted in written form to EPA’s Regional Administrator or state agency in charge of the RCRA program for that jurisdiction within fifteen days after the release. The report may serve either as initial notification to EPA of an incident requiring the execution of the facility’s contingency plan or as a follow up to the immediate telephone notification that occurred if the release threatened human health or the environment. Written notification must include:

1. Name, address and telephone number of the owner or operator;
2. Name, address, and telephone number of the facility;
3. Date, time, and type of incident (e.g., fire, explosion);
4. Name and quantity of material(s) involved;
5. The extent of injuries, if any;
6. An assessment of the actual or potential hazards to human health or the environment, where this is applicable; and
7. Estimated quantity and disposition of recovered material that resulted from the incident.

Because the reporting requirements under RCRA do not have RQ thresholds, RCRA reporting requirements may apply when neither CERCLA nor EPCRA’s nonroutine release reporting requirements are triggered.

RCRA contains a separate set of reporting provisions for releases from underground tank systems used in the storage or treatment of...

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593. 40 C.F.R. §§ 264.56(d), 265.56(a).
594. Id. §§ 264.56(d)(2), 265.56(d)(2).
595. Id. §§ 264.56(j), 265.56(j).
596. Id.
597. Id. §§ 264.56(d)(2), 265.56(d)(2).
598. Id. §§ 264.56(j), 265.56(j).
599. Id.
600. Id.
hazardous wastes. Notification must be made to EPA Regional Administrator within twenty-four hours of any “leak or spill of hazardous waste” from an underground tank system, unless the wastes are released in quantities of less than one pound and are immediately contained and remediated. This initial notification must be followed by a written report within thirty days. Releases already reported under CERCLA, as required by 40 C.F.R. § 302, are exempt from RCRA requirements. In addition to identifying the amount and type of substance released, and the facility’s owner or operator, the written follow-up report should include: the release’s likely migration route; characteristics of the soil surrounding the release; “results of any monitoring or sampling conducted in connection with the release, (if available)”; proximity of the release to “drinking water, surface water, and population areas”; and a description of response actions that have been performed or planned.

RCRA defines underground storage tanks (USTs) as tanks that hold petroleum or CERCLA hazardous wastes but that do not contain hazardous wastes regulated by RCRA subchapter III or certain other exempt categories of waste. Tanks regulated under the UST program are those buried at least ten percent below the surface of the ground. It should be noted that releases from tank systems are quite common because of the large number of inadequately designed tanks in use and the difficulty of discovering problems involving tanks that are buried beneath the surface. Many USTs are exempt from regulation under

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602. 40 C.F.R. §§ 264.196(d)(1), 265.196(d)(1). Underground storage tanks (USTs) that store regulated wastes are governed by RCRA §§ 9001–9010, 42 U.S.C. §§ 6991–6991i. Regulated wastes are petroleum and wastes identified as hazardous substances under section 101(14) of CERCLA, but do not include hazardous waste regulated under RCRA subchapter III. 40 C.F.R. §§ 261.20–24; see CERCLA § 101(14), 42 U.S.C. § 9601(14); RCRA §§ 9001–9010, 42 U.S.C. §§ 6991–6991i. Facilities that accumulate wastes for less than 90 days have some exemptions from RCRA requirements. 40 C.F.R. § 262.34(a). These facilities must, however, still comply with reporting requirements. Id.


604. Id. §§ 264.196(d)(3), 265.196(d)(3).

605. Id. §§ 264.196(d)(1), 265.196(d)(1); see also id. pt. 302.

606. Id. §§ 264.196(d)(3), 265.196(d)(3).


609. Id.

RCRA including farm motor fuel tanks, heating oil tanks for consumptive use on-site, septic tanks, and certain pipeline facilities. Therefore, the UST program primarily applies to large petroleum storage tanks. Releases from USTs must be reported to the appropriate implementing agency. These reporting requirements extend to releases, spills, overfills, and confirmed releases from USTs. RCRA also establishes reporting requirements applicable to numerous types of surface impoundments used in the treatment, storage, and disposal of hazardous waste. Owners or operators of surface impoundments that require RCRA subchapter III permits must notify the appropriate EPA regional office in writing within seven days of detecting a leak or a sudden and unexplained drop in impoundment level. Surface impoundments subject to liner requirements also have reporting requirements, as do landfills, waste piles, and containment buildings. The seven-day notification deadline applies to these types of impoundments as well, with the additional requirement that any new information must be provided to the region after fourteen days, and again after thirty days have passed. The release of hazardous waste from a drip pad must be reported to EPA within twenty-four hours. Additional information is required within ten days.

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611. RCRA § 9001(1), 42 U.S.C. § 6991(1).
612. Id.
613. RCRA § 9002(a), 42 U.S.C. § 6991a(a). The methods used to determine whether a release actually has occurred are extremely complex and beyond the scope of this Article. See RCRA § 9003, 42 U.S.C. § 6991b; see also RCRA § 9005, 42 U.S.C. § 6991d (offering a detailed description of UST testing); 40 C.F.R. pt. 280 (2004).
614. 40 C.F.R. § 280.50(a).
615. Id. § 280.53(a).
616. Id.
617. Id. § 280.61.
618. RCRA § 3005(j), 42 U.S.C. § 6925(j).
620. Id. §§ 264.221(a), 264.223(b)(1).
621. Id. § 264.304(b). Interim status facilities are subject to reporting requirements. Id. § 265.303(b).
622. Id. § 264.253(b).
623. Id. § 264.1101(c)(3)(i)(D).
624. Id. §§ 264.304(b), 253(b), .1101(c)(3)(i)(D).
625. Id. § 264.570(a). Drip pads are used “to convey treated wood drippage, precipitation, and/or surface water run-off to an associated collection system.” Id.
626. Id. § 264.573(m).
627. Id. § 264.573(m)(1)(iv).
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RCRA section 3008 subjects violators of reporting requirements to civil penalties of up to $25,000 per day and criminal penalties of up to $50,000 per day. Violators of UST requirements are subject to civil penalties of up to $10,000 per day. All civil penalties are subject to an inflation adjustment.

§ 6. ACCIDENTAL RELEASE RESPONSES UNDER THE TOXIC SUBSTANCES CONTROL ACT

The Toxic Substances Control Act (TSCA) requires any person who “manufactures, processes, or distributes . . . a chemical substance or mixture” to report immediately to EPA any “information which reasonably supports the conclusion that such substance or mixture presents a substantial risk of injury to health or the environment.” This provision is not normally used in the context of pollution control, however, TSCA does have more focused sections that deal with pollution issues.

Subchapter II of TSCA regulates schools constructed with material containing asbestos. This program requires the development of asbestos management plans for the remediation of school facilities. The management plan must be made available for inspection by the public and must be submitted to the Governor of the state where the school is located. The Governor must then submit a report to EPA

628. RCRA § 3008(g), 42 U.S.C. § 6928(g) (2000). Violations now are subject to an inflation-adjusted maximum civil penalty of $32,500 per day. See 40 C.F.R. § 19.4 tbl.1.
629. RCRA § 3008(d), 42 U.S.C. § 6928(d).
632. See Kliever et al., Release Reporting Requirements Under TSCA, FIFRA, OSHA, RCRA, CWA, and CAA, 27 ENV'T REP. CUR. DEV. (BNA) 1250, 1250–51 (1996) [hereinafter Kliever, Statutory Reporting Requirements]. Section 8(e) deals primarily with emergency release reporting under the “substantial risk” standard rather than with issues of pollution control. TSCA § 8(e), 15 U.S.C. § 2607(e).
635. TSCA § 203(i), 15 U.S.C. § 2643(i).
636. Id.
showing the status of management plan submissions. TSCA also has a lead-based paint program accompanied by reporting requirements. However, neither the asbestos nor the lead-based paint program involve emergency release notification.

§ 6(a). Section 8 of the TSCA

The TSCA is an important information gathering tool for EPA and other agencies. Because of its broad application, it often serves to fill regulatory gaps left by other environmental statutes. Section 8 of TSCA authorizes EPA to establish recordkeeping and reporting requirements for manufacturers, processors, and in some cases, distributors of “chemical substance[s].” The definition of “chemical substances” includes many substances other than toxic chemicals and in effect renders TSCA a broad chemical control act. Pursuant to section 8(a) of TSCA, EPA may require companies that manufacture or process (or propose to manufacture or process) a chemical substance to collect, maintain, and report information concerning the production, processing, environmental health effects, and exposure to individuals of each chemical substance or mixture for which a report is required. Pursuant to section 8(d), EPA may require manufacturers, processors, or distributors of chemical substances or mixtures to submit lists of health and safety studies on the chemical substance or mixture either (i) “conducted by such person,” (ii) “known to such person,” or (iii) “reasonably ascertainable by such person.” Section 8(e) requires

639. TSCA § 205(e), 15 U.S.C. § 2645(e).
645. TSCA defines a chemical substance as “any organic or inorganic substance of a particular molecular identity, including—(i) any combination of such substances . . . and (ii) any element or uncombined radical.” TSCA § 3(2)(A), 15 U.S.C. § 2602(2)(A).
companies to report information immediately to EPA concerning
substantial risk of injury to health or the environment. 648

EPA is required by section 8(b) to maintain and publish a current
inventory of “chemical substances.” 649 This “TSCA Inventory,” a
complex, multivolume compilation, contains approximately 70,000
chemicals. 650 Hundreds of new chemicals are added each year, 651 but
only about fifteen percent of the chemical compounds introduced in the
past twenty years have health effects data. 652 The information received
pursuant to section 8 provides EPA, industry, and citizens with
information on chemicals necessary to identify data gaps and monitor
ongoing activities.

Although EPA has not fully utilized TSCA’s information gathering
authority, it has increased its use of TSCA to gather information useful to
other EPA regulatory activities and to other federal agencies. 653
Moreover, EPA’s broad interpretation of the terms “manufacturer”654
and “processor” 655 casts a wide net over companies that import a
chemical substance or mixture for virtually any use or that handle a
chemical in “preparation” for sale or use. 656 For instance, under TSCA,

648. TSCA § 8(e), 15 U.S.C. § 2607(e). In addition, TSCA section 8(c) requires that “[a]ny
person who manufactures, processes, or distributes in commerce any chemical substance or mixture
shall maintain records of significant adverse reaction to health or the environment . . . alleged to have been caused by the substance or mixture.” 15 U.S.C. § 2607(c). Records of
adverse reactions reported by employees must be retained for thirty years; all other records must be
retained for five years. Id. A person subject to this section does not need to “report” the information
until such time as EPA requests these records. Id. Until then, a person merely needs to maintain a
section 8(c) file. Id.

649. TSCA § 8(b), 15 U.S.C. § 2607(b). The inventory reporting regulations are contained in
40 C.F.R. pt. 710.

Inventory is available at http://msds.ehs.cornell.edu (last visited Dec. 15, 2005). A searchable CD-
Rom version of the entire TSCA Inventory is available by calling the National Technical
Information Service (NTIS) at (703) 487-4650, or by ordering through the NTIS website at


653. CONNER, supra note 651, at 236; see also David J. Hayes, TSCA: The Sleeping Giant is
Stirring, 4 NAT. RESOURCES & ENV’T 3, 5 (Winter 1990) (“Indeed, EPA has adopted an ‘outreach’
approach, under which section 8(a) is utilized as a means of obtaining data that may be useful to a
number of diverse EPA program activities.”).

654. TSCA § 3(7), 15 U.S.C. § 2602(7); 40 C.F.R. § 704.3.

655. TSCA § 3(11), 15 U.S.C. § 2602(11); 40 C.F.R. § 704.3.

656. Hayes, supra note 653, at 4.
shoemakers who apply dye to shoes could be considered “processors” of the dye and of all the chemicals in them. In order to avoid overinclusiveness, EPA’s Office of Toxic Substances has issued regulations narrowing the application of TSCA. Moreover, a small commercial manufacturer or processor may be exempt from some recordkeeping and reporting requirements.

EPA may assess a civil administrative penalty for failure to make any report required under TSCA. The maximum penalty for a violation of TSCA’s reporting provisions is $25,000 with adjustment for inflation. Each day the violation continues is a separate violation. Penalties are assessed following a full administrative hearing and may be appealed directly to federal appellate courts. EPA determines penalty amounts after consideration of “the nature, circumstances, extent, and gravity of the violation” as well as the violator’s compliance history, ability to pay, ability to remain in business, degree of culpability, and “such other matters as justice may require.” On August 5, 1996, EPA issued a revised enforcement response policy that it will use to determine the appropriate penalty amount. The enforcement response policy considers those factors required by TSCA and establishes a matrix listing the appropriate penalty amounts. TSCA section 16(b) also provides for criminal penalties for a knowing or willful violation of TSCA’s mandates.


658. TSCA § 8(a)(1)(B), 15 U.S.C. § 2607(a)(1)(B). The definition of a small manufacturer or importer is set out at 40 C.F.R. § 704.3, and is further defined in the various chemical-specific reporting and record keeping regulations in 40 C.F.R. pt. 704, subpt. B.


660. Id. (The inflation adjustment is found at 40 C.F.R. § 19.4, tbl.1).


666. Kliever, Statutory Reporting Requirements, supra note 629, at 1251.

PCBs are regulated by TSCA section 6(e)\textsuperscript{668} as well as other statutes. TSCA section 9(b) encourages the Administrator to use other federal laws to protect health or the environment, but the Administrator has the discretion to use TSCA to protect against risks to either health or the environment. EPA has created a TSCA-based PCB program at 40 C.F.R. part 761. Disposal regulations were promulgated in 1978.\textsuperscript{669} 40 C.F.R. § 761.61 now provides for cleanup and disposal options for PCB remediation.\textsuperscript{670} TSCA regulations require a PCB release report to be made “in the shortest possible time after discovery, but in no case later than twenty-four hours after discovery.”\textsuperscript{671} However, in cases where the PCB release is subject to reporting under CERCLA\textsuperscript{672} and EPCRA,\textsuperscript{673} duplicate reports usually will not be required under TSCA.\textsuperscript{674} But, TSCA may apply to spills that do not reach the RQ for either of those statutes.\textsuperscript{675} TSCA also may require the submission of information additional to that required by CERCLA and EPCRA.\textsuperscript{676}

TSCA is not the exclusive remedy for cleaning up PCB contamination.\textsuperscript{677} Section 761.50(a)(6) provides that those storing or disposing of PCBs are also responsible for determining and complying

\begin{footnotesize}
\begin{enumerate}
\item[668.] 15 U.S.C. § 2605(e).
\item[670.] 40 C.F.R. § 761.50(b)(3)(i)(A) (2004) states that pre-April 18, 1978, PCB disposal (or pre-July 2, 1979, in some cases) are presumed to not present an unreasonable risk of injury to health or the environment. Regulations changed in 1998 at 40 C.F.R. § 761.50(b)(3)(i)(A) to allow EPA’s regional administrators to make a case-by-case determination that pre-1978 disposal presents an unreasonable risk of exposure to PCBs and may direct the owner or operator of the site to dispose of PCB remediation waste in accordance with § 761.61. The person claiming the historic exemption has the burden of production and persuasion to show the historic waste exemption applies, e.g., pre-February 17, 1978. See Rogers Corp. v. EPA, 275 F.3d 1096 (D.C. Cir. 2002); see also In re CWM Chem. Servs., Inc., TSCA Appeal No. 93-1, 6 E.A.D. 1 (EAB 1995).
\item[671.] 40 C.F.R. § 761.125(a)(1)(i).
\item[672.] CERCLA § 103(a), 42 U.S.C. § 9603(a) (2000).
\item[673.] EPCRA § 304(b), 42 U.S.C. § 11004(b).
\item[675.] See TSCA § 8(e), 15 U.S.C. § 2607(e); see also Kliever, Statutory Reporting Requirements, supra note 632, at 1251.
\item[676.] 40 C.F.R. § 761.125(a)(1)(i)-(iii). For spills that meet the RQs for PCBs, TSCA reporting requirements add to those of CERCLA. TSCA § 8(e), 15 U.S.C. § 2607(e); see Kliever, Statutory Reporting Requirements, supra note 632, at 1251.
\item[677.] 40 C.F.R. § 761.1(e) states, “These regulations do not preempt other more stringent Federal statutes and regulations.”
\end{enumerate}
\end{footnotesize}
with all other applicable federal, state, and local laws and regulations. EPA’s PCB Spill Cleanup Policy provides that it does not affect cleanup standards imposed under other federal statutory authorities, including but not limited to the CWA, RCRA, and CERCLA. 678 Where more than one requirement applies, the stricter standard must be met. CERCLA permits states and their political subdivisions to enact hazardous waste regulations where regulations do not conflict with the Act. 679 CERCLA regulations at 40 C.F.R. 302.4 lists PCBs as a hazardous substance under section 102(a) of CERCLA with a Chemical Abstracts Service Registry Number (CASRN) of 1336363 and a regulatory reportable quantity of one pound. Hazardous substances can be removed or remediated if consistent with the national contingency plan (NCP). 680

§ 7. ACCIDENTAL RELEASE REPORTING UNDER OSHA

Under the Occupational Safety and Health Act (OSH Act), 681 regulations governing specific chemicals require the reporting of workplace release incidents. 682 Generally, the employer must contact the nearest Occupational Safety and Health Administration (OSHA) Area Director within twenty-four hours of the incident and submit a written report within fifteen days. 683 The OSH Act contains three programs that may involve notification requirements. The first program requires the employer to prepare and implement a written employee emergency action plan specifying the “preferred means” to report fires and other emergencies. 684 The second program is a process safety management program for highly hazardous chemicals. 685 The aim of this program is to prevent or minimize “the consequences of catastrophic releases of toxic, reactive, flammable, or explosive chemicals.” 686 Because the safety management program involves “catastrophic releases,” it is limited to preventing the exposure of employees to serious hazards in the

679. Fireman’s Fund Ins. Co. v. City of Lodi, 302 F.3d 928 (9th Cir. 2002).
682. 29 C.F.R. § 1910.1003.
683. See id. (setting out reporting requirements for incidents that result in the release of certain carcinogens governed by that section into any area where employees may be potentially exposed).
684. Id. § 1910.38.
685. Id. § 1910.119.
686. Id.
Requirements for Unpermitted Air Pollution Releases

workplace. The program requires emergency planning and response protocols as well as release incident investigations and reports. The third program is the statute’s hazardous waste operations and emergency response (HAZWOPER) program. Although the program is primarily concerned with protecting workers engaged in cleanup activities, the facility’s HAZWOPER emergency response plan also must include procedures for reporting incidents to local, state, and federal governmental agencies. Based on a December 9, 1996, agreement between EPA and OSHA, the two agencies committed to working together to identify causes of accidental chemical releases that fall within both of their jurisdictions and to develop effective preventive measures.

§ 8. ACCIDENTAL RELEASE REPORTING UNDER THE CAA

The Clean Air Act (CAA) does not contain a generally applicable provision requiring the reporting of accidental releases of air pollutants. There are, however, several programs that require the reporting of releases under specific circumstances. For example, there are reporting requirements for the release of chemicals covered by specific National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations. Provisions requiring facilities to include accidental release reporting in their operating permit documentation can be found in section 503(b)(2) of the Act.

687. Id. § 1910.38(b).
688. Id. § 1910.38.
689. Id.
690. Id. § 1910.120.
691. Id. § 1910.120(a)(i).
692. Id. § 1910.120.
695. See, e.g., 40 C.F.R. § 61.65(a) (2004). The National Emission Standards for Hazardous Air Pollutants (NESHAP) regulate, among other things, polyvinyl chloride plants, ethylene dichloride, and vinyl chloride emissions. Id.
§ 8(a). Emergency Powers—CAA Section 303

In an emergency, a litigant can go to court and ask for relief under traditional equity powers based on public nuisance or some other appropriate cause of action. Many environmental laws have codified the basic common law doctrines and have expanded the doctrine. One example of this is CAA section 303,697 in which the Administrator is given the power to seek restraining orders and issue administrative orders necessary to protect public health or welfare or the environment. The federal district courts have jurisdiction to grant restraining orders.

Emergency powers similar to the ones granted by CAA section 303 are also found under other environmental laws.698 The removal response under section 104 of CERCLA699 also is an emergency response. Furthermore, the imminent and substantial danger test used for an emergency response of this type provides authority to deal with substances not included in the hazardous substance definition in CERCLA section 101(14).700 CERCLA’s emergency notification requirements in section 103701 and the emergency planning and notification provisions of the Emergency Planning and Community Right-to-Know Act (EPCRA)702 are other statutory provisions that can be used in an emergency. The emergency power to deal with imminent hazards under RCRA section 7003 has been used extensively.703 The first RCRA case was filed in February of 1979, and by 1981 fifty-six cases relying at least in part on the use of RCRA section 7003 had been filed.704

The 1990 CAA Amendments expanded the CAA section 303 emergency provisions to make the CAA more useful in an emergency than the emergency provision in other environmental statutes.705 The

requirements for unpermitted air pollution releases

Administrator can act under the CAA to protect public health or welfare or the environment from imminent and substantial endangerment; the pre-1990 law was concerned only with releases that posed an imminent and substantial endangerment to health.\textsuperscript{706} To incur civil liability required willful noncompliance with a section 303 order.\textsuperscript{707} The maximum fine that could be imposed was $5,000 per day, and there were no criminal sanctions.\textsuperscript{708} Under the 1990 CAA Amendments, administrative orders are effective for up to sixty days, and the Administrator can bring a court action to extend the orders.\textsuperscript{709} The old law made an order effective only for twenty-four hours, unless the Administrator brought a court action.\textsuperscript{710} The 1990 CAA section 112(r)(9) also created a redundant emergency order authority to prevent releases of extremely hazardous substances. However, it is not to be used if section 303 provides adequate authority.\textsuperscript{711}

Under section 303, the Administrator may seek a restraining order in an appropriate federal district court.\textsuperscript{712} If this is not practical, the Administrator may issue an order that is valid for not more than sixty days.\textsuperscript{713} Prior to taking action under section 303, the “Administrator shall consult with appropriate [s]tate and local authorities and attempt to confirm the accuracy of the information on which the action proposed to be taken is based.”\textsuperscript{714} Before the expiration of the sixty-day period for an administrative emergency order, the Administrator may bring an action in the appropriate federal district court to extend the period. This action extends the administrative emergency order by fourteen days or for a longer period if authorized by the court.\textsuperscript{715}

The threshold prerequisite for a successful CAA section 303 action is evidence that a pollution source is presenting an imminent and

\textsuperscript{707} Id.
\textsuperscript{708} Id.
\textsuperscript{709} Id.
\textsuperscript{710} Id.
\textsuperscript{711} See Clean Air Act; Enforcement Authority Guidance, 56 Fed. Reg. 24,393, 24,394 (May 30, 1991) (guidance on using the order authority under section 112(r)(9) of the Clean Air Act as Amended, and on coordinated use with other orders and enforcement authorities).
\textsuperscript{712} CAA § 303, 42 U.S.C. § 7603.
\textsuperscript{713} Id.
\textsuperscript{714} Id.
\textsuperscript{715} Id.
substantial risk of harm. Courts have interpreted imminent harm to include potential as well as actual harm.\textsuperscript{716} EPA has interpreted the imminent and substantial risk of harm to require only a substantial risk of harm.\textsuperscript{717} Under the CAA’s SIP regulations at 40 C.F.R. part 51, as the ambient concentration of criteria pollutants increases, the area moves in stages from “alert” to “warning” to “emergency” to “significant harm to health.” Numerical atmospheric concentration values for each criteria pollutant determine which stage exists. At emergency levels, imminent and substantial endangerment clearly exists. But endangerment could occur below the emergency level. That harm, however, cannot be speculative.

To obtain a section 303 judicially granted temporary restraining order (TRO) requires complying with Federal Rule 65, which requires a showing: (i) of irreparable harm; (ii) that the harm to the plaintiff would outweigh the harm to the source if the relief was granted; (iii) that success on the merits is likely; and (iv) that the public interest necessitates immediate relief. However, since the 1977 CAA Amendments, section 303 allows the Administrator to issue an order without having to meet the stringent requirements for a TRO. Also, section 303 can be used to require additional sampling or monitoring without giving the person an opportunity to confer with EPA, as required under CAA section 114. However, section 303 requires a higher standard of need for the information than section 114.

The emergency power found in the CAA section 303 is rarely used. EPA used it in December of 1971 to restrain industrial pollution during an air pollution episode in Birmingham, Alabama. Poor atmospheric conditions had allowed industrial emissions to build to high concentrations. At that time, EPA’s particulate matter “alert” level was a twenty-four-hour average of 375 micrograms per cubic meter of air. The “warning” level was 625 micrograms, and the “emergency” level was 875 micrograms. The Birmingham level was 771 micrograms on one day and 758 micrograms the next. The Jefferson County Department of

\textsuperscript{716} Ethyl Corp. v. EPA, 541 F.2d 1, 16–17 (D.C. Cir. 1976); Reserve Mining Co. v. EPA, 514 F.2d 492, 528 (8th Cir. 1975).

Requirements for Unpermitted Air Pollution Releases

Health was unable to get the industries to curtail their operations; consequently, the Department of Justice used CAA section 303 to obtain a temporary restraining order from the U.S. District Court in Birmingham, which required twenty-three local industries to halt their emissions.718

Violation of a section 303 order is punishable by a civil penalty under CAA section 113(b)(2) or by an administrative penalty under section 113(d)(1)(B). The violation of an emergency order under section 303 also is punishable pursuant to section 113(c)(1) by a fine pursuant to Title 18 or by imprisonment for a term not to exceed five years (subject to sentencing guidelines), or both.719 In addition, the conduct necessary to violate a section 303 order would in most cases be negligent endangerment or knowing endangerment that is punishable by the criminal provisions of CAA section 113(c)(4) and (5).720

With the expansion of section 303’s authority to protect the environment, the removal of the “willful” standard of liability, the expanded length of time that an order is valid, and the removal of the need to defer to state efforts, the amended section 303 has the potential to be a useful enforcement tool. The increased penalties for violation of a section 303 order make it a tool that can be used to encourage rapid compliance. Section 303 provides broad power to a federal district court to “immediately restrain any person causing or contributing to the alleged pollution to stop the emission of air pollutants causing or contributing to such pollution or to take such other action as may be necessary.”

§ 8(b). CAA Section 112(r)

The CAA gives EPA the authority to mandate release reporting for certain hazardous chemical releases regulated under section 112(r)(7)(A).721 However, the Agency has been slow to exercise its authority under this section.722 On June 20, 1996, EPA promulgated a

719. CAA § 113(c)(1), 42 U.S.C. § 7413(c)(1).
720. 42 U.S.C. § 7413(c)(4)-(5).
final rule requiring risk management programs that regulated facilities must establish under section 112(r)(7). The rule mandates certain forms of notification in the event of an accident. The determination of whether a specific stationary source is subject to section 112(r)(7) requires an examination of the list of substances and thresholds in 40 C.F.R. § 68.130 and the applicability of criteria in 40 C.F.R. § 68.10. Under the CAA, an “owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process must comply” with the accident prevention program requirements of section 112(r), which requires the creation of facility-specific Risk Management Plans (RMPs). RMPs must be in place by either June 21, 1999, three years after the substance is listed, or “the date on which a regulated substance is first present in more than a threshold quantity in a process,” whichever is latest.

EPA expected that about 64,000 industrial facilities would be required to comply with section 112(r) requirements. Because this program targets “individual chemical use and not specific industry sectors,” facilities that may escape coverage under other statutes may be subject to section 112(r) requirements when a release occurs. These facilities include grain processing operations, municipal sewage treatment plants, food processors, and distributors that use ammonia as a refrigerant.

Stationary sources subject to the section 112(r) requirements must develop and implement an RMP that includes an assessment of the chemical hazards present at the facility, a prevention program, and an emergency response program. The emergency response program must

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723. *Id.* at 31,668.
724. 40 C.F.R. § 68.10(a).
725. 40 C.F.R. §§ 68.10, 68.130; *see also* CAA § 112(r)(3), 42 U.S.C. § 7412(r)(3) (requiring EPA to promulgate regulations for hazardous air pollutants to be governed by section 112(r)(7)).
726. *See* 40 C.F.R. § 68.130.
727. *Id.* § 68.10(a)(3).
729. *Id.*
730. *Id.*
set forth “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.” These requirements are almost identical to those of the process safety management program created by the OSH Act to deal with hazardous chemicals in the workplace.

In its regulations, EPA does not specify plan elements or a specific format for the emergency plans beyond those that the statute requires. However, EPA has noted that plans developed to comply with other EPA contingency planning requirements and OSHA’s regulations on hazardous waste operations and emergency response would meet most of the requirements mandated by the section 112(r) emergency response program.

Sources too small to respond to releases because of a limited staff do not have to develop an emergency response program. However, these sources must have procedures in place for notifying emergency responders to ensure “that appropriate responses to their hazards have been addressed in the community emergency response plan developed under EPCRA for toxics or coordinated with the local fire department for flammables.”

Section 112(r) of the 1990 CAA created the first significant federal program to focus on the prevention of accidental catastrophic environmental releases of hazardous pollutants through the preparation and implementation of a risk management plan. Three major elements to the program are: (1) a hazard assessment of the effects of a release of extremely hazardous substances, (2) a program to design and maintain a

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734. See 40 C.F.R. §§ 68.80–68.85; see also Jordan, supra note 731, at 526.
735. 29 C.F.R. § 1910.120 (OSHA’s regulations).
737. Id.; see also 40 C.F.R. § 68.90(b).
safe facility taking the steps necessary to prevent releases, and (3) a plan
to minimize the consequences of accidental releases that nevertheless
occur.739 A general duty clause, similar to OSHA’s,740 imposes on
owners and operators a requirement “to design and maintain a safe
facility . . . to prevent releases, and to minimize the consequences of
accidental releases which do occur.”741 The requirements are
performance based; they do not specify how something must be done;
they only specify the manner in which the requirements are met to
minimize the risk of release.742

The section 112(r) program applies to accidental releases of
substances listed pursuant to section 112(r)(3) or “any other extremely
hazardous substance.”743 Congress included a list of sixteen chemicals in
the statute and gave EPA until November 15, 1992, to create an initial
list of one hundred substances. EPA may revise the list on its own
motion or by petition and is required to review the list at least every five
years.744 The basis for listing is the severity of acute health effects; the
likelihood of accidental release; and the “potential magnitude of human
exposure.”745 At the time a substance is listed, the Administrator must
establish a “threshold quantity for the substance, taking into account the
toxicity, reactivity, volatility, dispersibility, combustibility, or
flammability of the substance.”746 The statutory language “or any other
extremely hazardous substance” is not defined in the statute.

By November 15, 1993, EPA was required to promulgate section
112(r) regulations applicable to stationary sources with regulated
substances present in more than threshold quantities. Stationary source is
defined at section 112(r)(2)(C). A stationary source can include many
emission points from which an accidental release may occur if they
“belong to the same industrial group,” are located on contiguous
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properties, and are under common control.\footnote{CAA § 112(r)(2)(C), 42 U.S.C. § 7412(r)(2)(C).} Section 112(r) is intended to prevent or to minimize the consequences of an accidental release. The term “accidental release” is not defined and has only a limited legislative history.\footnote{Van R. Delhotal, The General Duty To Prevent Accidental Releases of Extremely Hazardous Substances: The General Duty Clause of Section 112(r) of the Clean Air Act, 13 J. ENERGY NAT. RES. & ENVTL. L. 61, 87 (1993).} Owners or operators of such sources must prepare a risk management plan to detect and prevent or minimize accidental releases and provide a prompt emergency response.\footnote{CAA § 112(r)(7)(B)(ii), 42 U.S.C. § 7412(r)(7)(B)(ii).} While this program is focused on the prevention of accidental releases, it is to be coordinated with similar efforts under CERCLA, EPCRA, and the CWA.\footnote{Spill planning is required by CWA § 311(j), 33 U.S.C. § 1321(j) (2000). See also Adam H. Steinman, Drafting One Integrated Emergency Response Plan for All Applicable Plan Requirements: Regulatory Guidance Has Finally Arrived, 27 ENV’T REP. (BNA) 515 (1996).}

States may run the section 112(r) program based on EPA’s authority to delegate, but some states are not taking either full or partial delegation for implementing the program. These states are concerned with their potential liability if an accident occurs after they have audited a facility and have approved it or if the state has not audited the facility and an accident occurs. Florida, Puerto Rico, and the Virgin Islands had delegated authority as of July of 2000.\footnote{See Judith Jacobs, Fewer Plants Filing RMPs with Agency than Expected Under Clean Air Act Provision, DAILY ENV’T REP. (BNA), Aug. 13, 1999, at A-8; Approval of Delegation of the Accidental Release Prevention Requirements: Risk Management Programs Under Clean Air Act Section 112(r)(7): State of Ohio, 64 Fed. Reg. 59,650 (Nov. 3, 1999).} Other states, including California, Louisiana, Mississippi, Nevada, New Jersey, Delaware, and South Carolina, have expressed an interest in running the 112(r) program. California and New Jersey have state programs that mirror the section 112(r) program.\footnote{James Kennedy, At Least Nine States Requesting Authority To Implement Risk Management Programs, DAILY ENV’T REP. (BNA), Mar. 26, 1999, at A-1.} By 2003, Idaho, Minnesota, Ohio, Oklahoma and Washington had been delegated authority to run their own 112(r) programs.\footnote{Approval of Section 112(r) Program of Delegation; Minnesota, 67 Fed. Reg. 48,036 (July 23, 2002); Delegation of Authority to Idaho Department of Environmental Quality, 67 Fed. Reg. 3106 (Jan. 23, 2002); Delegation of Authority to Washington Department of Ecology and Four Local Air Agencies, 66 Fed. Reg. 48,211 (Sept. 19, 2001); Approval of Section (1) Program of Delegation; Ohio, 66 Fed. Reg. 36,173 (July 11, 2001); Approval of Section 112(r) Program of Delegation; Minnesota, 67 Fed. Reg. 48,036 (July 23, 2002); Delegation of Authority to Idaho Department of...}
§ 8(b)(1). Actual or Threatened Releases: CAA section 112(r)(9)

Section 112(r)(9) is triggered when EPA 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 release of a regulated substance.” However, EPA must take action under section 303, rather than section 112(r)(9), whenever section 303 provides the Agency with adequate authority to protect human health and the environment.

EPA may initiate an action to enforce an administrative order pursuant to section 112(r)(9)(B) in federal district court, as if the order was issued under section 303. EPA “may secure such relief as may be necessary to abate such danger or threat.” The district court located where the threat occurs has “jurisdiction to grant such relief as the public interest and the equities of the case may require.”

After notice to the state in which the stationary source is located, EPA also may take other action, such as issuing administrative orders, including, but not limited to, orders “as may be necessary to protect human health.” Section 112(r)(9)(C) requires the Administrator to publish guidance for the use of this order authority that coordinates the use of emergency power with the other environmental statutes providing similar authority.754

§ 8(b)(2). The Chemical Safety and Hazard Investigation Board (CSB)

Section 112(r) created an independent Chemical Safety and Hazard Investigation Board (CSB) modeled after the National Transportation Safety Board (NTSB).755 The Board is to investigate accidental releases and make reports, including “recommending the adoption of regulations for the preparation of risk management plans” to prevent accidental releases and to mitigate the adverse effects of accidents.756 CSB functions overlap those of EPA, OSHA, and NTSB. EPA has authority under CAA section 112(r) as well as responsibilities for chemical


accidents pursuant to numerous statutes that it administers, especially CERCLA section 104. NTSB is responsible for investigating every civil aviation accident and other significant railroad, ship, highway, and pipeline accident in the United States. OSHA has its Process Safety Management (PSM) Standard that covers any process involves a highly hazardous chemical and imposes responsibilities on employers to prevent accidents and to have operating procedures to deal with covered processes. EPA’s section 112(r) regulations are nearly identical to OSHA’s process safety management standard. The main differences are those mandated by the CAA such as the hazard assessment with its required off-site consequences analysis and five-year accident history. Other CAA requirements include emergency response requirements, registration, and a risk management program that must be submitted to CSB, the implementing agency, the state emergency response commission (SERC), the local emergency planning committee (LEPC), and which must be available to the public. OSHA’s standard includes provisions applicable to workers that are not part of EPA’s proposal. But, if a facility meets OSHA requirements, it will probably be in compliance with EPA’s accident prevention program. However, EPA’s coverage of chemicals and thresholds is not the same as OSHA’s coverage. EPA regulates more “substances with acute toxic effects,” but regulates “fewer flammables and explosives,” and no reactive substances. OSHA does not cover state and local government employees. In addition, “OSHA exempts some processes that EPA does not exempt, and vice versa.”

760. Process is defined at 29 C.F.R. § 1910.119(b).
763. Risk Management, supra note 762, at 54,192.
764. Id. at 54,193. The differences between OSHA and EPA’s proposed rule are discussed in more detail at 58 Fed. Reg. 54,203–05 (Oct. 20, 1993). The universe of facilities covered by the proposed rule is discussed at 58 Fed. Reg. 54,207–10 (Oct. 20, 1993).
765. RMP GUIDANCE, supra note 742, at 1–5.
On September 25, 1998, CSB signed an MOU with OSHA that established policy and procedures for cooperation among the two organizations. Under the agreement, OSHA has primary responsibility for investigating employer compliance with job safety and health regulations. The chemical safety board will have the responsibility to determine the cause or probable cause of chemical incidents.

On March 10, 1999, EPA and CSB signed an MOU addressing their respective responsibilities. EPA, as the On-Scene Coordinator, has the responsibility to deal with an accidental release. Once a release is contained, EPA will “determine whether a facility was in compliance with . . . relevant safety and environmental statutes; CSB will determine the cause of the accident.” CSB will investigate chemical incidents resulting in death, serious injury, substantial property damage, or evacuation; it is not limited to incidents involving extremely hazardous chemicals. Information submitted under the requirements of the risk management plans (RMPs) will be disclosed to CSB by EPA pursuant to the MOU.

The extent to which CSB will grow in importance will depend on how well the board’s leadership plays the political game. CSB’s limited success to date is the result of congressional dissatisfaction with OSHA, support by labor unions, and environmental groups (particularly Environmental Defense). Industry also has supported CSB being the organization to perform investigations because CSB is prohibited from having its findings used as evidence in a civil suit for damages.

§ 8(b)(3). Regulations under CAA section 112(r)

EPA issued final rules concerning the list of regulated substances and thresholds covered under section 112(r) of the CAA on January 31,
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1994. These regulations cover seventy-seven toxic substances, sixty-three flammable substances, and the explosive substances listed by the Department of Transportation (DOT). These substances are explained and listed in 40 C.F.R. part 68, subparts A and C. The list, found at 40 C.F.R. § 68.130, includes the name of the substance, its chemical abstract number, and the threshold amount for each substance. The threshold amount plays a key role in these regulations. If the total quantity of a regulated substance contained in a process at a stationary source exceeds the threshold amount listed in 40 C.F.R. § 68.130, then the facility is subject to the accidental release prevention requirements described in section 112(r) of the CAA. The chemicals most likely to require a section 112(r) response include chlorine, because of its low threshold and its common use in water and wastewater treatment, and flammables. The list was amended on August 25, 1997, to change the concentration of hydrochloric acid, and on January 6, 1998, to delist Division 1.1 explosives as classified by DOT. Another August 25, 1997, amendment clarified the method for calculating the quantity of a listed solution and stated that certain reports required under 112(r) did not need to be reported under section 8(e) of the Toxic Substances Control Act.
On June 20, 1996, EPA promulgated a final rule for risk management programs under section 112(r)(7).\(^{780}\) The rule is codified at 40 C.F.R. §§ 68.3 to 68.220.\(^{781}\) EPA’s final rule requires nearly 70,000 facilities that handle regulated chemicals to develop risk management plans under CAA section 112(r).\(^{782}\) Manufacturers of listed chemicals are subject to the new rule as are cold-storage facilities that utilize ammonia, public drinking water treatment plants, waste water treatment plants, chemical wholesalers, propane retailers, and oil refineries.\(^{783}\) Much of the propane industry was later exempted from these requirements pursuant to the Chemical Safety Information, Site Security, and Fuels Regulatory Relief Act passed in 1999.\(^{784}\)

To determine whether a specific stationary source is subject to CAA section 112(r)(7) requires an examination of the list of substances and thresholds under 40 C.F.R. § 68.130; the proposed modifications of April 15, 1996,\(^{785}\) the stay of implementation promulgated on June 20, 1996;\(^{786}\) and the applicability criteria in 40 C.F.R. § 68.10 of the final rule.\(^{787}\) The regulatory amendments made on January 6, 1998, clarify that the “Chemical Accident Prevention Provisions [part 68] do not apply to sources located on the Outer Continental Shelf,” and that the “definition of stationary source is modified to clarify the exemption of transportation and storage incident to transportation and to clarify that naturally occurring hydrocarbon reservoirs are not stationary sources or parts of stationary sources.”\(^{788}\)

Stationary sources covered by these regulations must develop and implement a risk management program that includes a hazard assessment, a prevention program, and an emergency response program.

\(^{781}\) RMP Rule, supra note 780, at 31,706.
\(^{782}\) Id.
\(^{786}\) RMP Rule, supra note 780, at 31,668.
\(^{787}\) Id.
The risk management program must be described in a risk management plan (RMP) that must be registered with EPA, submitted to state and local authorities, and made available to the public.\footnote{RMP Rule, supra note 780, at 31,668, 31,669.}

An owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process is required to comply by June 21, 1999, three years after the substance is listed, or the date on which a regulated substance is first present, whichever date is latest.\footnote{Id. at 31,670, 31,717. Threshold quantities are determined under 40 C.F.R. § 68.115.}

\section*{§ 8(b)(4). Section 112(r) program levels}

Processes are divided into three tiers, labeled Programs 1, 2, and 3. Each Program level and its requirements reflect the appropriate level of risk.\footnote{RMP GUIDANCE, supra note 742, at 2-1.} A source can be subject to one or more programs for its various processes.\footnote{RMP Rule, supra note 780, at 31,670.} Each process is assigned a Program level, and only one Program level is assigned to each process.\footnote{Id.} Processes cannot be subdivided for the purpose of assigning Program levels.\footnote{Id. at 2-3.} Program level 1 applies to any process with no accidental release “with offsite consequences in the five years prior to the submission date of the RMP [Risk Management Plan], and has no public receptors within the distance to a specified toxic or flammable endpoint associated with a worst-case release scenario.”\footnote{RMP Rule, supra note 780, at 31,670; see generally RMP GUIDANCE, supra note 742, at 2-1.} Program level 2 is the default program and applies to all those processes not subject to Program levels 1 or 3.\footnote{Id. Pursuant to a 1997 agreement with Canada and Mexico, the United States has adopted the North American Industry Classification System (NAICS) to replace the Standard Industrial Classification (SIC) codes and all of pt. 68 is being revised to reflect those changes. Accidental Release Prevention Requirements; Risk Management Programs Under Clean Air Act Section 112(r)(7), Amendments, 64 Fed. Reg. 964, 965 (Jan. 6, 1999) (codified at 40 C.F.R. pt. 68).} Program level 3 applies to processes in ten specified North American Industry Classification System codes.\footnote{Id. at 2-3.} It also applies to all processes subject to
OSHA Process Safety Management (PSM) standard. It is in a facility’s best interest to qualify for Program 1, if possible.

Table 2. Program Level Criteria

<table>
<thead>
<tr>
<th>Program 1</th>
<th>Program 2</th>
<th>Program 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>No accidents in the previous five years that resulted in any offsite:</td>
<td>The process is not eligible for Program 1 nor subject to Program 3</td>
<td>Process is not eligible for Program 1</td>
</tr>
<tr>
<td>death, injury, response, or restoration activities at an environmental</td>
<td>AND</td>
<td>AND</td>
</tr>
<tr>
<td>receptor</td>
<td>NO</td>
<td>Process is subject to OSHA PSM</td>
</tr>
<tr>
<td>AND</td>
<td>NO</td>
<td>OR</td>
</tr>
<tr>
<td>No public receptors in worst-case circle</td>
<td>Emergency response coordinated with local responders</td>
<td>Process is classified in NAICS code:</td>
</tr>
<tr>
<td>AND</td>
<td>AND</td>
<td>• 32211 Pulp mills</td>
</tr>
<tr>
<td>Process is not eligible for Program 1 nor subject to Program 3</td>
<td>OR</td>
<td>• 32411 Petroleum refineries</td>
</tr>
<tr>
<td>AND</td>
<td>OR</td>
<td>• 32511 Petrochemical manufacturers</td>
</tr>
<tr>
<td>Emergency response coordinated with local responders</td>
<td>OR</td>
<td>• 325181 Alkalies and chlorine</td>
</tr>
<tr>
<td>AND</td>
<td>OR</td>
<td>• 325188 Industrial inorganic chemicals</td>
</tr>
<tr>
<td>NO</td>
<td>OR</td>
<td>• 325192 Cyclic crudes</td>
</tr>
<tr>
<td>Program is subject to OSHA PSM</td>
<td>OR</td>
<td>• 325199 Industrial organic chemicals</td>
</tr>
<tr>
<td>AND</td>
<td>OR</td>
<td>• 325211 Plastics and resins</td>
</tr>
<tr>
<td>Process is classified in NAICS code:</td>
<td>OR</td>
<td>• 325311 Nitrogenous fertilizers</td>
</tr>
<tr>
<td>• 32532 Agricultural chemicals</td>
<td></td>
<td>• 32533 Industrial inorganic chemicals</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 32532 Agricultural chemicals</td>
</tr>
</tbody>
</table>

If a facility has multiple processes subject to different Program levels, the facility must comply with the requirements of the applicable level for each process and submit a single risk management plan (RMP) for all covered processes.

§ 8(b)(4)(A). Hazard assessment. The hazard assessment includes the five-year accident history and the off-site consequence analysis. The five-year history must be completed for each process. Only certain releases are covered. The release must (1) be from a covered process involving a regulated substance above the threshold amount, and (2)

799. See RMP GUIDANCE, supra note 742, at 2-1.
800. Id. at 2-15.
801. Id.
802. Id. at 3-1.
result in an on-site death, injury, or significant property damage or known off-site deaths, injuries, property damage, environmental damage, evacuations, or sheltering. Every reported release must include the date, time, chemical involved, release duration, release event, quantity released, release source, weather condition, on-site impacts, off-site impacts, initiating event, contributing factors, whether off-site responders were notified, and what changes were introduced as a result of the accident.

The off-site consequence analysis has two parts: the worst-case release scenario and the alternative release scenario. A “worst-case release scenario” is defined as

the release of the largest quantity of a regulated substance from a vessel or process line failure, including administrative controls and passive mitigation that limit the total quantity involved or the release rate. For most gases, the worst-case release scenario assumes that the quantity is released in 10 minutes. For liquids, the scenario assumes an instantaneous spill; the release rate to the air is the volatilization rate from a pool 1 cm deep unless passive mitigation systems contain the substance in a smaller area. For flammables, the worst case assumes an instantaneous release and a vapor cloud explosion.

The process for developing a worst-case release scenario analysis is described in 40 C.F.R. § 68.25 (2004).

The EPA has adopted the term “alternative release scenarios” to mean an accidental release scenario that is “more realistic” and “more likely to occur” than the worst-case scenario and will reach an endpoint off-site.

EPA believes sources should have flexibility to select non-worst-case scenarios that are the most useful for communication with the public and first responders and for emergency response preparedness and planning.

803. Id.; 40 C.F.R. § 68.42(a).
804. RMP GUIDANCE, supra note 742, at 3-1 to 3-9.
805. Id. at 4-1 to 4-2. EPA has also issued a guidance document to assist in meeting these requirements. U.S. ENVTL. PROT. AGENCY, RISK MANAGEMENT PROGRAM GUIDANCE FOR OFFSITE CONSEQUENCE ANALYSIS (1999) [EPA-550-B-99-009] [hereinafter OCA GUIDANCE].
806. RMP Rule, supra note 780, at 31,668, 31,670–71; see also 40 C.F.R. § 68.3.
807. See OCA GUIDANCE, supra note 805, at 1-1; 61 Fed. Reg. at 31,670; see also 40 C.F.R. § 68.28.
808. RMP Rule, supra note 780, at 31,670.
An endpoint is needed for the off-site consequence analysis. Appendix A of the final rule lists the endpoints for toxic substances that must be used in worst-case and alternative scenario assessment. The endpoint is its Emergency Response Planning Guideline level 2 (ERPG-2) value, or if no ERPG-2 applies, then the endpoint is the level of concern (LOC) from the Technical Guidance for Hazards Analysis. The endpoints may also be found and/or calculated in EPA’s 1999 guidance entitled Risk Management Program Guidance for Offsite Consequence Analysis. Populations potentially affected are those within a circle that has as its center the point of release and its radius the distance to the toxic or flammable endpoint.

§ 8(b)(4)(B). Management programs. A management system is required under Program levels 2 and 3. The facility must delegate the responsibility of the implementation of the risk management program to a person or persons. The only required element in the RMP is the name of the individual with overall responsibility.

§ 8(b)(4)(C). Prevention programs. For Program level 2 sources, there are seven elements of the prevention program requirements. These include: compiling safety information, hazard review, operating procedures, training, maintenance, compliance audits, and incident investigation.

For Program level 3 sources, there are more detailed requirements. They include the requirements of the OSHA Process Safety Management (PSM) Standard, with minor wording changes.
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However, because the EPA and OSHA have differing legal authority for off-site consequences and on-site consequences, respectively, a facility may need to expand its process hazard analysis to meet the EPA’s RMP requirements.825 "There are twelve elements in the Program 3 prevention program. Each element corresponds with a section of subpart D of part 68 [of 40 C.F.R.]."826

824. RMP Rule, supra note 780, at 31,672; see RMP GUIDANCE, supra note 742, at 7-1.
825. RMP GUIDANCE, supra note 742, at 7-1.
826. Id. at 7-2.
Table 3. Summary of Program Level 3 Prevention Program\textsuperscript{827}
(40 C.F.R. part 68, subpart D)

<table>
<thead>
<tr>
<th>40 C.F.R.</th>
<th>Title</th>
<th>OSHA PSM Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>§ 68.65</td>
<td>Process Safety Information</td>
<td>PSM standard § 1910.119(d)</td>
</tr>
<tr>
<td>§ 68.67</td>
<td>Process Hazard Analysis</td>
<td>PSM standard § 1910.119(c)</td>
</tr>
<tr>
<td>§ 68.69</td>
<td>Operating Procedures</td>
<td>PSM standard § 1910.119(f)</td>
</tr>
<tr>
<td>§ 68.71</td>
<td>Training</td>
<td>PSM standard § 1910.119(g)</td>
</tr>
<tr>
<td>§ 68.73</td>
<td>Mechanical Integrity</td>
<td>PSM standard § 1910.119(j)</td>
</tr>
<tr>
<td>§ 68.75</td>
<td>Management of Change</td>
<td>PSM standard § 1910.119(l)</td>
</tr>
<tr>
<td>§ 68.77</td>
<td>Pre-Startup Review</td>
<td>PSM standard § 1910.119(l)</td>
</tr>
<tr>
<td>§ 68.79</td>
<td>Compliance Audits</td>
<td>PSM standard § 1910.119(o)</td>
</tr>
<tr>
<td>§ 68.81</td>
<td>Incident Investigation</td>
<td>PSM standard § 1910.119(m)</td>
</tr>
<tr>
<td>§ 68.83</td>
<td>Employee Participation</td>
<td>PSM standard § 1910.119(c)</td>
</tr>
<tr>
<td>§ 68.85</td>
<td>Hot Work Permit</td>
<td>PSM standard § 1910.119(k)</td>
</tr>
<tr>
<td>§ 68.87</td>
<td>Contractors</td>
<td>PSM standard § 1910.119(h)</td>
</tr>
</tbody>
</table>

\textsuperscript{827} Id.

\textsuperscript{828} RMP GUIDANCE, supra note 742, at 8-1.

\textsuperscript{829} RMP Rule, supra note 780, at 31,168, 31,673 (citing 29 C.F.R § 1910.120).

\textsuperscript{830} 40 C.F.R. § 68.90(b)(3) (2004).
employee training, and procedures to ensure the program is up-to-date.\(^831\) This requirement may be consolidated with other required emergency plans following the National Response Team Integrated Contingency Plan guidance to prevent a duplication of efforts.\(^832\)

\section*{§ 8(b)(4)(E). Risk management plan (RMP).} A risk management program is what you do; a risk management plan (RMP) is what you submit. An RMP that meets CAA section 112(r) requirements has three major components: (1) a hazard assessment that includes a release history for the past five years; (2) a program to prevent accidental releases; and (3) a response program that provides for the actions to be taken in an emergency.\(^833\) Each stationary source that has a regulated substance in more than a threshold quantity must prepare a RMP to detect and prevent or minimize accidental releases and to provide a prompt emergency response to any release.\(^834\) The RMP is a summary of the risk management program that is registered with the EPA Administrator and is also submitted to the Chemical Safety and Hazard Investigation Board, to the state where the site is located, and to any local agency with planning or response responsibility for responding to accidental releases.\(^835\) A RMP must include\(^836\) (1) an executive summary, \(^837\) (2) the facility’s registration,\(^838\) (3) the certification statement,\(^839\) (4) a worst-case scenario for each Program 1 process,\(^840\) (5) a five-year accident history for each process,\(^841\) and (6) a summary of the emergency response program.\(^842\)

If the facility has processes covered by Program levels 2 or 3, the RMP must also include\(^843\) (1) at least one alternative release scenario for each regulated toxic substance in Program 2 or 3 processes and at least

\begin{itemize}
  \item \(^831\) RMP GUIDANCE, \textit{supra} note 742, at 8-1; \textit{see} 40 C.F.R. § 68.95.
  \item \(^832\) \textit{See} The National Response Team’s Integrated Contingency Plan Guidance, 61 Fed. Reg. 28,642 (June 5, 1996).
  \item \(^834\) \textit{Id.}
  \item \(^836\) RMP GUIDANCE, \textit{supra} note 742, at 9-2; 40 C.F.R. pt. 68, subpt. G.
  \item \(^837\) \textit{See} 40 C.F.R. § 68.155 (2005).
  \item \(^838\) \textit{Id.} § 68.160.
  \item \(^839\) \textit{Id.} § 68.185.
  \item \(^840\) \textit{Id.} § 68.165(a)(1).
  \item \(^841\) \textit{Id.} § 68.168.
  \item \(^842\) \textit{Id.} § 68.180.
  \item \(^843\) RMP GUIDANCE, \textit{supra} note 742, at 9-2.
\end{itemize}
one alternative release scenario to cover all regulated flammables in Program 2 or 3 processes, 844 (2) a summary of the prevention program for each Program 2 process, 845 and (3) a summary of the prevention program for each Program 3 process. 846

Measures taken by sources to comply with OSHA’s PSM are sufficient to comply with the prevention program requirements of all three Programs. The EPA retains authority to enforce the prevention program requirements and the general duty requirements of CAA Section 112(r)(1). EPA and OSHA work to coordinate interpretation and enforcement of PSM and accident prevention programs. 847

After the RMP is submitted, changes in operation may require updates to the RMP beyond the standard update every five years. If a new substance or new process is added, the RMP must be revised and submitted by the date the substance is first used above the threshold quantity. If changes to processes require revised hazard assessments, or if a process changes the Program level, the source must submit a revised RMP within six months. States, local emergency planning commissions (LEPCs), and the public should be able to access all RMPs electronically. 848

844. 40 C.F.R. § 68.165(b) (2005).
845. Id. § 68.170.
846. Id. § 68.175.
847. RMP Rule, supra note 780, at 31,688, 31,670 (June 20, 1996).
848. Id. at 31,673.
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Table 4. RMP Updates

<table>
<thead>
<tr>
<th>Change That Occurs at Facility</th>
<th>Date by Which RMP Update Must Be Submitted</th>
</tr>
</thead>
<tbody>
<tr>
<td>No changes occur</td>
<td>Within 5 years of initial submission</td>
</tr>
<tr>
<td>A newly regulated substance is first listed by EPA</td>
<td>Within 3 years of date EPA listed new substance</td>
</tr>
<tr>
<td>A regulated substance is first present above its threshold quantity in:</td>
<td></td>
</tr>
<tr>
<td>– a process already covered or</td>
<td>On of before date the quantity of the regulated substance exceeds threshold in the process</td>
</tr>
<tr>
<td>– a new process</td>
<td></td>
</tr>
<tr>
<td>A change occurs that results in a revised PHA or hazard review</td>
<td>Within 6 months of the change</td>
</tr>
<tr>
<td>A change occurs that requires a revised offsite consequence analysis</td>
<td>Within 6 months of the change</td>
</tr>
<tr>
<td>A change occurs that alters the Program level that previously applied to any covered process</td>
<td>Within 6 months of the change</td>
</tr>
<tr>
<td>A change occurs that makes the facility no longer subject to the requirement to submit a RMP</td>
<td>Submit a revised registration (indicating that an RMP is no longer required) to EPA within 6 months of the change</td>
</tr>
</tbody>
</table>

The complexity of the risk management plan will depend on whether the “covered process” is subject to a Program level 1, 2, or 3. A “covered process” is a process that has greater than threshold quantities of a regulated substance on-site. The RMP is the cumulative plan for all covered processes.

The covered process (not the facility) is a Program level 3 if it meets chemical threshold requirements and is in NAICS code: 32211 (pulp mills), 325181 (chlor-alkali), 325188 (industrial inorganics), 325211 (plastic and resins), 325192 (cyclic crudes), 325199 (industrial organics), 325311 (nitrogen fertilizers), 32532 (agriculture chemicals), 32411 (petroleum refineries), 32511 (petrochemical manufacturers), or the process is subject to OSHA PSM standard. Most section 112(r) regulated chemicals also are on OSHA’s process safety management (PSM) list. EPA’s threshold values, found in 40 C.F.R. § 68.115, for all

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849. RMP GUIDANCE, supra note 742, at 9-65.
chemicals that also are on OSHA’s PSM list are lower than the OSH Act’s threshold, except for methylchloride; therefore, EPA’s requirements usually will control.

A process that was originally classified as one Program level may move up or down in classification, depending on the circumstances. For example, if a residential development appears within the public receptor distance for a worst-case scenario endpoint in a Program level 1 covered process, that process no longer qualifies for Program level 1 and must be reevaluated for either Program level 2 or 3 requirements. 851 A facility with a process originally not covered, but due to changes now uses a regulated substance in quantities exceeding the threshold amount, must comply by the time the threshold quantity is exceeded. 852 Conversely, if a Program level 2 or 3 process experiences changes that would qualify it for Program level 1 status, the facility may submit a revised RMP to that effect. For example, if an accidental release now falls outside the five-year accident report requirement, and that criterion kept the Program outside level 1, the facility could elect to switch down to a Program 1 level. 853 If a process no longer involves regulated substances beyond the threshold quantity, then the process is no longer a “covered process,” and the facility may submit a revised RMP indicating such. 854

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851. RMP GUIDANCE, supra note 742, at 2-17.
852. Id.
853. Id.
854. Id. at 2-18.
Table 5. Comparison of Program Requirements

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<thead>
<tr>
<th>Program 1</th>
<th>Program 2</th>
<th>Program 3</th>
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<tbody>
<tr>
<td>Worst-case release analysis</td>
<td>Worst-case release analysis</td>
<td>Worst-case release analysis</td>
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<td>Alternative release analysis</td>
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<td>5-year accident history</td>
<td>5-year accident history</td>
<td>5-year accident history</td>
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<tr>
<td>Document management system</td>
<td>Document management system</td>
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**Prevention Program**

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<th>Prevention Program</th>
<th>Prevention Program</th>
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<tbody>
<tr>
<td>Certify no additional prevention steps necessary</td>
<td>Safety Information</td>
<td>Process Safety Information</td>
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<tr>
<td>Hazard Review</td>
<td>Process Hazard Analysis</td>
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<tr>
<td>Operating Procedures</td>
<td>Operating Procedures</td>
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<td>Training</td>
<td>Training</td>
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<td>Maintenance</td>
<td>Mechanical Integrity</td>
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<td>Incident Investigation</td>
<td>Incident Investigation</td>
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<td>Compliance Audit</td>
<td>Compliance Audit</td>
<td>Management of Change</td>
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<td>Pre-Startup Review</td>
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<td>Employee Participation</td>
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<td>Hot Work Permits</td>
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**Emergency Response Program**

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<tr>
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<th>Emergency Response Program</th>
<th>Emergency Response Program</th>
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<tbody>
<tr>
<td>Coordinate with local responders</td>
<td>Develop plan and program (if applicable) and coordinate with local responders</td>
<td>Develop plan and program (if applicable) and coordinate with local responders</td>
</tr>
</tbody>
</table>

On August 5, 1999, the Chemical Safety Information, Site Security, and Fuels Regulatory Relief Act was signed into law. To alleviate concerns about terrorists using publicly available off-site consequence

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855. Id. at 2-20.
analysis (OCA) information, the law limited public access until at least August 5, 2000.\textsuperscript{857} On August 4, 2000, EPA and the DOJ promulgated regulations that severely limit public access to OCA information and limit the information that may be placed on the Internet.\textsuperscript{858} Moreover, reproduction of the documents is prohibited, and there is a limit on the number of facility reports that may be viewed by an individual.\textsuperscript{859} If a facility is required to submit a Program level 2 or 3 plan, then the facility is required to hold a public meeting and discuss the RMP and include a summary of the OCA.\textsuperscript{860} The law does not preclude the facility from discussing the OCA sections of the RMP; it prohibits government dissemination of such information.\textsuperscript{861} The law also removed the EPA’s authority to list flammable substances when used as a fuel or held for sale as a fuel at a retail facility.\textsuperscript{862}

Following the events of September 11, 2001, the impetus to keep OCA data out of public hands grew even stronger. Various right-to-know organizations argued that failure to release worst-case-scenario data placed citizens in danger by preventing effective response and community knowledge of nearby dangers.\textsuperscript{863} EPA, however, issued a final rule on April 9, 2004, which removed the requirement that an OCA be submitted as part of a valid RMP after June 21, 2004.\textsuperscript{864}


\textsuperscript{859} EPA Restricts Public Access to Facility Accident Risk Data, CLEAN AIR REP., Aug. 17, 2000, at 23.

\textsuperscript{860} Id. The facility must certify to the FBI by June 5, 2000, that the meeting has been held. Id.


§ 8(b)(4)(F). The general duty clause. CAA section 112(r)(1) includes a general duty clause that imposes on owners and operators of stationary sources handling extremely hazardous substances

a general duty in the same manner and to the same extent as section 654 of Title 29 [OSH Act] 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.865

The section goes on to state that it does not create any liability or a basis for a suit for compensation for bodily injury or property damages.866

The legislative history of the general duty clause shows it has two purposes. It places a burden of prevention and minimization on owners or operators without regulatory action by the EPA, and it prevents shifting of liability to the government because of the EPA’s approval of risk management plans.867

The general duty clause applies to owners and operators of stationary sources that handle extremely hazardous substances regardless of whether the federal or state government has an applicable regulatory program. The clause imposes three obligations: (1) identify hazards from potential accidental release; (2) design and maintain a safe facility in taking the necessary steps to prevent release; and (3) minimize damage from actual accidental releases.868 The general duty clause itself does not prescribe how these measures will be achieved.869 The clause is performance-based; it places the burden on those using these substances to demonstrate safe practices regarding accidental releases.870 However, the EPA has issued a guidance document to assist in complying with the section 112(r)(1) requirements.871

866. Id.
867. Delhotal, supra note 748, at 95.
869. Id. at 12.
870. Delhotal, supra note 748, at 96.
The general duty clause applies more broadly and may cover more substances and activities than the rest of section 112(r). It does not, however, “apply to transportation or to storage incidental to transportation.”872 Because the general duty clause is based on the OSH Act,873 the case law construing the Act, including the decisions of the Occupational Safety and Health Review Commission, are applicable.874 Importantly, however, only the EPA and DOJ can enforce the general duty clause.875 States, even with delegation of risk management programs, cannot enforce the clause.876

§ 8(b)(4)(G). Air permitting. Air permitting authorities must ensure that sources are in compliance with applicable requirements. Because section 112(r) is an applicable requirement, the EPA has identified in the section 112(r) final rule the permit conditions and the actions necessary to ensure compliance. An operating permit must identify 40 C.F.R. pt. 68 as an applicable requirement and establish conditions that require the owner or operator of the source either to submit a compliance schedule for meeting the requirements of part 68 by the date specified in 40 C.F.R. § 68.10(a), or, as part of the compliance certification submitted under 40 C.F.R. § 70.6(c)(5), to certify that to the best of the owner or operator’s knowledge the source is in compliance with all requirements of this part 68, including the registration and submission of the RMP. The owner or operator also must submit additional relevant information requested by the air permitting authority to ensure compliance with part 68.

An April 20, 1999 EPA memorandum lists the four responsibilities that title V air permitting agencies have under 40 C.F.R. § 68.215(e). These include verifying that the source owner or operator has submitted the required RMP or RMP revision; verifying the source certification or its equivalent; conducting a completeness check if necessary; and instituting enforcement actions when appropriate.877 The memorandum

872. Delhotal, supra note 748, at 98.
874. Delhotal, supra note 748, at 99.
876. Id.
continues with guidance as to how states and implementing agencies can best meet these obligations.

§ 9. EMERGENCY PLANNING AND RESPONSE IN THE POST 9-11 AGE

Prior to the Pentagon and World Trade Center attacks of September 11, 2001, law enforcement officials already had concerns about the potential misuse of the information the EPA was providing to the public regarding RMPs and their OCA material that were being submitted to the Agency pursuant to CAA section 112(r). Congress responded in 1999 by passing the Chemical Safety Information, Site Security, and Fuels Regulatory Relief Act (CSISSFRA), which amended CAA § 112(r)(7)(H) to place a moratorium on public access to OCA information and required the EPA to promulgate additional regulations.

The EPA published its final regulation on RMP data access on August 4, 2000. The EPA also amended its regulations at 40 C.F.R. § 68.150 to limit public access to RMPs and their OCA material. The 2000 regulation limits public access to sensitive OCA information to fifty-five federal reading rooms. Members of the public may read OCA information for up to ten facilities per calendar month. The Clinton Administration proposed to allow enhanced access for qualified researchers, but the proposal was rescinded by the George W. Bush Administration. In October of 2001, the EPA removed its risk management plan database, RMPInfo from the Internet, citing security concerns. In 2002, Congress enacted the Critical Infrastructure Information Act (CIIA), which created a new Freedom of Information Act exemption for critical infrastructure information and limited what can be done with the information. The 1999 CSISSFRRA statute required the DOJ to review the vulnerability of chemical facilities to

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886. Regulations were promulgated on April 15, 2003 at 68 Fed. Reg. 18,523 by DHS.
criminal and terrorist attacks and to prepare two reports. The DOJ was to review the effect of Clean Air Act (CAA) regulations on the prevention of chemical releases, including those that may be released as a result of chemical activity. It also was to develop, test, and validate a prototype vulnerability assessment methodology to assess the security of chemical facilities against terrorist and criminal acts. On May 30, 2002, nearly two years late, the DOJ submitted its interim report. It was based on a study of only eleven of the 15,000 chemical manufacturing facilities subject to the CAA’s RMP provisions; therefore, the study cannot be generalized to the industry as a whole. The DOJ determined the report’s release would pose a threat to national security, and, based on the CAA (42 U.S.C. § 7412(r)(7)(H)(xi)(III)), it would not make the report public. On May 6, 2002, the EPA’s Administrator was given the authority in an administrative order to classify as “secret” any information that might pose a national security risk. The legislation establishing the Department of Homeland Security (DHS) exempts from public disclosure information about physical and cyber security for information submitted voluntarily to DHS. But there are tradeoffs to this move to secrecy. Every five years RMPs must be resubmitted, and many plans were to be updated in 2004; ultimately about 15,000 plans will need updating. With the public essentially shut out of the process, it will be difficult to determine whether EPA is properly implementing the RMP programs or whether the government is adequately protecting the public from environmental-based threats. The government’s effort to reduce the public’s access to information concerning environmental risks is likely to accelerate if a broad chemical security act is enacted.

After September 11, 2001, developing a federal emergency response capability to deal with hazardous substances that are released to the environment by an act of terrorism became an additional governmental responsibility to be addressed. Two kinds of environmental-based attacks

888. Id. The DOJ decided it did not have the funds to comply with CSISFFRA’s mandate to issue a final report so it did not comply, although DOJ did not ask Congress for additional funds in 2001 or 2002. DOJ in its response blamed Congress.
889. 67 Fed. Reg. 31,109 (May 9, 2002).
Requirements for Unpermitted Air Pollution Releases

are the major concern. A terrorist may use the environment as the medium for delivery (e.g. sending anthrax through the mail or exploding a bomb) or can target a facility containing hazardous material to create a toxic release (e.g. a chemical or nuclear facility release). Terrorists also may obtain their weapons, or the material to build them, from targeted facilities.

In February of 2003, the White House released the National Strategy for the Physical Protection of Critical Infrastructures and Key Assets.892 The Homeland Land Security Act893 established the DHS, which formed March 1, 2003, when twenty-two agencies with about 180,000 employees were merged to create the fifteenth federal department.894 The DHS’s twenty-two agencies include the Federal Emergency Management Agency (FEMA) under the direction of the Under Secretary for Emergency Preparedness and Response, but it does not include the EPA, nor does the DHS have direct authority for the implementation of the environmental laws applicable to an unpermitted release. Thus, the EPA’s role is based on the National Incident Management System (NIMS) within the context of the National Response Plan (NRP) that was previously discussed. The Coast Guard, which is a major player in responding to emergency release situations, was moved intact to DHS. In 2002 Congress passed the Public Health Security and Bioterrorism Response Act,895 which amends the Safe Drinking Water Act to enhance the EPA’s ability to protect the nation’s drinking water. However, Congress has not provided new authority to the EPA to deal with terrorist attacks involving other environmental media. On December 17, 2003, President George W. Bush promulgated Homeland Security Presidential Directive 7,896 which transferred all of the EPA’s authority for the security of chemical facilities to the DHS. The EPA retains responsibility for the security of drinking water and water treatment facilities.

The EPA’s responsibilities for dealing with emergency situations include responding to the environmental effects of a terrorist attack. According to the EPA, data collected pursuant to its RMP program, based on a worst-case analysis, shows that a release of chemicals from any of 2,237 identified facilities could potentially affect 10,000 to 99,999 people. A release from any of another 493 larger facilities could affect between 100,000 and 999,999 people, and a release from any of the largest 111 facilities could potentially affect over a million people. On April 27, 2005, the GAO said that chemical facilities could have releases far more severe than those considered in the worst-case analysis. Moreover, industry’s voluntary initiatives fail to account for at least twenty percent of the facilities posing the highest risk to the public.

In October 2002, the EPA issued its strategy for homeland security which identified four goals for the Agency: (1) critical infrastructure protection; (2) emergency preparedness, response, and recovery; (3) communication and information; and (4) protection of EPA personnel and infrastructure. To date, however, neither the Department of Homeland Security nor the EPA have developed effective programs for dealing with these threats. No federal security requirements apply generally to chemical facilities. Only about one-sixth of the 15,000 facilities subject to RMP requirements are required to comply with federal security requirements concerning terrorism. There are about 2,000 RMP facilities that are community water systems that are subject to the Public Health Security and Bioterrorism Response Act of 2002 and must conduct vulnerability analyses of their facilities. There also are 238 chemical facilities located on waterways, which handle bulk liquid

897. U.S. ENVTL. PROT. AGENCY, STRATEGIC PLAN FOR HOMELAND SECURITY (Sept. 2002). Note that much of EPA’s concern has been directed at safeguarding waste water and drinking water facilities that are not within the scope of this article.
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chemicals and are required to implement security plans under the Maritime Transportation Security Act of 2002.902

The EPA has sufficient authority under the existing environmental laws, previously discussed, to begin to protect the public from the effects of terrorist attacks. TSCA section 6(9), for example, authorizes the EPA to regulate chemicals that “may present an unreasonable risk of injury to human health or the environment.” But the EPA would have to promulgate regulations that would require Agency resources that would have to be moved from other programs because Congress is unlikely to expand its budget. Moreover, ultimately the private sector would face high costs to “harden” its facilities and can be expected to flex its political muscle to avoid costly expenditures. The EPA also could try to use its emergency powers, but it would be difficult to demonstrate the “imminent” endangerment the environmental statutes require. The CAA section 112(r), both the general duty clause and section 112(r)(7)(A), could be used to deal with terrorist threats. However, it is not clear that an intentional targeting of a facility or a population was intended to be covered by section 112(r)’s planning requirements; nor is it clear that the general duty clause, which is based on OSHA’s general duty clause, was ever intended for use as a homeland security measure. A legislative fix is needed, but it has been a difficult task to develop a comprehensive bill that a majority in Congress would support. To date, only narrowly focused legislation has been enacted.

One area of commerce that has been the focus of enhanced emergency planning requirements has been “hazmat” transportation. The Homeland Security Act of 2002903 amended the Federal Hazardous Transportation Law904 to require security concerns to be addressed.905 On March 25, 2003, regulations were promulgated that imposed many new requirements on industry.906 The regulations include specific

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requirements mandating the development of a security plan. 907 On September 8, 2003, the DOT issued new informal penalty guidelines covering violations of the new security requirements. 908 Another change involves the role of the Department of Health and Human Services in national security issues. On July 21, 2004, the Project BioShield Act of 2004 909 authorized the federal government to purchase and stockpile vaccines and drugs to fight diseases of bioterror. It gave the National Institute of Health (NIH) new authority for research and development of new medicines to defend against bioterror. It also provided the Food and Drug Administration with authority to quickly distribute promising new drugs. 910 The Public Health Security and Bioterrorism Preparedness and Response Act of 2002, 911 which was previously mentioned, and the Maritime Transportation Security Act (MTSA) impose security requirements on a limited number of facilities. 912 The Bioterrorism Act requires many community water systems to perform vulnerability assessments and to develop emergency preparedness and response plans for the EPA’s review and approval. The MTSA requires high-risk port facilities to produce vulnerability assessments, security plans, and incident response plans that conform to Coast Guard requirements and that are reviewed and approved by the DHS.

Congressional action to deal broadly with the dangers posed by chemical facilities began in 2001 when Senator Jon Corzine (D – N.J.) introduced The Chemical Security Act (S. 1602) that called for the EPA and the DHS to work together in monitoring chemical facilities and also called for “inherently safer technologies” to be used to prevent or mitigate the deleterious effects of a possible attack on a facility housing chemicals. 913 The bill never passed the Senate because it was opposed by

907. See 49 C.F.R. §§ 172.800(b), 172.802(a).

1186
the chemical industry and the Bush administration. It was also opposed by the EPA, which feared the Agency would not have the resources to review about 15,000 RMPs as the Corzine bill required. The Bush administration’s response was the Chemical Facility Security Act (S. 994) sponsored by Senator James Inhofe (R. – Okla.) that would allow the chemical industry to set its own safety standards and would not require reporting of safety data to DHS unless such data was requested by the Department. This bill stalled as well. The Chemical Facility Security Act was reintroduced in the 108th Congress as S. 994. Two other bills, S. 157 and S. 6, were introduced. The Administration’s Bill, S. 994, the Chemical Facility Security Act, was reported by the Senate Committee on Environment and Public Works on May 11, 2004. As reported, the bill would have required the Secretary of the DHS to promulgate regulations for listing facilities. Listed facilities would have to conduct vulnerability assessments, identify hazards, prepare security plans, and have them approved by the DHS.

House Resolution 2901, introduced July 25, 2003, was similar to S. 994. Late in the 108th Congress, the chairman of the House Select Committee on Homeland Security introduced H.R. 5291, a bill similar to S. 157. The Chemical Facility Security Act, S. 994/H.R. 2901, focuses on increased security (hardening potential targets) and developing emergency measures. The Chemical Facility Security Act gives attention to inherently safer production and would require alternative, less risky, approaches to be used if, in the judgment of a facility owner/operator, a change was practical. It also requires vulnerability assessments and security measures to be implemented. Other bills were also considered, but none passed.

914. Id.
915. Id.
916. Id.
917. See S. REP. No. 108-261.
918. SCHIEROW, supra note 901, at CRS-39.
919. SCHIEROW, supra note 901, at CRS-39.
920. SCHIEROW, supra note 901, at CRS-39.
In late 2004 the Senate passed a resolution divesting the Environment & Public Works Committee of its authority over chemical security issues and gave it to the Homeland Security & Government Affairs Committee. This may increase the chance for passage of legislation in 2005 that is more stringent than the approach taken by the environment committee chairman James Inhofe. In the 109th Congress, H.R. 1562, the Chemical Facility Security Act of 2005, and H.R. 2237, the Chemical Security Act, were introduced. Both contain provisions requiring vulnerability assessments and the creation of security plans, but as of September 2005, no legislation has been enacted.922

While the EPA has not been granted additional statutory authority to deal with terrorist threats, it has been given more work and less money. White House Homeland Security Directives (HSPDs) promulgated since September 11, 2001, including four since late 2003, have added to the EPA’s mission. For example, HSPD-9 requires enhanced water surveillance activities. HSPD-10, released in April 2004, is aimed at bioterror prevention and is expected to impose new responsibilities on the EPA. At the same time, the EPA’s homeland security budget is projected to be cut to about $60 million in fiscal year 2006 from over $120 million in fiscal year 2004. These cuts threaten the EPA’s existing environmental programs.923 In June 2005, the Senate Appropriations Committee approved an EPA budget of $7.9 billion, which is above the House appropriation but is $100 million below the FY 2005 enacted levels.924 Both the Senate panel and the House cut the Administration’s request for homeland security preparedness.925 At the same time, the EPA has increased responsibility for responding to domestic bioterrorism. The costs of responding to the five letters containing anthrax was estimated at $1 billion; cleaning up the offices on Capitol Hill cost tens of millions of dollars.926 The public and private sector costs of effective security against biological and chemical threats could be extraordinary.

922. SCHIEROW, supra note 901, at CRS-2.
925. Id.
§ 10. INTEGRATED PLANNING

The legal requirements applicable to unpermitted releases are complex and voluminous, as the prior material has shown. The program, however, works rather smoothly because of the efforts of the federal and state agencies charged with responding to emergencies and the efforts of the private sector to develop response programs. Nevertheless, the existing system is complex, confusing, costly, and has limited effectiveness.

In an effort to streamline the process, the one-stop federal notification using the National Response Center (NRC), discussed supra Section 2, greatly simplifies notification. Accordingly, the emergency response utilizes a single response program. Since the 1970s there has been a National Oil and Hazardous Substances Pollution Contingency Plan. The EPA has amended this National Contingency Plan (NCP) many times, and it now applies to activities based on CERCLA, section 311 of the Clean Water Act, and the Oil Pollution Act of 1990. For air pollution issues, the federal government has taken steps to simplify the requirements concerning emergency response plans based on the CAA section 112(r)(10) mandate that the President conduct a review of federal release prevention, mitigation, and response authorities.

To coordinate the response actions by all levels of government, a national response system (NRS) is utilized. It is composed of the national response team (NRT), the regional response team (RRT), the on-scene coordinator/remedial project manager (OSC/RPM), area committees, and special teams and related support entities. The NRS expands or contracts in relation to the size or complexity of the release. On June 5, 1996, the EPA, the DOT (including the Coast Guard), the Department

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927. The National Contingency Plan (NCP) initially was required by section 11 of the Federal Water Pollution Control Act (now known at the CWA) as amended in 1970 by Pub. L. No. 91-224, § 103. The responsibility for preparing the NCP was given to the Council on Environmental Quality by President Nixon on July 20, 1970, in Executive Order 11,548, 35 Fed. Reg. 11,677 (July 20, 1970). The national response is now an interagency responsibility chaired by EPA. See 40 C.F.R. § 300.105 (2004).


930. 40 C.F.R. § 300.5.

931. Id.
of Interior, and the Department of Labor (through OSHA) released the National Response Team’s Integrated Contingency Plan (ICP) Guidance, also known as the “one plan.”932 “The ICP guidance does not change existing regulatory requirements; rather, it provides a format for organizing and presenting material currently required by the regulations.”933 This provides one-plan guidance to prepare emergency response plans for responding to spills of oil and nonradiological hazardous substances under many programs, including the EPA’s CAA Risk Management Programs Regulations found at 40 C.F.R. part 68.934 The guidance provides a mechanism for creating a single emergency response plan, or ICP, that covers the requirements found in the nine federal programs.935 It is important to emphasize, however, that the requirements imposed by the various environmental laws will not change because of the availability of the ICP format for emergency planning and response. 936

The ICP guidance is based on the National Interagency Incident Management System (NIIMS) Incident Command System (ICS), which is the management system commonly used for response efforts.937 There are three main sections to the ICP—an introduction, a core plan, and supporting annexes. The introduction contains information on the facility, response personnel, and other key contact information.938 “The core plan is intended to reflect the essential steps necessary to initiate, conduct, and terminate an emergency response action: recognition,

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932. See NRT Guidance, supra note 929, at 28,642.
933. Id. at 28,643.
934. Id. at 28,642.
935. Id. at 28,642–43.
936. NRT Guidance, supra note 929, at 28,643.
937. Id. at 28,644.
938. Id.
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notification, and initial response, including assessment, mobilization, and implementation.939 The core plan should be concise and simple, with checklists and flowcharts used whenever possible.940 The core plan also should follow a system of response levels based on the potential consequences to health and the environment and the need to communicate information to off-site authorities.941 The response levels should be as consistent as possible with those in place by local emergency planning organizations.942 "The annexes are designed to provide key supporting information for conducting an emergency response under the core plan as well as document compliance with regulatory requirements not addressed elsewhere in the ICP."943 The annexes are meant to be supplementary rather than duplicative.

On February 28, 2003, the Homeland Security Presidential Directive HSPD-5 was issued. It calls for the establishment of a single comprehensive approach to domestic incident management to prevent, prepare for, respond to, and recover from terrorist attacks, major disasters, and other emergencies. The Secretary of Homeland Security is the principle official for incident management, but nothing in this directive alters the authorities of federal departments and agencies. The Department of Homeland Security (DHS) is a coordinator and is specifically charged with administering the National Incident Management System (NIMS) and developing a National Response Plan (NRP). The NRP, using the NIMS, is to provide the structure for exercising federal authority over domestic incidents. By April 1, 2003, the Secretary of the DHS was to publish a plan for the full development and implementation of the NRP. By June 1, 2003, a NIMS for managing emergencies was to be developed and adopted by federal departments and agencies. By August 1, 2003, federal departments and agencies were to submit a plan to adopt and implement NIMS to the Secretary of DHS. Beginning in fiscal year 2005, the NIMS requirements are to be imposed as a condition for grants, contracts, or other activities.944

939. Id.
940. "A rule of thumb is that the core plan should fit in the glovebox of a response vehicle."
941. Id.
942. Id. at 28,644.
943. Id. at 28,643.
2004, DHS issued the NIMS to provide a comprehensive national approach to incident management applicable to all jurisdictional levels and across functional disciplines. On September 8, 2004, Tom Ridge, the Director of the DHS, sent a letter to the governors outlining the steps that states, territories, tribes, and local entities should take to become NIMS compliant.945

On January 6, 2005, the DHS, acting pursuant to various federal statutes, regulations, and executive orders released its National Response Plan (NRP).946 The NRP aims to integrate the myriad federal, state, and local agencies and nongovernmental groups into a coherent unit that can better prevent and respond to national emergencies.947 To accomplish this goal, the NRP uses the National Incident Management System (NIMS).948 The Homeland Security Operations Center (HSOC) is the head of this operation and it receives incident information from the existing reporting regimes such as the NRC.949 When the NRC receives a report, it must relay the incident to the HSOC. The HSOC then decides whether the report contains an Incident of National Significance (INS).950 If a release is significant enough to be deemed an INS, the HSOC will activate the NRP and commit resources in response to the emergency.951 If a release is not significant enough to be deemed an INS, the appropriate federal, state, or local agency will mitigate the emergency in the same manner as it would have pre-NRP.952 If a release is large enough to be deemed an INS, then an analysis of the possible impacts

945. Letter on file with the author.
947. Id. at 19–21.
949. NATIONAL RESPONSE PLAN, supra note 946, at 47–48.
950. Id.
951. Id.
952. Id.
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will be done at the Interagency Modeling and Atmospheric Assessment Center (IMAAC). The result of the IMAAC analysis is then used in setting the course for response actions under the NRP.

In the summer of 2005, considerable uncertainty exists concerning whether a viable program will be created to deal with homeland security issues involving chemical or biological agents. The EPA has the chemical expertise, but the DHS has expertise in security matters. Whether these organizations can effectively work together is unknown. The various pending bills differ in how they divide responsibility between the EPA and the DHS. Under the Administration’s bill, the EPA would be precluded from having any role in chemical security; the DHS would have sole authority. Under the Corzine bill, the EPA would have a role in assessing vulnerabilities and could impose requirements on chemical plants. The EPA also could require facility operators to reduce the use of highly toxic materials. If legislation is enacted, budgets nevertheless appear inadequate to develop an effective program that reduces the nation’s vulnerability to an environmental-based attack. Despite four years having passed since the lessons of September 11, 2001, not much progress appears to have been made.

953. Id.
954. Id.