PRE-PUBLICATION COPY NOTICE:

The EPA Administrator signed the following proposed rule on July 2, 2019:

FINANCIAL RESPONSBILITY REQUIREMENTS UNDER CERCLA SECTION 108(B) FOR FACILITIES IN THE ELECTRIC POWER GENERATION, TRANSMISSION, AND DISTRIBUTION INDUSTRY [RIN 2050-AG93; FRL-XXXX-XX-OLEM]

This is a **pre-publication** version of the proposed rule that EPA is submitting for publication in the *Federal Register*. While the Agency has taken steps to ensure the accuracy of this Internet version of this proposed rule, it is not the official version of the proposed rule. Please refer to the official version of the proposed rule that will appear in a forthcoming *Federal Register* publication. Once the official version of the proposed rule publishes in the *Federal Register*, the pre-publication version of the proposed rule that appears on the website will be replaced with a link to the proposed rule that appears in the *Federal Register* publication.

The docket number for this proposed rulemaking is **EPA-HQ-OLEM-2019-0085**.

For further information about the docket, please consult the ADDRESSES section in the front of the proposed rule.

ENVIRONMENTAL PROTECTION AGENCY **6560-50**

40 CFR Part 320

[EPA-HQ-OLEM-2019-0085; FRL --]

RIN 2050-AH03

Financial Responsibility Requirements Under CERCLA Section 108(b) for Facilities in the Electric Power Generation, Transmission, and Distribution Industry

AGENCY: Environmental Protection Agency (EPA or the Agency).

ACTION: Proposed Rule.

SUMMARY: EPA is proposing to not impose financial responsibility (FR) requirements for facilities in the Electric Power Generation, Transmission, and Distribution industry under Section 108(b) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Section 108(b) addresses the promulgation of regulations that require classes of facilities to establish and maintain evidence of financial responsibility consistent with the degree and duration of risk associated with the production, transportation, treatment, storage, or disposal of hazardous substances.

DATES: Comments must be received on or before [insert date 60 days after date of publication in the Federal Register].

ADDRESSES: Submit your comments, identified by Docket ID No. EPA–HQ– SFUND–2019–0085, at http:// www.regulations.gov. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be

accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. EPA will generally not consider comments or comment contents located outside of the primary submission (i.e. on the Web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit http://www2.epa.gov/dockets/ commenting-epa-dockets.

FOR FURTHER INFORMATION CONTACT: For more information on this notice, contact Charlotte Mooney, U.S. Environmental Protection Agency, Office of Resource Conservation and Recovery, Mail Code 5303P, 1200 Pennsylvania Ave., NW., Washington, DC 20460; telephone (703) 308-7025 or (email) mooney.charlotte@epa.gov.

SUPPLEMENTARY INFORMATION:

How Can I Get Copies of This Document and Other Related Information?

This **Federal Register** notice and supporting documentation are available in a docket EPA has established for this action under Docket ID No. EPA-HQ-OLEM-2019-0085. All documents in the docket are listed in the http://www.regulations.gov index. Although listed in the index, some information is not publicly available, e.g., Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically at http://www.regulations.gov or in hard copy at EPA/DC, WJC West, Room 3334, 1301 Constitution Ave., NW, Washington, DC 20460. This Docket Facility is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The Docket Facility telephone number is (202) 566–0276. The Public Reading Room is

open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744.

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I. Executive Summary

A. Overview

Section 108(b) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) directs EPA to develop regulations that require classes of facilities to establish and maintain evidence of financial responsibility consistent with the degree and duration of risk associated with the production, transportation, treatment, storage, or disposal of hazardous substances. The statute further requires that the level of financial responsibility be established to protect against the level of risk the President, in his discretion, believes is appropriate, based on factors including the payment experience of the Hazardous Substance Superfund (Fund). The President's authority under this section for non-transportation-related facilities has been delegated to the EPA Administrator.

In August 2014, the Idaho Conservation League, Earthworks, Sierra Club, Amigos Bravos, Great Basin Resource Watch, and Communities for a Better Environment filed a lawsuit in the U.S. Court of Appeals for the District of Columbia Circuit, seeking a writ of mandamus requiring issuance of CERCLA § 108(b) financial responsibility rules for the hardrock mining industry, and for the three additional industries identified by EPA in the 2010 Advance Notice of

Proposed Rulemaking (ANPRM),[1] that is, Chemical Manufacturing; Petroleum and Coal Products Manufacturing; and Electric Power Generation, Transmission, and Distribution. Following oral arguments, EPA and the petitioners submitted a Joint Motion for an Order on Consent, filed on August 31, 2015, which included a schedule for further administrative proceedings under CERCLA § 108(b). The court order granting the motion was issued on January 29, 2016. A copy of the order can be found in the docket for this rulemaking.

In addition to requiring EPA to publish a proposed rule on hardrock mining financial requirements by December 1, 2016, the January 2016 Order requires EPA to "sign for publication in the **Federal Register** a determination whether EPA will issue a notice of proposed rulemaking on financial assurance requirements under § 108(b) in the (a) chemical manufacturing industry; (b) petroleum and coal products manufacturing industry; and (c) electric power generation, transmission, and distribution industry by December 1, 2016." EPA signed the required determination on December 1, 2016; the notice was published on January 11, 2017[2] and announced EPA's intent to proceed with rulemakings for all three of the classes.

B. Purpose of Today's Action

The purpose of today's action is to propose that financial responsibility requirements under CERCLA § 108(b) at facilities in the Electric Power Generation, Transmission, and Distribution industry are not necessary, and solicit comments on this proposal. EPA has reached this conclusion based on the analyses described in Parts VI and VII of this proposal. The evidence provided in these analyses contributed to EPA's proposed finding that the degree and

[1] *See* 75 FR 816

[2] *See* 82 FR 3512

duration of risk posed by the Electric Power Generation, Transmission and Distribution Industry does not warrant financial responsibility requirements under CERCLA § 108(b).

The analysis and proposed finding in this proposal are not applicable to and do not affect, limit, or restrict EPA's authority to take a response action or enforcement action under CERCLA at any facility in the Electric Power Generation, Transmission, and Distribution Industry, including any currently operating facilities or those described in this proposal and in the background documents for this proposal, and to include requirements for financial responsibility as part of such response action. The set of facts in the rulemaking record related to the individual facilities discussed in this proposed rulemaking support the Agency's proposal not to issue financial responsibility requirements under Section 108(b) for this class, but a different set of facts could demonstrate a need for a CERCLA response action at an individual site. This proposed rulemaking also does not affect the Agency's authority under other authorities that may apply to individual facilities, such as the Clean Air Act (CAA), the Clean Water Act (CWA), the Resource Conservation and Recovery Act (RCRA), and the Toxic Substances Control Act (TSCA).

C. Summary of the Major Provisions of the Regulatory Action

EPA is proposing to not require evidence of financial responsibility under CERCLA § 108(b) at facilities in the Electric Power Generation, Transmission, and Distribution industry. Thus, there are no proposed regulatory provisions associated with this action.

D. Costs and Benefits of the Regulatory Action

EPA is proposing to not require evidence of financial responsibility under CERCLA § 108(b) at facilities in the Electric Power Generation, Transmission, and Distribution industry. EPA, therefore, has not conducted a Regulatory Impact Analysis for this action.

II. Authority

This proposed rule is issued under the authority of §§ 101, 104, 108 and 115 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C §§ 9601, 9604, 9608 and 9615, and Executive Order 12580. (52 FR 2923, January 29, 1987).

III. Background Information

A. Overview of Section 108(b) and other CERCLA Provisions

CERCLA, as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), establishes a comprehensive environmental response and cleanup program. Generally, CERCLA authorizes EPA[3] to undertake removal or remedial actions in response to any release or threatened release into the environment of "hazardous substances" or, in some circumstances, any other "pollutant or contaminant." As defined in CERCLA § 101, removal actions include actions to "prevent, minimize, or mitigate damage to the public health or welfare or to the environment," and remedial actions are "actions consistent with [a] permanent remedy[.]" Remedial and removal actions are jointly referred to as "response actions." CERCLA § 111 authorizes the use of the Hazardous Substance Superfund (Fund) established under title 26, United States Code, to finance response actions undertaken by EPA. In addition, CERCLA § 106 gives EPA[4] authority to compel action by liable parties in response to a release or threatened

[3] Although Congress conferred the authority for administering CERCLA on the President, most of that authority has since been delegated to EPA. *See* Exec. Order No. 12580, 52 FR. 2923 (Jan. 23, 1987). The executive order also delegates to other federal agencies specified CERCLA response authorities at certain facilities under their "jurisdiction, custody or control."

[4] CERCLA §§ 106 and 122 authority is also delegated to other federal agencies in certain circumstances. *See* Exec. Order No. 13016, 61 FR 45871 (Aug. 28, 1996).

release of a hazardous substance that may pose an "imminent and substantial endangerment" to public health or welfare or the environment.

CERCLA § 107 imposes liability for response costs on a variety of parties, including certain past owners and operators, current owners and operators, and certain generators, arrangers, and transporters of hazardous substances. Such parties are liable for certain costs and damages, including all costs of removal or remedial action incurred by the federal government, so long as the costs incurred are "not inconsistent with the national contingency plan," (the National Oil and Hazardous Substances Pollution Contingency Plan or NCP).[5] Section 107 also imposes liability for natural resource damages and health assessment costs.[6]

Section 108(b) establishes an authority to require owners and operators of classes of facilities to establish and maintain evidence of financial responsibility. Section 108(b)(1) directs EPA to develop regulations requiring owners and operators of facilities to establish evidence of financial responsibility "consistent with the degree and duration of risk associated with the production, transportation, treatment, storage, or disposal of hazardous substances." In turn, § 108(b)(2) directs that the level of financial responsibility shall be initially established, and, when necessary, adjusted to protect against the level of risk that EPA in its discretion believes is appropriate based on the payment experience of the Fund, commercial insurers, courts settlements and judgments, and voluntary claims satisfaction. Section 108(b)(2) does not, however, preclude EPA from considering other factors in addition to those specifically listed. The statute prohibited promulgation of such regulations before December 1985.

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[5] *See* CERCLA § 107 (a)(4)(A).

[6] *See* CERCLA § 107 (a)(4)(C) – (D).

In addition, section 108(b)(1) provides for publication within three years of the date of enactment of CERCLA of a "priority notice" identifying the classes of facilities for which EPA would first develop financial responsibility requirements. It also directs that priority in the development of requirements shall be accorded to those classes of facilities, owners, and operators that present the highest level of risk of injury.

B. History of Section 108(b) Rulemakings

1. 2009 Identification of Priority Classes of Facilities for Development of CERCLA Section 108(b) Financial Responsibility Requirements

On March 11, 2008, Sierra Club, Great Basin Resource Watch, Amigos Bravos, and Idaho Conservation League filed a suit against former EPA Administrator Stephen Johnson and former Secretary of the U.S. Department of Transportation Mary E. Peters, in the U.S. District Court for the Northern District of California. Sierra Club, et al. v. Johnson, No. 08-01409 (N. D. Cal.). On February 25, 2009, that court ordered EPA to publish the Priority Notice required by CERCLA § 108(b)(1) later that year. The 2009 Priority Notice and supporting documentation presented the Agency's conclusion that hardrock mining facilities would be the first class of facilities for which EPA would issue CERCLA § 108(b) requirements.[7] Additionally, the 2009 Priority Notice stated EPA's view that classes of facilities outside of the hardrock mining industry may warrant the development of financial responsibility requirements.[8] The Agency committed to gather and analyze data on additional classes of facilities and consider them for possible regulation. The court later dismissed the remaining claims.

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[7] *See* 74 FR 37214 (July 28, 2009)

[8] Id. at 37218.

2. Additional Classes 2010 Advance Notice of Proposed Rulemaking

On January 6, 2010, EPA published an Advance Notice of Proposed Rulemaking (ANPRM or Notice),[9] in which the Agency identified three additional industrial sectors for the development, as necessary, of proposed § 108(b) regulation. To develop the list of additional classes for the 2010 ANPRM, EPA used information from the CERCLA National Priorities List (NPL) and analyzed data from the Resource Conservation and Recovery Act (RCRA) Biennial Report (BR) and the Toxics Release Inventory (TRI). As was discussed in the Notice, these sources were chosen because "they are well-established, reliable sources of information on facilities associated with hazardous substances, and were readily available to the Agency."[10] As an additional factor for consideration, EPA looked at certain known cases where impacts to groundwater or surface water had been documented, as well as recent catastrophic releases, such as the 2008 release of coal ash from the Tennessee Valley Authority's (TVA) Kingston Plant. The result of this analysis is explained in the 2010 ANPRM in detail, with the conclusion that three industries – the Chemical Manufacturing industry (North American Industry Classification System (NAICS) 325), the Petroleum and Coal Products Manufacturing industry (NAICS 324), and the Electric Power Generation, Transmission, and Distribution industry (NAICS 2211) – would be considered for financial responsibility requirements under § 108(b).

EPA specifically requested public comment in the 2010 ANPRM on whether to propose a regulation under CERCLA § 108(b) for each of the three industries, or any class or classes within those industries, including information demonstrating why such financial responsibility requirements would or would not be appropriate for those particular classes. In addition, the

[9] *See* 75 FR 816.

[10] *See* 75 FR 819.

Agency requested information related to the industry categories discussed in the Notice, including data on facility operations, information on past and expected future environmental response actions, use of financial responsibility mechanisms by the industry categories, existing financial responsibility requirements, and other information the Agency might consider in setting financial responsibility levels. Finally, EPA requested information from the insurance and the financial sectors related to instrument availability and implementation, and potential instrument conditions.[11] Comments received on the ANPRM are summarized in the Additional Classes 2017 Notice of Intent to Proceed with Rulemakings, section III.B.4 below.

3. 2014 Petition for Writ of Mandamus

Dissatisfied with the pace of EPA's progress, in August 2014, the Idaho Conservation League, Earthworks, Sierra Club, Amigos Bravos, Great Basin Resource Watch, and Communities for a Better Environment filed a new lawsuit in the U.S. Court of Appeals for the District of Columbia Circuit, seeking a writ of mandamus requiring issuance of CERCLA § 108(b) financial assurance rules for the hardrock mining industry and for three other industries: chemical manufacturing; petroleum and coal products manufacturing; and electric power generation, transmission, and distribution. Thirteen companies and organizations representing business interests in the hardrock mining and other sectors sought to intervene in the case.

Following oral argument, the court issued an Order in May 2015 requiring the parties to submit, among other things, supplemental submissions addressing a schedule for further administrative proceedings under CERCLA § 108(b). The Order further encouraged the parties to confer regarding a schedule and, if possible, to submit a jointly agreed upon proposal.

[11] *See* 75 FR 830-831.

Petitioners and EPA were able to reach agreement on a schedule. The parties requested an Order from the court with a schedule calling for the Agency to sign a proposed rule for the hardrock mining industry by December 1, 2016, and a final rule by December 1, 2017. The joint motion also included a requested schedule for the additional industry classes, which called for EPA to sign by December 1, 2016, a determination on whether EPA will issue a notice of proposed rulemaking for classes of facilities in any or all of the other industries, and a signature schedule for proposed and final rules for the additional industry classes as follows:

> "EPA will sign for publication in the Federal Register a notice of proposed rulemaking in the first additional industry by July 2, 2019, and sign for publication in the Federal Register a notice of its final action by December 2, 2020.
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> EPA will sign for publication in the Federal Register a notice of proposed rulemaking in the second additional industry by December 4, 2019, and sign for publication in the Federal Register a notice of its final action by December 1, 2021.
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> EPA will sign for publication in the Federal Register a notice of proposed rulemaking in the third additional industry by December 1, 2022, and sign for publication in the Federal Register a notice of its final action by December 4, 2024."[12]

While the joint motion identified the other industries as being the Chemical Manufacturing industry, the Petroleum and Coal Products Manufacturing industry, and the Electric Power Generation, Transmission and Distribution industry, and set a rulemaking schedule, it did not indicate which industry would be the first, second or third. The Joint Motion specified that it did not alter the Agency's discretion as provided by CERCLA and administrative law.[13]

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[12] *In Re: Idaho Conservation League*, No. 14-1149 (D.C. Cir. Jan. 29, 2016) (order granting joint motion).

[13] *See* Joint Motion at 6 ("Nothing in this Joint Motion should be construed to limit or modify the discretion accorded EPA by CERCLA or the general principles of administrative law.")

On January 29, 2016, the court granted the joint motion and issued an Order that mirrored the submitted schedule in substance. The Order did not mandate any specific outcome of the rulemakings.[14] The court Order can be found in the docket for this rulemaking. The signing of this proposed rule by July 2, 2019, will satisfy one component of the court Order. EPA has selected the Electric Power Generation, Transmission and Distribution industry as the first additional industry to meet the schedule laid out in the Order.

4. Additional Classes 2017 Notice of Intent to Proceed with Rulemakings

Consistent with the January 2016 court Order, EPA signed on December 1, 2016, a determination regarding rulemakings for the additional classes - a Notice of Intent to Proceed with Rulemakings for all three of the classes. The notice was published in the Federal Register on January 11, 2017.[15]

The notice formally announced EPA's intention to move forward with the regulatory process and publish a notice of proposed rulemaking for classes of facilities within the three industries identified in the 2010 ANPRM. The announcement in the notice was not a determination that requirements were necessary for any or all of the classes of facilities within the three industries, or that EPA would propose such requirements. In addition, the notice gave an overview of some of the comments received on the 2010 ANPRM and initial responses to those comments. The comments on the ANPRM which specifically addressed the need for CERCLA § 108(b) regulation for the three additional classes fell into four categories: (1) other laws that the industry complies with that obviate the need for CERCLA § 108(b) regulation; (2)

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[14] In granting the Joint Motion, the court expressly stated that its Order "merely requires that EPA conduct a rulemaking and then decide whether to promulgate a new rule – the content of which is not in any way dictated by the [Order]." *In re Idaho Conservation League,* at 17 (quoting *Defenders of Wildlife v. Perciasepe*, 714 F.3d 1317, 1324 (D.C. Cir. 2013).

[15] *See* 82 FR 3512.

the sources of data EPA used to select the industries; (3) past versus current practices within each industry; and (4) the overall need for financial responsibility for each industry. In discussing the ANPRM comments in the 2017 notice, the Agency stated its intent to use other, more industry-specific and more current sources of data to identify risk, and to consider site factors that reduce risks, including those that result from compliance with other regulatory requirements, and develop a regulatory proposal based on the record EPA would develop for each rulemaking.

At the time of the 2017 notice, EPA had not identified sufficient evidence to determine that the rulemaking process was not warranted, nor had EPA identified sufficient evidence to establish CERCLA § 108(b) requirements. The notice described a process to gather and analyze additional information to support the Agency's ultimate decision, including further evaluation of the classes of facilities within the three industry sectors. The notice stated that EPA would decide whether proposal of requirements was necessary and, accordingly propose appropriate requirements or propose not to impose requirements.

IV. Statutory Interpretation

CERCLA § 108(b) provides general instructions on how to determine what financial responsibility requirements to impose for a particular class of facility. Section 108(b)(1) directs EPA to develop regulations requiring owners and operators of facilities to establish evidence of financial responsibility "consistent with the degree and duration of risk associated with the production, transportation, treatment, storage, or disposal of hazardous substances." Section 108(b)(2) directs that the "level of financial responsibility shall be initially established and, when necessary, adjusted to protect against the level of risk" that EPA "believes is appropriate based on the payment experience of the Fund, commercial insurers, courts settlements and judgments, and voluntary claims satisfaction." Read together, the statutory language on determining the

degree and duration of risk and on setting the level of financial responsibility confers a significant amount of discretion on EPA.

Section 108(b)(1) directs EPA to evaluate risk from a selected class of facilities, but it does not suggest that a precise calculation of risk is either necessary or feasible. Although the risk associated with a particular site can be ascertained only once a response action is required, any financial responsibility requirements imposed under § 108(b) would be imposed before any such response action was identified. The statute thus necessarily confers on EPA wide latitude to determine, in a § 108(b) rulemaking proceeding, what degree and duration of risk are presented by the identified class.

Section 108(b)(2) in turn directs that EPA establish the level of financial responsibility that EPA in its discretion believes is appropriate to protect against the risk. This statutory direction does not specify a methodology for the evaluation. Rather, this decision is committed to the discretion of the EPA Administrator. While the statute provides a list of information sources on which EPA is to base its decision—the payment experience of the Superfund, commercial insurers, courts settlements and judgments, and voluntary claims satisfaction—the statute does not indicate that this list of factors is exclusive, nor does it specify how the information from these sources is to be used, such as by indicating how these categories are to be weighted relative to one another.

For the electric power industry, EPA has investigated the payment history of the Fund, and enforcement settlements and judgments, to evaluate, in the context of this CERCLA § 108(b) rulemaking, the risk from facilities that would be subject to CERCLA financial responsibility requirements. The statute also authorizes EPA to consider the existence of federal and state regulatory requirements, including any financial responsibility requirements. Section

108(b)(1) directs EPA to promulgate financial responsibility requirements "in addition to those under subtitle C of the Solid Waste Disposal Act and other Federal law." According to the 1980 Senate Report on legislation that was later enacted as CERCLA, Congress considered it appropriate for EPA to examine those additional requirements when evaluating the degree and duration of risk under what was later enacted as CERCLA § 108(b):

> "The bill requires also that facilities maintain evidence of financial responsibility consistent with the degree and duration of risks associated with the production, transportation, treatment, storage, and disposal of hazardous substances. These requirements are in addition to the financial responsibility requirements promulgated under the authority of § 3004(6) of the Solid Waste Disposal Act. It is not the intention of the Committee that operators of facilities covered by § 3004(6) of that Act be subject to two financial responsibility requirements for the same dangers."[16]

While the Senate Report mentions RCRA § 3004(6) specifically, it is consistent with Congressional intent for EPA to consider other potentially duplicative federal financial responsibility requirements when examining the "degree and duration of risk" in the context of CERCLA § 108(b) to determine whether and what financial responsibility requirements are appropriate. It is also consistent with Congressional intent for EPA to consider state laws before imposing additional federal financial responsibility requirements on facilities.

Consideration of state laws *before* developing financial responsibility regulations is consistent with CERCLA § 114(d), which prevents states from imposing financial responsibility requirements for liability for releases of the same hazardous substances *after* a facility is regulated under § 108 of CERCLA. Just as Congress clearly intended to prevent states from imposing duplicative financial assurance requirements after EPA had acted to impose such requirements under § 108, it is reasonable to also conclude that Congress did not mean for EPA

[16] S. Rept. 96–848 (2d Sess, 96th Cong.), at 92.

to disrupt existing state programs that are successfully regulating industrial operations to minimize risk, including the risk of taxpayer liability for response actions under CERCLA, and that specifically include appropriate financial assurance requirements under state law. Reviews of both state programs and other federal programs help to identify whether and at what level there is current risk that is appropriate to address under CERCLA § 108.

EPA also believes that, when evaluating whether and at what level it is appropriate to require evidence of financial responsibility, EPA should examine information on electric power generation, transmission and distribution facilities operating under modern conditions, *i.e.*, the type of facilities to which financial responsibility regulations would apply. These modern conditions include state and federal regulatory requirements and financial responsibility requirements that currently apply to operating facilities. This reading of § 108(b) is consistent with statements in the legislative history of the statute. The 1980 Senate Report states that the legislative language that became § 108(b) "requires those engaged in businesses involving hazardous substances to maintain evidence of financial responsibility commensurate with the risk which they present."[17]

This statutory interpretation is reflected in today's proposal. Any financial responsibility requirements imposed under § 108(b) would apply to currently operating facilities. EPA thus sought to examine the extent to which hazardous substance management at currently operating electric power generation, transmission and distribution facilities as a class continues to present risk. Moreover, the statutory direction to identify requirements consistent with identified risks guides EPA's interpretation that imposition of financial responsibility requirements under

[17] S. Rept. 96–848 (2d Sess, 96th Cong.), at 92.

§ 108(b) would not be necessary for currently operating facilities that present minimal current risk. The interpretation in this proposal does not extend to any site-specific determinations of risk made in the context of individual CERCLA site responses. Those decisions will continue to be made in accordance with preexisting procedures.

EPA thus examined records of releases of hazardous substances from facilities operating under a current regulatory framework and data on the actions taken and expenditures incurred in response to such releases. The data collected do not reflect historical practices, many of which would be illegal under current environmental laws and regulations. Instead, EPA has considered current federal and state regulation of hazardous substance production, transportation, treatment, storage, or disposal applicable to facilities in the electric power industry.

V. Approach to Developing this Proposed Rule

Based on the statutory interpretation described above, EPA developed an analytical approach to determine whether the current risk under a modern regulatory framework within the Electric Power Generation, Transmission and Distribution industry rises to the level that warrants imposition of financial responsibility requirements under CERCLA § 108(b). Specifically, EPA designed the analytical approach to determine the need for financial responsibility for this industry based on the degree and duration of risk associated with the industry's production, transportation, treatment, storage, or disposal of hazardous substances. The approach, described in detail below, looks at risks by examining records of releases of hazardous substances from facilities in the industry in combination with the payment history of the Fund, and enforcement settlements and judgments. To enable EPA to base its decision on risk posed by facilities operating under modern conditions, *i.e.*, the types of facilities to which financial responsibility requirements would apply, EPA developed an approach to identify and

consider relevant state and federal regulatory requirements and financial responsibility requirements that currently apply to operating facilities, as well as voluntary protective practices.

EPA sought to determine the level of risk at current Electric Power Generation, Transmission and Distribution operations. Relevant to this decision are requirements of existing regulatory programs and voluntary practices, including existing financial responsibility requirements, which can reduce costs to the taxpayer; EPA's experience with clean-ups in the Electric Power Generation, Transmission and Distribution industry; and enforcement actions, which may reduce the need for federally-financed response action at facilities in the Electric Power Generation, Transmission and Distribution industry.

As part of scoping the Electric Power Generation, Transmission and Distribution industry for this proposal, EPA sought to understand general characteristics of the industry that may be relevant to financial responsibility under § 108(b). To do this EPA compiled industry features, including the types of activities undertaken and wastes handled or produced. Additionally, EPA looked at the financial condition of the industry to assess the ability of facilities in this class to pay for any environmental obligations they may incur. Discussion of these aspects of the industry is included in Section VI of this proposal.

Section VII.A. describes EPA's evaluation of cleanup cases at facilities in the Electric Power Generation, Transmission and Distribution industry. So-called "cleanup cases" are sites in the Electric Power Generation, Transmission and Distribution industry where releases and cleanup actions occurred. To perform this evaluation EPA developed an analytic approach that considered cleanup cases to identify risk at currently operating facilities and where taxpayer funds were expended for response action. EPA first examined each site to determine the nature and timing of release. EPA used this information to determine if releases occurred under current

regulations. As an initial screen, releases that occurred prior to 1980 were deemed to be legacy releases that occurred prior to the advent of the modern environmental regulatory framework and were therefore screened out of our analysis. Once EPA identified those sites with more recent releases occurring under a modern environmental regulatory framework, EPA then focused on those response actions that were paid for by the taxpayer by looking at those sites with Fund-financed cleanup activity.

As described in Section VII.B., to understand the modern regulatory framework applicable to currently operating facilities within the Electric Power Generation, Transmission and Distribution industry, EPA compiled applicable federal and state regulations. Specifically, EPA looked to regulations that address the types of releases identified in the cleanup cases. This review also considered industry voluntary programs that could reduce risk of releases. EPA also identified financial responsibility regulations that apply to facilities in the Electric Power Generation, Transmission and Distribution industry, Section VII.C., and compliance and enforcement history for the relevant regulations, Section VII.D.

In considering how to structure its analysis and what data sources to examine, EPA looked at prior analysis done for selection of industry classes in the 2010 ANPRM and public comments responding to EPA's approach. In the public comment period for the ANPRM, EPA received a total of 67 comments from 30 commenters on the Chemical Manufacturing industry, Petroleum and Coal Products Manufacturing industry, and the Electric Power Generation, Transmission, and Distribution industry. In addition, EPA received five comments to the Hardrock Mining Proposed Rule related to the additional classes of facilities.

A large portion of the comments EPA received on the ANPRM were related to the Electric Power Generation, Transmission and Distribution industry. Commenters noted their

view that this industry is distinct from other industries because it does not have a history of failing to cover remediation costs. Further, commenters stated that facilities in this industry are subject to multiple federal environmental statutes and regulations and thus EPA should not duplicate existing financial assurance. In addition, commenters stated that EPA should focus on large electric power generation facilities that produce and release hazardous substances, not transmission or distribution facilities; wind, solar, nuclear, or hydro-electric plants; or natural gas-fired and oil-fired electric generation facilities. Lastly, some commenters believe that EPA placed too much emphasis on Toxics Release Inventory (TRI) data and RCRA Biennial Report (BR) data and expressed their opinions that these data sources are not risk based.

In its 2017 Notice of Intent to Proceed with Rulemakings[18] EPA acknowledged limitations on information that can be gained from TRI and BR data and announced its intention to use industry-specific and current sources of data to identify risk for the purposes of the rulemakings. In the analysis conducted to assess risk in the Electric Power Generation, Transmission and Distribution industry for this action, EPA chose not to rely on TRI and BR data. While the Agency found those data sources appropriate for identifying classes of facilities to examine further at the time of the 2010 ANPRM, it did not find them valuable for assessing current risk in the industry or the need for a response action.

V. Electric Power Generation, Transmission and Distribution Industry Overview

A. Identification of Electric Power Generation, Transmission and Distribution Industry

For this proposal and the associated analyses, EPA reviewed facilities classified under the North American Industry Classification System (NAICS) code 2211. Most recently available

[18] *See* 82 FR 3512

census data lists the size of the industry at 10,330 establishments nationally.[19] The Electric Power

Generation, Transmission and Distribution (NAICS 2211) industry is defined as: Facilities primarily engaged in generating, transmitting, and distributing electric power. Establishments[20] in this industry group may perform one or more of the following activities: (1) generate electric energy; (2) operate transmission systems that convey the electricity from the generation facility to the distribution system; and (3) operate distribution systems that convey electric power received from the generation facility or the transmission system to the final consumer.

B. Current Industry Practices

Operational and decommissioning practices in industrial sectors and their associated firms can ultimately affect the ability of individual firms to responsibly minimize their impact on human health and the environment. To consider the potential for releases as part of its decision making, EPA prepared a high-level review[21] of industry practices and the environmental profile of the Electric Power Generation, Transmission and Distribution industry, which includes a summary of relevant operational and decommissioning materials and wastes.

Electric generating plants convert mechanical, chemical, and/or fission energy into electric energy. Within this population of electric generating plants, there are different types of processes employed to produce electricity (*e.g.*, coal-fired power plants, wind turbines). Electric power transmission is the bulk transfer of electrical energy between the point of generation and

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[19] United States Census Bureau, EC1222A1 – Utilities: Geographic Area Series: Summary Statistics for the U.S., States, Metro Areas, Counties, and Places, 2012.

[20] Establishment is defined as a single physical location where business is conducted or where services or industrial operations are performed. www.census.gov/ces/dataproducts/bds/definitions.html

[21] *Electrical Power Generation, Transmission and Distribution Industry Practices and Environmental Characterization*, June 2019.

multiple substations near a populated area or load center. A distribution substation performs multiple functions, such as stepping down and stabilizing voltage going into distribution lines, splitting and routing distribution power in multiple directions, and disconnecting the transmission grid from the substation when necessary.

Operation of any power plant requires use of a variety of nonhazardous materials, including paper, cardboard, wood, aluminum, containers, packaging materials, office waste, food, municipal trash, and wastes from equipment assembly and maintenance crews. Potentially hazardous materials are also frequently used. These materials can include sandblast media, fuels, paints, spent vehicle and equipment fluids (*e.g.*, lubricating oils, hydraulic fluids, battery electrolytes, glycol coolants), among others. Hazardous materials may include, but are not limited to, asbestos or mercury containing materials, compressed gases used for welding and cutting, dielectric fluids, boiler bottom ash, and oils. Process fluids can be either hazardous or non-hazardous, and can include oily water, spent solvents, chemical cleaning rinses, cooling water, wash and makeup water, sump and floor discharges, oily water separator fluids, boiler blowdown, and water from surface impoundments. Other materials beyond those listed here may be used in the operation of power plants.

The types of hazardous substances that have been released from facilities in the Electric Power Generation, Transmission and Distribution industry include hydrogen fluoride; vanadium, zinc, copper, and lead compounds; ammonia; and arsenic, cobalt, barium, cadmium, and selenium compounds. Coal combustion residuals frequently contain arsenic, selenium, mercury, and other toxic metals. Other substances beyond those listed here may also have been released from facilities in the industry.

As detailed in the 2010 ANPRM, most environmental impacts of electric utilities relate to the fuel sources used to generate electric power. For example, burning coal at coal-fired power plants generates ash that contains contaminants like mercury, cadmium and arsenic. Without proper management, contaminants present in coal ash can pollute waterways, groundwater, and drinking water. The need for federal action to help ensure protective coal ash disposal has been further highlighted by large spills such as those at the TVA Kingston Plant and Duke Energy's Dan River Steam Station,[22] which caused widespread environmental and economic damage to nearby waterways and properties.

Electricity delivery can also affect the environment in several ways. High voltage power switches, inverters, converters, controller devices and other power electronics contain lead, brominated fire retardants, and cadmium in their printed circuit boards; these circuit boards must be managed properly to avoid posing risk to human health or the environment. Electrical substations and urban manhole facilities require periodic cleaning, which may yield hazardous waste. Additionally, insulating materials such as asbestos and polychlorinated biphenyls (PCBs) must also be managed properly.

Industry practices in certain subsectors, the Fossil Fuel Generation (221112), Transmission (221121) and Distribution (221122), of the Electric Power Generation, Transmission and Distribution industry use more hazardous substances and/or generate larger volumes of hazardous waste. Several generation subsectors use and generate lower amounts of hazardous substances or wastes, including Hydroelectric (221111), Nuclear (221113), Solar (221114), Wind (221115), Geothermal (221116) and Tidal (221118). Further information on

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[22] https://www.epa.gov/tn/epa-response-kingston-tva-coal-ash-spill
https://www.epa.gov/dukeenergy-coalash.

industry practices is provided in EPA's document "Electrical Power Generation, Transmission and Distribution Industry Practices and Environmental Characterization"[23] available in the docket for this rulemaking.

Facilities in the electric power generation, transmission and distribution industry are subject to a wide range of environmental regulation and enforcement oversight as discussed in Sections VII.B. and VII.D. below.

C. Industry Economic Profile

Economic trends and financial health in industrial sectors and their associated firms can ultimately affect the ability of individual firms to responsibly address their environmental liabilities. Circumstances where firms face financial stress can potentially contribute to the abandonment of facilities and the creation of orphan wastes sites requiring cleanup. To consider the potential for firms to default on their financial obligations EPA prepared a high-level economic profile of the Electric Power Generation, Transmission and Distribution industry, which includes a summary of relevant financial metrics, market consolidation and diversification trends, industry default risks, and accounting standards for environmental liabilities of entities operating within this industry. This analysis, summarized in this section, looked at the industry as a whole and additionally focused on certain subsectors that might be most pertinent to evaluate for CERCLA 108(b) requirements, including facilities subject to the 2015 Disposal of Coal Combustion Residuals from Electric Utilities Final Rule (2015 CCR Rule).[24] The full

[23] *Electrical Power Generation, Transmission and Distribution Industry Practices and Environmental Characterization*, June 2019.

[24] *Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities* (80 FR 21302, April 17, 2015)

analysis is found in the background document for this section available in the docket for this rulemaking.[25]

According to the U.S. Census Survey of Business Owners, firms under NAICS 2211 generated $430 billion in total value of sales, shipments, receipts, revenue, or business done in 2012. Of this $430 billion, 72 percent came from Electric Power Transmission, Control, and Distribution, while Electric Power Generation accounted for the remaining 28 percent. Within Electric Power Generation, fossil fuel power generation accounted for the largest portion of these values, at 68 percent.

The market structures under which Electric Power Generation, Transmission and Distribution industry firms operate are varied and unique to this industry. Firms, their owners/shareholders, and taxpayers may experience different risk profiles based on the companies' ownership (privately or publicly held), as well as the nature of the market in which they operate (regulated or deregulated). In addition, the federal government owns nine power agencies, accounting for seven percent of net generation and eight percent of transmission. These federally-owned utilities present an extremely low risk of default on environmental liabilities. Publicly-owned utilities also present a low risk of bankruptcy due to detailed financial reporting requirements and government oversight. Publicly-owned utilities may also have access to lower-cost forms of financing, such as tax-free bonds and local low-interest loans. More information on the numbers of publicly-owned utilities and investor-owned utilities, and their relative

[25] *CERCLA 108(b) Economic Sector Profile: Electric Power Generation, Transmission, and Distribution Industry*, June 2019.

percentages across the industry, is provided in the background document available in the docket for this rulemaking.[26]

These utilities can operate in either regulated or deregulated markets, which also come with financial risk/stability tradeoffs. Regulated markets are characterized by vertically integrated monopolies that own and operate all infrastructure and essential components involved in the delivery of electricity to their customers. Regulated firms are given reasonable opportunity to recover necessary and prudent costs in their rates through rate regulation. This generally includes costs necessary to address environmental liabilities, which are ultimately covered by the rate-payers. On the other hand, deregulated, or merchant, markets allow for competition as generation plants sell wholesale electricity to retail suppliers, who set prices, making the performance of environmental cleanups more susceptible to market forces and a firm's ability to pay.

EPA assessed financial ratios, including cash flow-solvency, profitability, efficiency, and debt risk, for companies in the Electric Power Generation, Transmission and Distribution industry to examine trends over time and provide a deeper assessment of the industry's and companies' financial health. Generally, EPA research finds that the Electric Power Generation, Transmission, and Distribution industry remains financially stable. The industry is characterized by diversified fuel sources and vertical integration, reducing firms' dependency on any one subsector and strengthening long-term financial stability. Mergers and acquisitions in recent years have also enhanced financial stability in the long run by further diversifying large firms

[26] Id.

across subsectors. According to the 2018 U.S. Cost of Capital Valuation Handbook, in recent years the industry experienced less risk and volatility than the overall market.

Firms in the industry overall remain profitable and able to cover short-term debt. The data, however, also indicate that larger firms in the industry tend to be more highly leveraged. For some firms, long-term liabilities have risen relative to net worth ratios, resulting in a higher risk of default. While default risk remains relatively low industry-wide, the data suggest two key risk factors that may threaten financial stability for some firms: high dependency on coal and nuclear generation, and rapid market consolidation through mergers and acquisition.

For example, some notable bankruptcies in recent years stemmed from a high dependency on coal and nuclear power generation. Firms more solely invested in coal or nuclear generation faced more difficulty, due to their lack of diversification into alternative fuel sources and lower profit margins.[27] Nevertheless, the occurrence of bankruptcies in this industry has historically been far lower than that of many other industries, and such occurrences remain relatively infrequent. Further evidence suggests that due in part to factors such as the significant amount of fixed infrastructure and consumer dependence on electricity, energy sector firms that default tend to emerge from bankruptcy and continue to operate rather than fully close. Such bankruptcies tend to proceed under Chapter 11 relief, for purposes of debt restructuring. Moreover, in most of these bankruptcies the debtors have retained their responsibility for environmental liabilities. Additionally, if the units are continuing to operate, the obligation to comply with applicable environmental regulations, including the 2015 CCR final rule and any

[27] For example, Energy Future Holdings Corp. filed for bankruptcy in 2014, followed by First Energy Solutions in 2018, after they struggled to make money from coal and nuclear plants in unfavorable market conditions.

final amendments, will still be required. Further discussion on bankruptcy experience of this industry, including evaluation of individual bankruptcy cases, can be found in the background document to this section found in the docket.[28]

Close examination of market structures and typical bankruptcy restructuring that exist within the Electric Power Generation, Transmission and Distribution industry suggest that the industry as a whole should retain the capacity and fiduciary responsibility to pay the costs of addressing their environmental obligations. In this industry, publicly-owned utilities subject to rate-setting regulations, as well as federally-owned utilities, are less likely to default on liabilities than in other industries. For investor-owned utilities and those that operate in deregulated markets, bankruptcy code provisions and legal precedents can provide other protections against the discharge of environmental liabilities in bankruptcy.

VII. Discussion of Cleanup Sites Analysis

A. Cleanup Site Evaluations

As described in the Approach to Developing the Proposed Rule, Section V above, to evaluate the need for financial responsibility regulations in the Electric Power Generation, Transmission and Distribution industry, EPA sought examples of pollution that occurred under a modern regulatory framework and that required a taxpayer-funded CERCLA cleanup. In its evaluation, EPA focused first on identifying response actions at Superfund National Priority List (NPL) sites and sites using the Superfund Alternative Approach (SAA)[29], as those are generally

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[28] *CERCLA 108(b) Economic Sector Profile: Electric Power Generation, Transmission, and Distribution Industry*, June 2019.

[29] The "Superfund Alternative Approach (SAA)" uses the same CERCLA authority and investigation and cleanup process and standards that are used for NPL sites. The threshold criteria for using the SAA are: 1) the site must have contamination significant enough to make it eligible for listing on the NPL; 2) the site is anticipated to need

larger cleanups both in terms of amounts of contaminants removed and costs to carry out these cleanups. EPA also looked at Superfund removals at non-NPL sites. Beyond these sites in the federal Superfund program, EPA included proven CCR damage cases[30] in its evaluation, given the prevalence and significance of the CCR damage cases reviewed for the 2010 ANPRM. Specifically, in that ANPRM, EPA assessed documented evidence of proven damage due to CCRs in 17 cases of groundwater contamination and 10 cases of surface water contamination. EPA noted an additional 40 cases of potential CCR-related groundwater or surface water contamination.

To identify the relevant cleanup cases, EPA included NPL sites, sites using the SAA, and non-NPL sites identified in EPA's Superfund Enterprise Management System (SEMS) database. EPA also included CCR damage cases identified as part of the 2015 CCR Rule.[31] EPA collected information on the timing and nature of releases or threatened releases at these sites. Specifically, EPA sought to identify, as applicable, facility operation end dates, release dates, sources of contamination, NPL proposal dates, contaminated media, type of contaminant, cleanup lead, and information on Superfund expenditures at the site. For this collection, EPA relied on information

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remedial action; and, 3) there must be a cooperative, viable, capable PRP that will sign a CERCLA agreement with EPA to perform the necessary cleanup.

[30] CCR are byproducts of the combustion of coal at power plants by electric utilities and independent power producers. Fly ash, bottom ash, boiler slag, and flue gas desulfurization materials are types of CCR. On April 17, 2015, the EPA published a final rule establishing a comprehensive set of requirements for the disposal of CCR in landfills and surface impoundments. 80 FR 21302. These requirements were finalized under the solid waste provisions, subtitle D, of the Resource Conservation and Recovery Act.

[31] The same list of proven CCR Damage Cases used in promulgation of the 2015 CCR Rule, was also relied upon as the best available source of data on CCR damage cases at the time that these CERCLA 108(b) analyses were conducted. The 2015 CCR Rule requires groundwater monitoring as a first step in a process to monitor and assess contaminants from CCR units. Facilities must post groundwater monitoring data on a publicly available website. Utilities are required to initiate corrective actions should groundwater exceedances be detected. Any such responses being taken under the 2015 CCR Rule are in early stages, too early to discern if any impact to taxpayer may result. EPA, therefore, did not evaluate this data for this proposal.

previously collected as part of the ANPRM, information available in Superfund site documents (*e.g.* NPL listing narratives, Records of Decision, Action Memos, Five-Year Reviews), and information in SEMS as of March 2018, as well as data for proven CCR damage cases, and associated site summaries developed for the 2015 CCR Rule.[32] The cleanup case identification and site information collection processes are described in greater detail in the relevant background documents.[33]

After compiling information about the risks and history of each site, EPA sought to identify instances where releases occurred under a modern regulatory framework and those releases that resulted in Fund-financed response actions. To do so, EPA's methodology applied sequenced screens to the identified sites. EPA first sought to screen out any NPL sites or sites using the SAA where the contaminant release or cleanup activity occurred before 1980. EPA chose 1980 as a cutoff point to initially screen out legacy issues because it was the year that CERCLA was enacted, as well as the date of the initial regulations under RCRA Subtitle C governing the generation, treatment, storage, and disposal of hazardous waste. EPA chose to give these significant RCRA and CERCLA milestones greatest consideration due to the large number of issues of waste management, land disposal, and soil contamination identified in the review of the NPL and SAA cases. EPA believes the 1980 cutoff point to be a conservative screen (*i.e.*, retains more sites in the analysis) in that only the initial RCRA regulations were in place in 1980 and they were refined, expanded and enhanced several times over the next decades. Moreover,

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[32] *Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities*, (80 FR 21302, April 17, 2015).

[33] *Identification and Evaluation of National Priority List (NPL) Sites, Sites Using the Superfund Alternative Approach (SAA), and Coal Combustion Residual (CCR) Cleanup Cases in the Electric Power Generation, Transmission, and Distribution Industry*, June 2019, and *Identification and Evaluation of CERCLA 108(b) Electric Power Generation, Transmission, and Distribution Industry non-National Priority List (NPL) Removal Sites,* June 2019.

the Agency's enforcement authorities expanded in the 1980s as the RCRA program matured. Notably, the passage in 1984 of Hazardous and Solid Waste Amendments (HSWA) resulted in many regulatory changes and enhanced enforcement mechanisms.

Next, EPA sought to remove sites where significant Fund expenditures had not occurred, because response actions that were paid for by private parties do not support the need for CERCLA § 108(b) financial responsibility regulations. Using the "Action Lead" field in SEMS associated with each site, EPA screened out the Potentially Responsible Party (PRP) lead sites. This left only the Mixed Lead Construction or Government Performed Construction sites in the analysis, consistent with EPA's assessment that at PRP Performed Construction sites, responsible parties retain responsibility for the majority of costs. Therefore, PRP Performed Construction sites do not represent significant expenses to the Superfund.

EPA then reviewed the remaining sites (*i.e.*, those with both release dates of 1980 or later and Mixed Lead Construction or Government Performed Construction designation in SEMS) individually in greater detail. Specifically, EPA considered the site history and each of the contamination sources at the site in the context of the regulations that would be applicable to that facility today. A particularly relevant regulation is the 2015 CCR Rule, which added significant new requirements to the coal-fired electric utility plants that dispose of CCR in landfills and surface impoundments. The promulgation of the 2015 CCR Rule effectively establishes the introduction of the modern regulatory framework for coal-fired electric utilities. More information on the regulations EPA considered is available in Section VII.B. below.

Findings from EPA's analysis of the cleanup cases are discussed below, with more detailed information available in the "Identification and Evaluation of National Priority List (NPL) Sites, Sites Using the Superfund Alternative Approach (SAA), and Coal Combustion

Residual (CCR) Cleanup Cases in the Electric Power Generation, Transmission, and Distribution Industry" background document and the "Identification and Evaluation of CERCLA 108(b) Electric Power Generation, Transmission, and Distribution Industry non-National Priority List (NPL) Removal Sites" background document in the docket for this rulemaking.[34] The background documents provide the list of sites identified as well as the information considered in the screening and review process. Also provided is the list of sites remaining at each stage of the analysis, as well as the Agency's rationale for each site's subsequent designation.

Using the data sources described above for the Electric Power Generation, Transmission, and Distribution industry, EPA identified 4 NPL sites and 1 site using the SAA, as well as 24 non-NPL CERCLA removal action sites,[35] and an additional 27 proven CCR-related damage cases[36] not tracked within Superfund data systems, to evaluate according to the methodology described above. As described further below, none of the NPL sites, sites using the SAA, or CCR damage cases were ultimately considered incidents that occurred under a modern regulatory framework nor were they incidents where taxpayer funds were relied upon. For the removal sites, 2 of the 24 cases showed releases of hazardous substances under a modern regulatory framework and required taxpayer expenditures, as described below.

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[34] *Identification and Evaluation of National Priority List (NPL) Sites, Sites Using the Superfund Alternative Approach (SAA), and Coal Combustion Residual (CCR) Cleanup Cases in the Electric Power Generation, Transmission, and Distribution Industry*, June 2019.

[35] None of these 24 removal sites are associated with NPL sites. Removal actions that have taken place at NPL sites or sites using the SAA, either before or after listing or designation, are tracked in SEMS as NPL or SAA level actions and not as separate removal records.

[36] These 27 proven CCR damage cases represent the final list of sites at Electric Power Generation, Transmission and Distribution industry facilities that are not in the Superfund program. Such sites were included in EPA's evaluation due to the known prevalence of ground and surface water damages associated with the management of CCRs. Proven damage cases were relied upon as the highest quality source of data, selected on the basis of strict criteria where the subject damages are confirmed as being attributable to Fossil Fuel Combustion Wastes, based on documented evidence from Scientific Results, Administrative Rulings, and/or Court Findings.

The four NPL sites evaluated include two coal-fired power generation plants with serious CCR contamination, as well as one hydro-electric facility with PCB contamination and one nuclear power generator with radiation contamination. The one site using the SAA is a steam plant that generates electric power from oil-fired burners and natural gas turbines.

For the four NPL sites, either the dates of contaminant release were prior to 1980, or the power plants were federal facilities owned and operated by the federal government. In the case of the one site using the SAA, no further remedial action is called for and costs for removal and cleanup were covered by the PRP under its CERCLA agreement with EPA. As a result, EPA did not undertake a more detailed review of these sites, as summarized in Table 1 below.

Table 1: Evaluation Results for NPL and SAA Sites in the Electric Power Generation, Transmission and Distribution Industry

Total NAICS 2211 NPL & SAA Sites Evaluated	Number of NAICS 2211 NPL & SAA Sites Screened Out Based on Pre-1980, or PRP Lead Status	Detailed Review Concluded Release Occurred Prior to Modern Regulation	Detailed Review Identified a Possible Modern Regulation Release but no Taxpayer Expenditures	Cases with Release(s) Under Modern Regulation that Required Taxpayer Funded Response
5	5	0	0	0

Given the small number of NPL and SAA cleanup cases and the consideration of CCR damage cases for the 2010 ANPRM, EPA chose to evaluate the potential risk from CCR damage cases. EPA evaluated the 27 proven CCR damage cases identified for the 2015 CCR Rule. Following the above methodology for identifying modern risk, 17 of the cases were screened from further consideration because the source of contamination was determined to have occurred prior to 1980, or because the site was designated as a responsible party lead cleanup. Ten remaining cases were determined to have occurred after 1980. When these 10 remaining cases

were assessed against today's modern regulatory framework, the releases were all found to have occurred prior to promulgation of the 2015 CCR Rule[37] and therefore they were screened from further consideration. As described in more detail in the Role of Federal and State Programs section below, the 2015 CCR Rule was specifically designed to contain requirements that address the risks from coal combustion residue disposal – leaking of contaminants into groundwater, blowing of contaminants into the air as dust, and the catastrophic failure of coal ash surface impoundments, *i.e.*, the sources of contamination identified in the CCR damage cases. Therefore, although there are examples of significant releases in more recent years (for example, as recent as 2014 in the case of the Duke Energy breach at Dan River, and 2008 in the case of a catastrophic dike failure at the TVA Kingston Plant), those cases still occurred prior to the advent of the new regulatory standards intended to prevent and remedy these types of incidents. Although not all provisions of the 2015 CCR Rule have been fully implemented, EPA believes the requirements in place and those to be implemented in the coming years sufficiently reduce the risk level at coal-fired power plants. The 2015 CCR Rule is described further in Section VII.B.

The summary results of the analysis of proven CCR damage cases are presented in Table 2 below.

[37] *Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities*, (80 FR 21302, April 17, 2015).

Table 2: Evaluation Results for CCR Damage Cases in the Electric Power Generation, Transmission and Distribution Industry

Total Proven CCR Damage Cases Evaluated	Number of CCR Damage Cases Screened Out Based on Pre-1980, or Responsible Party Lead Status	Detailed Review Concluded Release Occurred Prior to Modern Regulation	Detailed Review Identified a Possible Modern Regulation Release but no Taxpayer Expenditures	Cases with Release(s) Under Modern Regulation that Required Taxpayer Funded Response
27	17	10	0	0

Additionally, EPA chose to look at the major removal cases found in the SEMS database to supplement this analysis. For this sector, EPA identified 24 removal sites which were evaluated using the analytic methodology. Using the methodology, EPA screened out 19 sites because the environmental releases occurred before 1980 or PRPs led the response action. To assess the five sites that remained after those screens, EPA first conducted a detailed review to compare the environmental issues at the sites to the regulations applicable today. Based on the detailed review, EPA concluded that the environmental releases at three of the five remaining removal sites were caused by a one-time incident (*e.g.*, transformer fire, equipment failure), resulting in release of PCB transformer oil. Although not designated PRP-lead actions, according to EPA's record, PRPs financed and performed the response actions to the satisfaction of EPA at these sites, and no Fund expenditures occurred.

Regarding the other two removal sites that remained after the screens, EPA's detailed review indicated that both cases involved long-term PCB contamination resulting from inappropriate handling and storage of PCB waste. However, notwithstanding a government-lead designation in SEMS, neither of these sites required significant taxpayer expenditure. EPA considered all available history at each site to determine the level of Fund expenditure. According to EPA's SEMS expenditure data for English Station power plant in New Haven,

Connecticut (an abandoned coal fired power plant, which operated from 1914 through 1992), the Fund incurred an estimated cost of $17,000, while the PRP signed a Partial Consent Order[38] with the state of Connecticut to spend $30 million to address site contamination potentially dating back to 1914. Similarly, EPA incurred an estimated cost of $374,000 for response actions at Commonwealth Utilities Corporation (CUC) site in the Northern Mariana Islands (a currently operating facility) after the territory-owned company informed EPA that it lacked the technical capacity to address the PCB contamination issues at the site. In this case, EPA did not pursue cost recovery due, in part, to the PRP's inability to pay. The Fund expenditures for response action at these two sites were not deemed significant for purposes of this analysis. More detailed information can be found in the background document and supporting spreadsheets available in the docket for this rulemaking. The background document includes the list of sites identified for analysis, as well as the data and information considered in the screening and review process. The summary results of the analysis are presented in Table 3 below.

Table 3: Evaluation Results for Superfund Removal Sites in the Electric Power Generation, Transmission and Distribution Industry

Total NAICS 2211 Superfund Removal Cases Evaluated	Number of NAICS 2211 Superfund Removal Cases Screened Out Based on Pre-1980, or PRP Lead Status	Detailed Review Concluded Release Occurred Prior to Modern Regulation	Detailed Review Identified a Possible Modern Regulation Release, but no Taxpayer Expenditures	Cases with Release(s) Under Modern Regulation that Required Taxpayer Funded Response
24	19	0	3	2

Prevalent sources of risk

[38] *State of Connecticut v. The United Illuminating Company* Partial Consent Order Number COWSPCB 15-001

EPA's analysis of cleanup cases compiled information, where discernable, on the root cause of releases. Across the industry overall, the most prevalent issue was groundwater contamination from unlined or leaking CCR surface impoundments and landfills. Other sources of contamination observed at these sites include catastrophic failures/breaches of dikes, and collapse of dry ash stacks. The common issues observed at most removal sites were legacy PCB and asbestos contamination resulting from the handling and disposal of PCB-containing oil and asbestos-containing insulation materials at fossil fuel powered electric generation plants.

B. Role of Federal and State Programs and Voluntary Protective Industry Practices at Facilities in the Electric Power Generation, Transmission and Distribution Industry

In the January 6, 2010 ANPRM, EPA stated that it recognized that the NPL data reflect releases arising from activity that, in some cases, predates CERCLA, RCRA, and other legal requirements and, as such, the Agency welcomed information about current releases of hazardous substances to the environment to help inform EPA's future actions. As discussed in the Approach section of this proposal, to enable EPA to base its decision on risk posed by facilities operating under modern conditions, *i.e.*, the types of facilities to which financial responsibility requirements would apply, EPA developed an approach to identify and consider relevant state and federal regulatory requirements and financial responsibility requirements that currently apply to operating facilities, as well as voluntary protective practices. EPA thus undertook an effort to gather information about federal and state environmental programs and industry voluntary programs that have been implemented and are applicable to currently operating facilities within the Electric Power Generation, Transmission and Distribution industry today. EPA evaluated the extent to which activities that contributed to the risk associated with the production, transportation, treatment, storage, or disposal of hazardous substances are now

regulated. EPA recognizes that substantial advances have been made in the development of manufacturing, pollution control, and waste management practices, as well as the implementation of federal and state regulatory programs to prevent and address such releases at these facilities. In part, EPA's proposed decision to not issue financial responsibility requirements for this industry was determined based on EPA's review and analysis of federal regulations and complemented by state program regulations. Industry voluntary programs were considered as an additional factor in EPA's proposed decision. EPA's findings and conclusions about the impact of federal and state environmental programs, along with industry voluntary programs, are discussed in the following section.

Overview of Federal and State Regulatory Programs and Industry Voluntary Practices Applicable to the Electric Power Generation, Transmission and Distribution Industry

EPA evaluated federal and state regulations which address the potential for release of hazardous substances to the range of environmental media that may be affected by a release from a facility in the Electric Power Generation, Transmission and Distribution industry. EPA found that a comprehensive regulatory framework has developed since the enactment of CERCLA. Federal statutes such as the Clean Air Act (CAA), the Clean Water Act (CWA), and RCRA are applicable across the entire industry and lay the foundation for this regulatory framework. Specific regulations are discussed in the background document according to the environmental issues that the regulations address: air pollution, water pollution, emergency planning and response, hazardous substances management, and hazardous and non-hazardous waste disposal and management. This background document is located in the docket for this rulemaking.[39]

[39] *Summary Report: Federal and State Environmental Regulations and Industry Voluntary Programs in Place to Address CERCLA Hazardous Substances at Facilities in the Electric Power Generation, Transmission and Distribution Industry*, June 2019.

Regulations Addressing Prevalent Sources Identified in Analysis of Cleanup Cases

EPA's analysis of the cleanup cases found that the most prevalent releases were:

- groundwater contamination from unlined or leaking CCR surface impoundments and landfills, catastrophic failures/breaches of CCR containment dikes, and collapse of dry ash stacks;
- PCB contamination from the handling and disposal of PCB-containing oil; and
- asbestos contamination from handling and disposal of asbestos-containing insulation.

CCR is one of the largest industrial waste streams generated in the United States. CCRs are residuals from the combustion of coal at coal-fired power plants; they consist of fly ash, bottom ash, boiler slag, and flue gas desulfurization materials. Approximately 110 million tons of CCR was generated in 2012.[40] The disposal of CCR is subject to recent regulation under the Agency's 2015 CCR Rule.[41] EPA promulgated the rules for CCR disposal under RCRA Subtitle D. The 2015 CCR Rule addresses risks from CCR disposal identified in these cases – leaking of contaminants into groundwater, blowing of contaminants into the air as dust, and the catastrophic failure of CCR surface impoundments such as what occurred at TVA's Kingston Plant – by adding new requirements for CCR landfills and surface impoundments. In any cases where releases might occur, the 2015 CCR Rule includes both closure and corrective action provisions that could be used to remedy those releases. These regulations establish minimum national criteria for existing and new CCR landfills, existing and new CCR surface impoundments, and lateral expansions of these units including: location restrictions, design and operating criteria, groundwater monitoring and corrective action, closure and post closure care requirements, as

[40] *See* 80 FR 21303 (April 17, 2015)

[41] *See* 80 FR 21301.

well as recordkeeping, notification, and internet posting requirements. These regulatory requirements are designed specifically to prevent the types of risks from CCR that have occurred in the past. EPA did not establish financial assurance requirements as part of the CCR rule.[42]

EPA recognizes that the 2015 CCR Rule is not yet fully implemented at this point, although rule implementation is ongoing. While the rule became effective in 2015, it established timeframes for the technical criteria based on the amount of time needed to implement the requirement. Thus, for some requirements implementation is complete, and for other requirements, activities are ongoing. The implemented standards themselves have materially reduced risk by, for example, imposing structural integrity criteria on surface impoundments holding CCR to help prevent damages that would occur if the unit's embankment or dike failed structurally, such as the dike failure at the TVA Kingston Plant in 2008. One of these criteria is that the surface impoundment must be assessed to demonstrate that the unit design and operation meet minimum factors of safety, and if the unit does not, the surface impoundment must be closed. The deadline to complete this initial assessment was 2016 or 2108, depending on designations in the rule, and represents an important rule protection that has been implemented.[43]

An example of an important risk-reducing requirement of the 2015 CCR rule for which implementation is ongoing is the requirement for groundwater monitoring and corrective action. Owners and operators of landfills and surface impoundments holding CCR are required to install

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[42] In the proposal for the 2015 CCR Rule the Agency stated that the RCRA subtitle D alternative did not include proposed financial responsibility requirements and that any such requirements would be proposed separately. The Agency solicited comment on whether financial responsibility requirements under CERCLA § 108(b) should be a key Agency focus under a RCRA subtitle D approach. While the Agency received numerous comments urging the Agency to establish financial responsibility as part of the subtitle D option, the CERCLA § 108(b) option did not receive significant support. EPA did not require financial assurance requirements as part of the 2015 CCR Rule and committed to continue to investigate the use financial responsibility requirements under other statutory authorities.

[43] The 2015 CCR Rule requires that operating surface impoundments must be re-assessed every five years to ensure that the unit remains structurally sound.

a system of monitoring wells to detect releases of hazardous constituents from the units. If this monitoring shows an exceedance of a groundwater protection standard for specific constituents, corrective action must be taken to remedy the contamination. The groundwater monitoring and corrective action program is an example of a requirement that is ongoing but has already provided meaningful protection by identifying issues and requiring corrective action. Based on information made publicly available by electric utilities, current groundwater monitoring results show that a significant percentage of the electric utilities will need to implement the rule's corrective action program. At this point, electric utilities are at the early stages of implementing the corrective action program.

The 2015 CCR Rule also established timelines and standards for closure and post-closure care. Specifically, the rule requires all CCR units to close in accordance with specified standards and to monitor and maintain the units for a period of time after closure, including the groundwater monitoring and corrective action programs. These criteria help ensure the long-term safety of closed CCR units. EPA expects, based on information made publicly available by the electric utilities, that a significant percentage of CCR surface impoundment will begin closing in the coming years. A small percentage of CCR units have already completed closure under the rule.

As described here, the 2015 CCR Rule is not yet fully implemented; however, the activities associated with the deadlines that have already passed have already reduced risk from coal-fired power plants, including that of a Superfund response being necessary. Moreover, EPA expects that activities associated with the ongoing CCR rule compliance will further reduce risk at these facilities as units are closed in accordance with the prescribed standards and corrective actions taken.

Contamination from PCBs and asbestos is largely addressed by toxic substances management regulations under the authority of the Toxic Substances Control Act (TSCA). TSCA provides EPA with authority to issue rules requiring reporting, record-keeping, and testing of specific chemicals and to establish regulations that restrict the manufacturing (including import), processing, distribution in commerce, use, and disposal of chemicals and mixtures. TSCA authorizes EPA to prevent unreasonable risks by regulating chemicals and mixtures, ranging from hazard warning labels to the outright ban on the manufacture, processing, distribution in commerce or use of certain chemicals and mixtures. TSCA and its amendments have also established specific programs for the management of certain chemicals – namely, PCBs, asbestos, radon, lead, mercury, and formaldehyde.

TSCA section 6(e) establishes a set of requirements that apply throughout the lifecycle of PCBs. Specifically, TSCA prohibits the manufacturing, processing, distribution in commerce, and use of PCBs, except under certain exclusions, exemptions, and authorizations. Regulations implementing TSCA section 6(e), found in 40 CFR Part 761, contain certain criteria through which EPA may obtain additional knowledge of the PCB universe. For example, the regulatory use authorization for PCB Transformers generally require owners to register those transformers with EPA. TSCA also established EPA's authority to promulgate rules to prescribe methods for the disposal of PCBs. The TSCA PCB regulations include storage and disposal requirements for specific types of PCB waste which are designed to prevent unreasonable risk of injury to health or the environment. These regulations may dictate comprehensive requirements, such as verification sampling and financial assurance, or may provide for the issuance of an approval (permit) which takes into account factors specific to the facility and serves as an enforceable document that governs PCB activities at that facility. In particular, the PCB regulations provide

for the cleanup and disposal of PCB remediation waste through self-implementing provisions, performance-based disposal requirements, and site-specific risk-based approvals. Cleanup and disposal requirements can include notification, sampling, approval requirements, and institutional controls. Regulatory notification provisions for PCB waste activities require facilities to notify EPA of specific PCB activities, including transportation, disposal, storage, R&D/treatment, and certain generation. All affected PCB waste is manifested from the generator to final disposal.

Regulation of asbestos is similarly rigorous. Numerous laws and regulations control the use of asbestos and direct procedures for asbestos abatement. Under TSCA, in 1989, EPA imposed a partial ban on the manufacture, import, processing, and distribution of some asbestos-containing products, and in the April 2019 Significant New Use Rule[44] ensured that other discontinued uses of asbestos cannot reenter the marketplace without EPA review. OSHA has promulgated standards for asbestos exposure in work under 29 CFR Part 1926.1101. This part sets permissible exposure limits, set standards for restriction of access to regulated areas and require employers to provide respirators for employees in those areas, implement monitoring and exposure assessment testing and frequency requirements, and prescribe engineering controls and work practices for operations to come into compliance. Additionally, EPA's Asbestos Worker Protection Rule, promulgated under the authority of the TSCA, extends these worker protections to state and local government employees involved in asbestos work who are not covered by OSHA's asbestos regulations. Asbestos demolition methods are separately regulated by the Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP) regulation under

[44] *Restrictions on Discontinued Uses of Asbestos* (84 FR 17345, April 25, 2019).

the Clean Air Act. The Asbestos NESHAP established requirements that apply to asbestos removal, transportation, and disposal practices from a variety of sources, and is intended to minimize the release of asbestos fibers during activities involving the handling of asbestos.[45]

State Regulatory Programs

Some state regulations impose requirements on the Electric Power Generation, Transmission, and Distribution industry in addition to federal regulatory requirements. The requirements of current state programs can reduce risk at facilities that manage hazardous substances. EPA researched key state environmental regulations relevant to the Electric Power Generation, Transmission and Distribution industry from states representative of the geographic distribution of facilities. In many cases, states have adopted federal regulations or incorporate them by reference into state administrative codes. In other cases, states have promulgated their own regulatory regimes that expand on or are more stringent that analogous federal regulations or implement standalone state regulations. A detailed discussion of state regulations, as well as the methodology EPA used in selecting the 25 states that it researched, is available in the regulation summary background document in the docket for this rulemaking.[46]

States regulations relevant to the Electric Power Generation, Transmission and Distribution industry primarily focus on air pollution. State air regulations are an example of state regulations that set standards that are stricter than federal regulations. Specifically, states

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[45] *See* https://www.epa.gov/asbestos/overview-asbestos-national-emission-standards-hazardous-air-pollutants-neshap#was.

[46] *Summary Report: Federal and State Environmental Regulations and Industry Voluntary Programs in Place to Address CERCLA Hazardous Substances at Facilities in the Electric Power Generation, Transmission and Distribution Industry*, June 2019. To summarize the state regulatory framework relevant to fossil fuel electric power generation facilities, EPA first determined the geographic distribution of fossil fuel power plants and determined which states contain over 50 percent of these facilities in the United States. Those states are: Pennsylvania, Michigan, Indiana, Illinois, Missouri, Texas, Kentucky, Iowa, Ohio, Wisconsin, Florida, Minnesota, and North Carolina. For a description of EPA's methodology in determining rele0vant state regulations, see Appendix I. For a comprehensive summary of the relevant state regulations that EPA located, see Appendix III.

may set air emission standards for emissions other than the six criteria pollutants regulated under the CAA, such as mercury, volatile organic compounds, and visible air emissions. Some states, such as Wisconsin, have issued emission limitation and technology standards for facilities constructed before the implementation of federal new source requirements; those sources are exempt from the federal source performance standards.

In addition, state regulations relevant to the Electric Power Generation, Transmission and Distribution industry primarily focus on the management and disposal of CCR wastes. More than half of U.S. states had implemented some form of their own CCR-related monitoring, design/siting, and/or inspection requirements beyond those called for at the federal level, prior to promulgation of the 2015 CCR Rule. Additionally, most states have been authorized to implement the RCRA Subtitle C program, which applies to certain facilities and waste streams in the Electric Power Generation, Transmission and Distribution industry. For specific substances and operational practices, some states with authorized RCRA programs have imposed requirements that are more stringent than the federal regulations.

EPA's review of current federal and state regulations indicates that a framework of requirements is being implemented, that reduces the risks posed by operating facilities in the Electric Power Generation, Transmission and Distribution industry. This risk reduction is critical to understanding "the degree and duration of risk associated with the production, transportation, treatment, storage, or disposal of hazardous substances" as well as the risk to taxpayers of being required to fund response activities under CERCLA, and thus is a primary factor leading to EPA's proposed decision to not issue financial responsibility requirements for this industry.

Industry Voluntary Practices

EPA reviewed facility Risk Management Plans, industry materials, government literature and academic literature to locate voluntary programs that: 1) attempt to address CERCLA hazardous substance management, disposal and release prevention, mitigation and response; 2) are relevant to fossil fuel electric power facilities; and 3) in which fossil fuel electric power facilities participated. Industry voluntary programs fall into three categories: those sponsored by federal, state, or local governmental agencies; those fostered within industry associations or non-governmental organizations; and those implemented by individual firms. Some of these programs set discharge, emissions and safety standards that supplement federal and state standards and may come with a certification from the government agency or industry group that promotes the standards. Other programs solicit reporting on emissions or other data in order to publish industry performance reports. EPA's review of available studies found that the industry voluntary programs can be effective at reducing both pollution and the frequency of government enforcement actions. A detailed discussion of industry voluntary practices, as well as the methodology used by EPA, is available in Section II. Industry Voluntary Programs of the regulation summary background document in the docket for this rulemaking.[47]

C. Existing State and Federal Financial Responsibility Programs

To help inform the level of risk associated with classes of facilities in the Electric Power Generation, Transmission and Distribution industry, EPA reviewed existing state and federal financial responsibility (FR) programs that may be applicable to the industry and that cover a wide range of liabilities including, closure, post-closure care, corrective action, third-party personal injury/property damage, and natural resource damages. EPA focused on these types of

[47] *Summary Report: Federal and State Environmental Regulations and Industry Voluntary Programs in Place to Address CERCLA Hazardous Substances at Facilities in the Electric Power Generation, Transmission and Distribution Sector*, June 2019

FR programs for two reasons. First, these categories of damages, actions and costs are like those that could be covered by CERCLA § 108(b) rulemaking and thus they help inform the need for CERCLA § 108(b) FR for this industry. Secondly, the existence of FR requirements can help create incentives for sound practices, reducing the risk of releases requiring CERCLA response action. EPA also sought to identify state cleanup funds that are at least partially funded by industry (*e.g.*, through a tax on hazardous wastes generated), and that could cover future CERCLA liabilities that may arise at electric power facilities. EPA's report focused on the 25 states reviewed in EPA's reports on existing state regulatory and voluntary programs (excluding FR programs) that may be applicable to electric power facilities. Finally, EPA reviewed existing FR requirements in the following federal programs: (1) RCRA Subtitle C Treatment, Storage, Disposal Facilities; (2) TSCA commercial PCB waste facilities; (3) EPA Safe Drinking Water Act Underground Injection Control wells; (4) U.S. Nuclear Regulatory Commission (NRC) requirements for decommissioning nuclear power reactors; and (5) NRC insurance requirements for nuclear incidents. The report is available in the docket for this rulemaking.[48]

EPA identified a range of existing FR programs that may be applicable to facilities in the Electric Power Generation, Transmission and Distribution industry. These programs include the federal programs mentioned above as well as state programs related to:

- Cleanup or corrective action financial assurance for discharges/releases of hazardous waste or hazardous constituents
- Facility remediation FR associated with transfer in ownership or facility closure
- FR for storage tanks containing hazardous substances

[48] *Review of Existing Financial Responsibility Laws Potentially Applicable to Classes of Facilities in the Electric Power Generation, Transmission, and Distribution Industry*, June 2019.

- FR included in enforcement orders to assure compliance
- FR specific to coal-fired electric generating facilities
- FR specific to facilities that process or dispose of coal combustion residuals, for example, in coal ash ponds and/or landfills
- FR found in land use/siting permit conditions

The applicability of these programs will depend on a variety of facility-specific factors, for example, use of a specific piece of equipment (*e.g.*, ownership of an underground storage tank that contains regulated substances) or engagement in a specified activity (*e.g.*, a release of a hazardous substance). Furthermore, state financial responsibility programs vary by state and some types of FR programs exist only in subsets of the states reviewed. However, a majority of the states reviewed, 20 of the 25, had financial responsibility programs in place that cover the processing or disposal of coal combustion residuals. EPA believes that state and federal FR programs help reduce risk at facilities where they are applicable.

D. Compliance and Enforcement History

To understand the experience of courts settlements and judgments, EPA looked at compliance and enforcement in the Electric Power Generation, Transmission and Distribution industry. Compliance assistance, monitoring, and enforcement are important components of the regulatory framework discussed above. Through inspections, compliance monitoring can identify noncompliance at regulated facilities. Enforcement actions impose legal instruments to ensure correction of deficiencies and achieve compliance with environmental requirements. Compliance and enforcement actions have certain functions which EPA considers particularly pertinent to the risk determination for rulemaking under CERCLA § 108(b). First, through negotiated agreements, EPA can ensure that the responsible party carries out or pays for the cleanup in the

event that noncompliance causes release of a hazardous material. Second, enforcement actions can compel a responsible party to return to compliance through instruments such as settlements and orders. Third, the prospect of financial penalties that can accompany these enforcement instruments can encourage compliance. All of these functions support the regulatory structure in reducing risk of Fund expenditures. EPA looked at applicable enforcement authorities as well as historical enforcement and compliance data in the development of this proposal.

EPA obtained data from the EPA Enforcement and Compliance History Online (ECHO) system to provide a review of federal enforcement from FY1973 through FY2017.[49] Facilities whose primary NAICS codes indicate Electric Power Generation, Transmission and Distribution industry activities (NAICS 2211) were included in EPA's review. ECHO data show that initiatives and normal review or inspection of facilities resulted in over 2000 enforcement cases in the Electric Power Generation, Transmission and Distribution industry from FY1974 through FY2017. CAA (62%) and CWA (12%) cases were the most common. There are a dramatically smaller number of cases in RCRA (6%), CERCLA (5%), and the Emergency Planning and Community Right-to-Know Act (EPCRA) (4%). Further description of this review, which includes details on the topics summarized in this section, is available in the background document "Enforcement, Court Settlements and Judgments in the Electric Power Generation, Transmission and Distribution Industry" in the docket for this rulemaking.

1. Relevant Industry-Specific Focused Federal Enforcement Initiatives

One way that EPA's Office of Enforcement and Compliance Assurance focuses enforcement and compliance resources on the most serious environmental violations is with

[49] ECHO does not include all of EPA's compliance and enforcement activity because regions are not required to report "informal actions," and it does not consistently capture all state actions.

enforcement initiatives that develop and implement national program priorities. Enforcement initiatives are an important tool for identification of noncompliance and subsequent actions to compel return to compliance. Additionally, these initiatives emphasize use of the full range of compliance assurance tools, not only enforcement, and can thereby reduce risk by helping facilities prevent releases that might otherwise be caused by noncompliance. In recent years, facilities in the Electric Power Generation, Transmission and Distribution industry were included in two initiatives:

a. Ensuring Energy Extraction Sector Compliance with Environmental Laws

This initiative focuses on significant public health and environmental problems, including exposure to significant releases of volatile organic compounds, reducing CAA non-attainment, and reducing water quality impairment. The background document[50] details some of the relevant initiative inspection and NAICS 2211 enforcement results from FY2011 through FY2017.

b. Reducing Air Pollution from the Largest Sources

This initiative focused on ensuring that large industrial facilities, like coal fired power plants, comply with the Clean Air Act when building new facilities or making modifications to existing ones. This initiative benefited human health and the environment with significant cuts in air emissions, especially from coal fired power plants, since it began in 2005.

2. Enforcement of Recent Electric Power Generation, Transmission and Distribution Industry Federal Requirements

[50] *Enforcement, Court Settlements and Judgments in the Electric Power Generation, Transmission and Distribution Industry*, June 2019.

At the time of promulgation, EPA lacked the authority to enforce the 2015 CCR Rule.[51] Enforcement was by citizen suits only, although the Agency could use its authorities under RCRA § 7003 to address conditions that may present an "imminent and substantial endangerment." The Water Infrastructure Improvements for the Nation (WIIN) Act[52] was signed in December of 2016 and expanded the enforcement authorities available to EPA. The Act states that EPA may use its information gathering and enforcement authorities under RCRA §§ 3007 and 3008 to enforce the 2015 CCR Rule or permit provisions.[53] At this time, no cases of federal enforcement of this regulation have yet been concluded.

a. Review of Enforcement Response Actions

Enforcement cases can include instances where removal action, release reduction, or return to compliance include the removal of contaminated media by the responsible party. Measures to remove contamination may be required in enforcement orders under the range of environmental statutes and are negotiated to require activities aligned with return to compliance.[54] In this situation, taking an enforcement action directly reduces risks to human health and the environment. During the period FY2012 through FY2017, 14 settled Electric Power Generation, Transmission and Distribution industry enforcement cases were identified as

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[51] The 2015 CCR Rule was promulgated under Subtitle D of RCRA, and at the time of rule promulgation in 2015, it did not require the states to adopt or implement the regulations or to develop a permit program. It also did not provide a mechanism for EPA to approve a state permit program to operate "in lieu of" the federal regulations.

[52] Public Law 114-322.

[53] Section 2301 of the WIIN Act, 42 U.S.C. § 6945(d), amended RCRA to allow States to submit permit (or other system of prior approval and conditions) programs to EPA for approval. The Act states that if a state CCR permitting program is approved by the Agency (known as a participating state), those permits will operate "in lieu of" the federal regulations in part 257. The Act states that EPA will develop permits for those units located in tribal lands and, if given specific appropriations, EPA will develop a permitting program for those units located in non-participating states.

[54] These ECHO enforcement removals are separate from the Superfund removals analyzed elsewhere. ECHO system data includes the combined value of total enforcement financial penalties, Supplemental Environmental Projects (SEPs), and associated compliance activity

those where removal of contaminated media occurred. Six of these are CERCLA cases and five are CWA cases. One CAA and two TSCA cases are also included.

The substances removed are generally categorized as metals, hydrocarbons, and hazardous chemicals. These cleanups arising from federal enforcement actions mitigated risks to human health and the environment by removing soils, groundwater, and sediments contaminated by a variety of substances, and reduced likelihood of impact to the Fund.

b. Total value of enforcement settlements and judgments

Settlements and judgments in enforcement cases can result in financial penalties, supplemental environmental projects (SEPs), and activities required to return to compliance.[55] Enforcement settlements and judgments can ensure that the responsible party conducts or pays for cleanup, drive a return to compliance, and incentivize compliance. For all enforcement cases from FY1974 through FY2017 in the Electric Power Generation, Transmission and Distribution industry, the total penalties recovered are over $415 million, the total value of SEPs is over $129 million, and the total compliance activity estimates are over $34.2 billion, all in 2017 inflation-adjusted dollars.

3. Review of Major CERCLA and RCRA Cases

As stated in the cleanup site evaluations in Section VII.A., particular consideration was given to CERCLA and RCRA regulations as relevant components of the modern regulatory framework that applies to the Electric Power Generation, Transmission and Distribution industry. There have been over 224 CERCLA and RCRA cases brought in this industry, beginning in 1984. The ten largest CERCLA or RCRA enforcement settlements and judgments

[55] Compliance actions ordered can include the removal of contaminated media, installation of new equipment, or implementation of compliant processes.

for the Electric Power Generation, Transmission and Distribution industry have 2017 inflation-adjusted values ranging from over $250,000 to $1.1 billion. Further discussion of the details on the federal actions for these and additional criminal cases can be found in the background document "Enforcement, Court Settlements and Judgments in the Electric Power Generation, Transmission and Distribution Industry." This document identifies facilities where noncompliance was identified and was addressed by means of formal federal enforcement. The scope of the background document does not include either facilities where noncompliance was addressed through informal enforcement, facilities where noncompliance was addressed by a state, or facilities that are in compliance.

The compliance and enforcement actions documented here and in the background document show that where noncompliance is identified, the preponderance of industry responsible parties are conducting or paying for cleanups, returning to compliance, and improving public health and the environment. Although enforcement actions alone do not completely supplant the need for Fund-financed response actions in the Electric Power Generation, Transmission and Distribution (as discussed in section VIII, below), effective criminal, administrative and judicial enforcement demonstrates proper functioning of this component of the modern regulatory framework. Enforcement thus serves as a complementary element supporting the overall conclusion that CERCLA 108(b) financial assurance is not necessary.

VIII. Decision to Not Propose Requirements

Based on consideration of the analyses described in the previous sections, EPA has reached a conclusion that the degree and duration of risk posed by the Electric Power Generation, Transmission and Distribution industry does not warrant financial responsibility

requirements under CERCLA § 108(b) and thus is proposing to not issue such requirements. The analysis and proposed finding in this proposal are not applicable to and do not affect, limit, or restrict EPA's authority to take a response action or enforcement action under CERCLA at any facility in the Electric Power Generation, Transmission, and Distribution Industry, including any currently operating facilities or those described in this proposal and in the background documents for this proposal, and to include requirements for financial responsibility as part of such response action. The set of facts in the rulemaking record related to the individual facilities discussed in this proposed rulemaking support the Agency's proposal not to issue financial responsibility requirements under Section 108(b) for this class, but a different set of facts could demonstrate a need for a CERCLA response action at an individual site. This proposed rulemaking also does not affect the Agency's authority under other authorities that may apply to individual facilities, such as the CAA, the CWA, RCRA, and TSCA.

EPA believes the evaluation of the Electric Power Generation, Transmission and Distribution industry demonstrates significantly reduced risk at current Electric Power Generation, Transmission and Distribution operations. The reduction in risks due to the requirements of existing regulatory programs and voluntary practices combined with reduced costs to the taxpayer, demonstrated by EPA's cleanup case analysis, existing financial responsibility requirements, and enforcement actions, reduce the need for federally-financed response action at facilities in the Electric Power Generation, Transmission and Distribution industry. EPA looked at current industry practices, market structure and economic performance of the industry; analyzed cleanup cases and CCR proven damage cases for facilities in the industry to identify risk; evaluated the extent to which the industry and sources of releases are

covered by a modern regulatory framework, the degree to which taxpayers have been called upon to pay for cleanup, and EPA enforcement history in the industry.

As discussed in Section VII.A., EPA identified a small number of cleanup cases that occurred under a modern regulatory framework and also entailed some Fund expenditure. Overwhelmingly, however, the industry was found to be practicing responsibly within the current regulatory framework, with just 2 sites out of the 10,330 establishments in the industry indicating a significant impact to the Fund under a modern regulatory framework. The language in § 108(b) on determining the degree and duration of risk and on setting the level of financial responsibility confers a significant amount of discretion on EPA. It is EPA's assessment that the small set of federally-funded cleanup cases due to recent contamination does not warrant the imposition of financial responsibility requirements on the entire Electric Power Generation, Transmission and Distribution industry under CERCLA § 108(b).

EPA's analysis of Superfund cleanup cases, supplemented by a review of CCR damage cases, found that the most prevalent source of contamination stemmed from unlined or leaking CCR surface impoundments and landfills. Requirements under the newly-imposed regulatory structure of the 2015 CCR Rule specifically target this CCR risk, minimizing the likelihood of future contamination from this source incurring liabilities to the Fund. EPA believes the 2015 CCR rule requirements, both those implemented and those with ongoing implementation, significantly reduce the risk of a Superfund response being necessary at these facilities. The Agency believes this risk reduction is particularly notable in light of coal fired power plant sector's minimal impact on Superfund resources to date as indicated by the review of NPL, SAA and removal sites associated with the sector.

The analysis of removal cases found PCB and asbestos contamination to be the leading causes of removal actions in the industry. The current regulatory framework, including application of the TSCA and RCRA regulations, limits the use of these contaminants and requires both proper disposal and cleanup of these contaminants when releases do occur.

EPA acknowledges that regulations do not always prevent releases, and the risk of a release is lessened but never eliminated by existing federal and state environmental regulations. However, EPA believes that the network of federal and state regulations creates a comprehensive framework that applies to prevent releases that could result in a need for future cleanup. In addition, enforcement settlements and judgments that force return to compliance are effective components of the applicable regulatory structure. EPA's analysis of enforcement history shows that enforcement of the applicable regulations provides a lever to monitor compliance, obtain responsible party cleanups, and recover financial penalties. Federal and state regulatory programs, backed up by effective enforcement and complemented by industry voluntary practices, have improved public health and the environment significantly since CERCLA's initial adoption over 40 years ago. EPA believes within the Electric Power Generation, Transmission and Distribution industry this framework provides effective controls which protect human health and the environment.

Examination of market structures for the Electric Power Generation, Transmission and Distribution industry further indicates comparatively low likelihood of default on environmental obligations at the expense of taxpayers and the government by companies in this industry. This economic performance combined with the low impact to the Fund by facilities with releases that happened under the modern regulatory framework, suggests that the degree of risk to the Fund

by this industry does not rise to a level that warrants CERCLA § 108(b) financial responsibility requirements.

For these reasons, EPA is proposing today to not issue financial responsibility requirements under CERCLA § 108(b) for this industry.

A. Solicitation of Public Comment on this Proposal

EPA solicits comments on all aspects of today's proposal. EPA is specifically interested in receiving comments on several issues and requests the following information:

- Examples of Electric Power Generation, Transmission and Distribution industry related response actions related to releases which took place under the modern regulatory framework where potentially responsible parties (PRPs) did not lead the response at the facility.
- Examples of Electric Power Generation, Transmission and Distribution industry related response actions related to releases which took place under the modern regulatory framework where PRPs have not taken financial responsibility for their environmental liabilities.
- Information on state-lead or other federal agency cleanups or instances of natural resource damages associated with this industry that may supplement the information on cleanups gathered and analyzed for this proposal.
- Information about existing federal, state, tribal, and local environmental requirements for the Electric Power Generation, Transmission and Distribution industry relevant to the prevention of releases of hazardous substances that were not evaluated as part of this proposal.

- Information about financial responsibility requirements applicable to the Electric Power Generation, Transmission and Distribution industry that were not evaluated as part of this proposal.

IX. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is a significant regulatory action that was submitted to the Office of Management and Budget (OMB) for review, because it may raise novel legal or policy issues [3(f)(4)]. Any changes made in response to OMB recommendations have been documented in the docket for this rulemaking. EPA did not prepare an economic analysis for the proposed rule, since this action imposes no regulatory requirements.

B. Executive Order 13771: Reducing Regulation and Controlling Regulatory Costs

This proposed rule is not subject to the requirements of Executive Order 13771 (82 FR 9339, February 3, 2017) because this proposed rule would not result in additional cost.

C. Paperwork Reduction Act (PRA)

This action does not impose an information collection burden under the PRA, because this action does not impose any regulatory requirements.

D. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. This action will not impose any requirements on small entities.

E. Unfunded Mandates Reform Act (UMRA)

This action does not contain any unfunded mandate as described in UMRA, 2 U.S.C. 1531-1538, and does not significantly or uniquely affect small governments, because this action does not impose any regulatory requirements.

F. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the federal government and the states, or on the distribution of power and responsibilities among the various levels of government, since this action imposes no regulatory requirements.

G. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have tribal implications as specified in Executive Order 13175, because this action imposes no regulatory requirements. Thus, Executive Order 13175 does not apply to this action.

H. Executive Order 13045: Protection of Children From Environmental Health and Safety Risks

This action is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children, since this action imposes no regulatory requirements.

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

This action is not a "significant energy action" because it is not likely to have a significant adverse effect on the supply, distribution or use of energy, since this action imposes no regulatory requirements.

J. National Technology Transfer and Advancement Act

This rulemaking does not involve technical standards.

K. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

EPA believes that this action is not subject to Executive Order 12898 because it does not establish an environmental health or safety standard, since this action imposes no regulatory requirements.

List of Subjects in 40 CFR Part 320

Environmental protection, Financial responsibility, Hazardous substances, Electric power.

Dated: _____.

_____

Andrew R. Wheeler,

Administrator.