

## ENVIRONMENTAL PROTECTION AGENCY

### 40 CFR Part 320

[EPA-HQ-SFUND-2015-0781; FRL-9953-75-OLEM]

RIN 2050-AG61

### Financial Responsibility Requirements Under CERCLA § 108(b) for Classes of Facilities in the Hardrock Mining Industry

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** The Environmental Protection Agency (EPA) is proposing requirements under section 108(b) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) for demonstrating financial responsibility. This proposed rule would create a new Part in the CERCLA regulations to require financial responsibility under CERCLA § 108(b), define requirements for demonstration of financial responsibility, define requirements for maintenance of financial responsibility instruments, and establish criteria for owners and operators to be released from financial responsibility requirements. In addition, this proposal would establish specific financial responsibility requirements applicable to certain classes of mines and associated mineral processing facilities within the hardrock mining industry. EPA expects this proposed rule will, when made final, increase the likelihood that owners and operators will provide funds necessary to address the CERCLA liabilities at their facilities, thus preventing owners or operators from shifting the burden of cleanup to other parties, including the taxpayer. In addition, EPA expects that by adjusting the amount of financial responsibility to account for environmentally safer practices, it would provide an incentive for implementation of sound practices at hardrock mining facilities and thereby decrease the need for future CERCLA actions.

**DATES:** Comments must be received on or before March 13, 2017. Under the Paperwork Reduction Act (PRA), comments on the information collection provisions are best assured of consideration if the Office of Management and Budget (OMB) receives a copy of your comments on or before February 10, 2017.

**ADDRESSES:** Submit your comments, identified by Docket ID No. EPA-HQ-SFUND-2015-0781, 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>.

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## I. Executive Summary

### A. Purpose of the Regulatory Action

Section 108(b) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), also known as Superfund, 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. When releases of hazardous substances occur, or when a threat of release of hazardous substances must be averted, a Superfund response action may be necessary. Since the Superfund tax has expired, EPA's Superfund appropriation is increasingly funded by the general revenues. Therefore, the costs of such response actions can fall to the taxpayer if parties responsible for the release or potential release of hazardous substances are unable to assume the costs. In addition, the likelihood of a CERCLA response action being needed, as well as the costs of such a response action, are likely to be higher where protective management practices were not utilized during facility operations. This proposed rule is intended to address both concerns. By assuring that owners and operators establish financial responsibility consistent with the risks associated with the production, transportation, treatment, storage, and disposal of hazardous substances at their facilities, this proposed rule would increase the likelihood that owners and operators will provide funds necessary to address the CERCLA liabilities at their facilities, thus preventing the burden from shifting to the taxpayer or to other parties. In addition, this proposed rule would provide an incentive for implementation of sound practices at hardrock mining facilities that would

decrease the need for future CERCLA actions.

### B. Summary of the Major Provisions of the Regulatory Action

EPA identified hardrock mining as the classes for which it would first develop financial responsibility requirements in a **Federal Register** notice dated July 28, 2009 (2009 *Priority Notice*).<sup>1</sup> In that notice, EPA provided a general definition of "hardrock mining"<sup>2</sup> and has refined that general definition for purposes of this proposal. This proposed rule would apply to certain classes of facilities that engage in the extraction, beneficiation, and processing of metals, (e.g., copper, gold, iron, lead, magnesium, molybdenum, silver, uranium, and zinc) and non-metallic, non-fuel minerals (e.g., asbestos, phosphate rock, and sulfur).<sup>3</sup>

The proposed rule would require owners and operators subject to the rule to demonstrate and to maintain financial responsibility consistent with the degree and duration of risk associated with the treatment, production, transportation, storage and disposal of hazardous substances at their facilities. The Agency is proposing that current owners and operators of facilities subject to the rule be required to demonstrate financial responsibility to cover the three types of costs associated with releases and potential releases of hazardous substances from their facilities, including response costs, health assessment costs, and natural resource damages. These are the same types of costs that CERCLA makes specified parties, including current owners or operators, liable for under CERCLA § 107. Thus, by requiring current owners or operators of facilities that manage hazardous substances to set aside funds for cleanup (or otherwise demonstrate their ability to pay for it), EPA expects this proposed rule would increase the likelihood that owners or operators subject to the rule will be able to pay the costs associated with releases or potential releases of hazardous substances from their facilities for which they are responsible, in the event a CERCLA cleanup becomes necessary.

The proposal would establish a process for owners and operators subject to the proposed rule to identify a financial responsibility amount for their sites, to demonstrate evidence of

financial responsibility, and to maintain the required amount of financial responsibility until the requirement for financial responsibility for the site is released by EPA. The proposed rule would promote efficiency and accuracy of information collected by requiring electronic submission of information. Further, the proposal would encourage public participation in the effective implementation of the rule by requiring owners or operators to post information related to their compliance with the financial responsibility requirements of this rule on their company Web sites.

The proposal includes a formula by which EPA expects facilities to calculate an amount of financial responsibility. The formula is also structured to allow facilities, upon certain showings, to reduce that calculated amount to account for the current conditions of their sites. EPA expects that many, if not most, facilities, will be able to adjust the amount required based on the calculation. By requiring an amount of financial responsibility consistent with the degree and duration of risk at the site, while allowing for adjustments as a result of environmentally-protective practices, the proposed rule should create economic incentives for owners and operators to employ environmentally sound practices. In turn, EPA expects that the proposed rule would ultimately have the effect of decreasing Superfund liabilities because it would create incentives for owners and operators to minimize the risk associated with their facilities thereby lowering their financial responsibility amounts. This is also consistent with CERCLA's overarching goal of encouraging potentially responsible parties to increase the level of care with which they manage the hazardous substances at their sites. Similarly, the proposed rule would provide for the release of the owner and operator's financial responsibility requirements when EPA makes a determination that the risks from the facility are minimal. This provision would encourage protective and responsible closure and cleanup of their facilities.

The proposed rule also would establish conditions for payment of funds from the financial responsibility instruments. Under the proposed rule, financial responsibility instruments could be used to pay a party that has sought reimbursement through the courts for costs; to pay as specified in a settlement with the Federal Government, or to pay into a trust fund established by the owner or operator pursuant to a Federal Government administrative order under CERCLA § 106(a). EPA has thus sought to ensure

<sup>1</sup> *Identification of Priority Classes of Facilities for Development of CERCLA Section 108(b) Financial Responsibility Requirements*, 74 FR 37213, July 27, 2009.

<sup>2</sup> *Id.* at 37213.

<sup>3</sup> The details on the facilities that would be subject to this proposed rule are provided in Subpart H of this preamble.

that its proposed CERCLA § 108(b) instruments would complement the current Superfund framework for obtaining cleanup and reimbursement from those parties responsible for contamination.

### C. Costs and Benefits of the Regulatory Action

#### 1. Introduction

EPA assessed the industrial and social costs as well as benefits of the regulatory options of the proposed rule. The details of the analysis are presented in the Regulatory Impact Analysis (RIA), which can be accessed in the docket supporting this rulemaking (Docket No. EPA-HQ-SFUND-2015-0781). This preamble provides an overview of the methodology that EPA applied in the RIA and the key results including the identification and characterization of the potentially regulated universe; the projected economic impacts from industry and society standpoints; and potential social welfare benefits of the proposed rule. Detailed discussions of the uncertainties and limitations of the analysis are provided in the RIA.

#### 2. Characterization of Baseline Affected Entities

Hardrock mining is the extraction and beneficiation of rock and other materials from the earth that contain a target metallic or non-fuel non-metallic mineral. Mineral processing separates and refines mineral concentrates to extract the target material.<sup>4</sup> In order to establish the universe of facilities likely to be subject to this proposed rule, EPA primarily relied on July 2015 data from the U.S. Mine Safety and Health Administration (MSHA) Mine Data Retrieval System (MDRS) accessed on July 2015,<sup>5</sup> U.S. Energy Information Administration (EIA) (2015),<sup>6</sup> and the 2015 U.S. Geological Survey (USGS) Mineral Commodity Summaries (MCSs).<sup>7</sup>

From a list of potentially regulated facilities, EPA excluded 35,103 coal mining operations. EPA also removed 44,845 mines associated with 59 non-fuel hardrock commodities to conform

with the scope of those classes of facilities identified in the 2009 Priority Notice.<sup>8</sup> Furthermore, EPA removed an additional 4,548 mines classified as abandoned (non-currently operating) sites by MSHA. From the remaining 354 facilities, EPA identified and removed classes of facilities that may present a lower level of risk of injury than other facilities within the 2009 Priority Notice universe. These facilities are mines engaged solely in exploration projects, placer mines that do not use hazardous substances to extract ore, and mining operations of less than five acres that are not located within a mile of other mining activities. In addition, mineral processors with less than five acres of disturbed surface impoundment and waste pile disturbed acres would not be subject to the proposed rule. Overall, EPA removed 133 facilities in these classes, leaving 221 facilities in what is referred to here as the “included universe.”

EPA believes that 221 facilities (208 active and thirteen intermittent or temporarily idled) will currently be subject to this rule. The Agency acknowledges that the population of mines and mineral processors that are operating at any given point in time can fluctuate significantly due to fluctuating commodity prices, other business-related factors, mining and processing technical operations issues, and weather conditions. As such, EPA may not have accurately identified all facilities that would be subjected to the rule. Thus, the Agency requests comments on the included universe.

The most common activities at these facilities are surface mining (88), underground mining (56), and processing (68).<sup>9</sup> Geographically, the potentially regulated universe spans over 38 states, mostly concentrated in the western states. The states with the most potentially regulated facilities are Nevada (45), Arizona (21), and Minnesota (14). The potentially regulated universe currently mines 33 commodities, although the scope of the rule is not limited to the 33 commodities currently mined at the potentially regulated facilities. The most common commodities mined in the potentially regulated universe are Gold (70), Copper (25), and Iron Ore (17). A

wide range of NAICS codes (approximately 45 types) are represented by the owners of the facilities in the potentially regulated universe, the most common of which are 212221: Gold Ore Mining (18), 213114: Supporting Activities for Metal Mining (10), and 212234: Copper Ore and Nickel Ore Mining (8). However, there were twelve owners for which no NAICS code could be identified.

#### 3. Cost of the Proposed Rule

This rule includes two proposed Options for use of a financial test—the no financial test option (Option 1), and the financial test option (Option 2). Option 1 requires all owners and operators to acquire third-party financial instruments to demonstrate financial responsibilities. Alternatively, under Option 2 the owner or operator could qualify to self-insure (or use the corporate guarantee) by passing the proposed financial test. Owners or operators unable to qualify for the Option 2 financial test must acquire a third-party instrument or a trust fund to comply with the rule. EPA’s RIA assessed the costs associated with obtaining third-party instruments under the two options, as well as costs associated with the reporting and recordkeeping requirements of the rule. These costs represent the primary economic impacts of the proposed rule to the regulated industry.

To assess the cost, EPA developed and implemented a multi-dimensional analysis that involves: (1) An estimation of the owner or operator’s financial responsibility obligations under baseline scenario; (2) estimation of the price of third-party instruments; and (3) assessment of the industrial (*i.e.*, cost imposed on the regulated industry), and social costs (*i.e.*, costs from the standpoint of society) associated with obtaining financial assurance. In addition, EPA’s analysis also examined the extent to which the rule shifts the burden of financing potential Superfund cleanups and related expenditures away from the taxpayer and toward the regulated owners or operators. This section provides an overview of the methodology EPA used to assess the industrial and social costs, and intra-industry transfers (*i.e.*, payment between two industries). This section also discusses the transfer of cost from the government (taxpayer) to the regulated industry.

##### a. Industry Compliance Costs

As described earlier in this preamble, EPA identified 221 facilities owned by 121 ultimate parent companies that would be subject to the rule. To estimate

<sup>4</sup> Identification of Priority Classes of Facilities for Development of CERCLA Section 108(b) Financial Responsibility Requirements. 74 FR 37213, July 28, 2009.

<sup>5</sup> MDRS data are available at: <http://www.msha.gov/drs/drshome.htm> and Mines Data Set, <http://www.msha.gov/OpenGovernmentData/OGIMSHA.asp>.

<sup>6</sup> U.S. Energy Information Administration. 2015. 2014 Domestic Uranium Production Report. Washington, DC. April. Available at: <http://www.eia.gov/uranium/production/annual/pdf/dupr.pdf>.

<sup>7</sup> MCS can be accessed at <http://minerals.usgs.gov/minerals/pubs/mcs>.

<sup>8</sup> U.S. EPA. 2009. Mining Classes Not Included in Identified Hardrock Mining Classes of Facilities. Available online at: <http://www.regulations.gov/contentStreamer?documentId=EPA-HQ-SFUND-2009-0265-0033&disposition=attachment&contentType=pdf>.

<sup>9</sup> Many of the 184 facilities conduct multiple activities, causing the total number of facilities to be less than the summation of all activities practiced.

the impact of acquiring financial assurance, EPA collected facility-specific data (e.g., mine site features, acreage, and meteorological data) and company-level financial information. However, this effort rendered facility-specific data for only 49 facilities, and financial information for 21 publically traded firms. Thus, EPA’s assessment of compliance costs relied on this subset of mining/mineral processing facilities and related owner companies for which detailed technical data was obtained (herein referred to as the “modeled universe”). EPA extrapolated the results of the analysis of this subset of facilities to the full universe of facilities covered by the rule. EPA requests comments on using the modeled universe to estimate the overall industrial compliance costs.

The compliance costs of acquiring third-party financial instruments depends on the financial responsibility amounts the instrument covers. Thus, EPA first estimated the baseline financial responsibility amounts for facilities in the modeled universe. EPA used a financial responsibility formula that the Agency developed for facilities to calculate their financial responsibility amount on a national basis. As described in Section VI.D.4. of this preamble, the proposed formula consists of three key components that capture the potential costs associated with release of hazardous substances at hardrock mining facilities. These include the response component; health assessment component; and natural resources damages.

For the response component, EPA estimated the financial responsibility amounts for each facility for twelve categories of response activities that EPA has undertaken at hardrock mining sites. These include categories for types of engineering costs (e.g., capital cost to construct source control for an open pit); operation and maintenance (O&M) costs (e.g., interim, short-term, and long-term O&M); and long-term water treatment costs. EPA aggregated the twelve response categories and adjusted the amount to account for other costs related to response activities that may be experienced by the Agency including mobilization/demobilization; engineering design and redesign; contingency; contractor profit and overhead; contractor liability insurance; payment and performance bonds; and Agency direct and indirect costs. EPA also applied locality adjustment factors to account for regional variation in labor and material costs. EPA then combined the aggregated financial responsibility estimates for the response component with the health assessment and natural resource damages components to arrive at the maximum financial responsibility amount for each facility. EPA applied a proposed multiplier to obtain the financial responsibility amount for natural resource damages and a fixed financial responsibility amount for health assessment.<sup>10</sup>

The proposed rule is also structured to provide reductions in the financial responsibility amount required at a facility for risk-reducing practices,

including controls established in compliance with Federal and state reclamation and closure programs. For the purpose of the RIA, EPA adjusted the maximum financial responsibility amount for owners and operators, where EPA identified risk-reducing practices in enforceable documents backed by financial bonding. In applying the reductions, EPA assumed that identified risk-reducing practices would fully meet EPA’s proposed criteria. As such, for qualified facilities, EPA applied full reductions in the financial responsibility amount for the relevant response categories. EPA acknowledges this assumption simplifies the construct of the proposed rule’s requirements for reductions.

Table X–1 presents the adjusted baseline financial responsibility estimates for future CERCLA liability of owners and operators in the modeled universe. The table also provides the extrapolation of results from the modeled universe to the full universe. As shown in the table, Column C presents the median financial responsibility amount of the modeled universe by facility types. EPA used these median values to estimate the financial responsibility amounts of the full universe. Column D presents the financial responsibility amount for the full universe, which was calculated by multiplying the total number of mines in the full universe (Column A) by the median financial responsibility amount calculated for modeled universe.

TABLE X–1—EXTRAPOLATION FR FROM THE MODELED UNIVERSE TO THE POTENTIALLY REGULATED UNIVERSE

Facility type	Potentially regulated universe (n=221)	Modeled universe (n=49)	Modeled universe facility FR—Median (\$2015 millions)	Potentially regulated universe total FR amount across facilities, median-based extrapolation (\$2015 millions)
	(A)	(B)	(C)	(D) = A * C
Brine Extraction/Processing .....	6	(none; assume equal to ISR) .....	\$1	\$8
In-situ recovery .....	8	3 .....	1	10
Processor/Refiner .....	33	1 .....	76	2,496
Surface Mine .....	62	25 .....	48	2,961
Surface Mine/Processing .....	27	13 .....	28	766
Surface Mine/Processing/Primary Smelter .....	2	(none; assume equal to surface mine/processing).	28	57
Surface/Underground mine .....	1	(none; assume equal to surface mine).	48	48
Underground Mine .....	53	5 .....	5	284
Underground Mine/Processing .....	6	2 .....	29	172
Primary Smelter .....	23	(none; approximated separately)	11	263
All Facilities .....	221	49 .....	37	7,064

**Note:** This exhibit presents extrapolation based on median values of financial responsibility amounts for the modeled universe.

<sup>10</sup> 13.4 percent of the response costs estimated for each site. For health assessment costs, EPA

estimated a fixed financial responsibility amount of \$550,000 per facility based upon health assessment

cost information obtained from the Agency for Toxic Substances and Disease Registry (ATSDR).

As shown in the table, the estimated financial responsibility amount for the regulated industry is \$7.1 billion. EPA assumed this amount represents the baseline financial responsibility amount of the regulated industry, for which owners and operators must demonstrate financial assurance under the proposed rule by procuring third-party financial instruments, or through self-insurance (or corporate guarantee).

EPA estimated the compliance costs to industry assuring payment of financial responsibility amounts by focusing on the 21 owners and operators of 38 mining facilities<sup>11</sup> in the modeled universe<sup>12</sup> for which detailed financial data is publically available. EPA conducted the cost analysis in two primary steps: (1) EPA first subjected the modeled universe to the two regulatory options (with or without financial test) to identify entities that may be required to acquire third-party instruments; and (2) for entities unable to self-insure, EPA estimated the compliance cost of obtaining third-party financial responsibility instruments.

To determine whether owners and operators pass the financial test, EPA compared the relevant financial characteristics of each company to the financial test described in § 320.43 of the preamble. Consistent with the proposed test, EPA's analysis allowed owners and operators to self-insure their entire obligation if they hold at least one long-term corporate credit rating equal to or higher than A – as issued by S&P or another equivalent rating agency. Furthermore, EPA also allowed self-insurance of up to one-half of an owner or operator's obligation if it holds at least one long-term credit rating of BBB+ or BBB. EPA assumed owners and operators that pass the test would elect to self-insure either the full or one-half of their obligations. For these facilities, EPA assumed compliance costs associated with acquiring third-party instruments would be zero, and that the owner or operator would only incur compliance costs associated with the

reporting and recordkeeping requirements of the proposed rule.

For owners or operators that did not pass the financial test, and for the regulatory option where the financial test is precluded (Option 1), EPA estimated the costs of obtaining third-party financial responsibility instruments. For each facility, EPA modeled separately the costs of three representative financial instruments, which included letter of credit, trust fund, and insurance.<sup>13</sup> EPA assumed owners and operators would choose the instrument option with the lowest cost. Overall, the pricing of the instruments is case-specific, and informed by several parameters. Specifically, the factor considered included the baseline financial responsibility level determined by the formula, the financial health of the owner or operator (credit rating and default probability), the corresponding fee structure of the specific financial instrument, and the project's risk profile (probability and timing of costs associated with the facility's CERCLA liabilities). In estimating the cost of the instruments, EPA also assumed that no market capacity constraints exist for the issuance of third-party instruments sufficient to cover the financial responsibility amounts estimated earlier in this discussion.

The actual compliance cost incurred by industry in securing these instruments comes from the transactional costs (e.g., the fees and commissions paid to financial institutions) and the net cost of acquiring capital to fund the purchase of financial instruments. EPA did not attempt to predict whether the funds come from internal sources or from debt or equity markets. Regardless of the sources of funding, EPA assumed the net cost to the owner or operator of acquiring funds is the weighted average cost of capital (WACC).<sup>14</sup> EPA collected firm specific WACCs from each company's Web site.

EPA assumed owners and operators would need to acquire funding to purchase financial instruments every three years<sup>15</sup> (as required by the rule) until released from their obligations. Thus, EPA annualized the compliance cost using a seven percent discount rate over the life of the mine. To investigate the sensitivity of results, EPA also applied a three percent discount rate. In addition, EPA assumed a period of analysis from 2021 to end of mine life (capped at 2055). The start date is based on a year before the end of the four-year implementation schedule of the rule, which represents the year mines will start to incur significant costs. The end date is mainly based on the end of mining operations. However, where EPA could not identify the end date for mining operations, EPA capped the analysis at 2055, which represents the ninetieth percentile of mine lives in the modeled universe. Furthermore, EPA also assumed that the owner and operator would be released from their financial responsibility obligations when the facility ceases its operation. However, under the proposed rule owners and operators may not be released of their obligations until EPA makes a determination.

Table X–2 summarizes the average annualized compliance costs for the two regulatory options, as a percentage of the financial responsibility amounts of owners and operators in the modeled universe. The annualized costs are categorized based on the credit worthiness of the firms in the modeled universe. Entities with a stronger financial profile (Category 1) were simulated to experience an annual cost as low as 1.1 percent of the financial responsibility amount. Similarly, poorly rated entities (Category 4) would experience annual costs as high as four percent. Overall, on a weighted average basis, annualized compliance costs as a percentage of the financial responsibility amount equal approximately 2.3 to 2.4 percent.

TABLE X–2—INSTRUMENT PRICING OUTCOMES

Company category	Average annualized cost as percentage of financial responsibility amounts	Percent of companies in category
BBB .....	1.1 to 1.7 .....	26.3
BB .....	2.5 .....	26.3

<sup>11</sup> The identified owner/operator companies of the 49 facilities in the modeled universe were matched to S&P's financial database. This crosswalk identified the owner/operator companies of 40 facilities in S&P financial database. Two of these facilities have entered bankruptcy and therefore did not have the necessary recent financial data to be included in the analysis.

<sup>12</sup> It is important to distinguish between the mine facilities, to which the financial responsibility amount applies, and the owner/operator company that is obligated to fund, or secure, this financial responsibility amount. One owner/operator may have this obligation for more than one mine.

<sup>13</sup> EPA limited the analysis to three instruments because it believed that these reasonably represent

the ranges of costs for the other instruments allowed by the rule.

<sup>14</sup> WACC is defined as the average cost of obtaining capital in the debt and equity markets.

<sup>15</sup> The proposed rule would require facilities to update financial responsibility amount calculations every three years, and maintain financial assurance consistent with the revised financial responsibility amount.

TABLE X-2—INSTRUMENT PRICING OUTCOMES—Continued

Company category	Average annualized cost as percentage of financial responsibility amounts	Percent of companies in category
B .....	2.4 .....	36.8
CCC .....	4.0 .....	10.5

**Note:**

1. Pricing categories based on credit ratings and other financial metrics. Ranges of costs are presented for Option 2 (low) and Option 1 (high).  
 2. This exhibit presents costs discounted using a 7 percent social discount rate. Supplementary results discounted using a 3 percent social discount rate are presented in Appendix E of the RIA.

EPA applied these weighted average percentages to extrapolate results to the entire universe. Table X-3 presents the calculation of annualized compliance costs for the full universe under the two regulatory options. As shown in the table, Column A lists the aggregated financial responsibility amount covered by third-party instruments by mine type under the proposed financial test regulatory option, while Column B lists

the financial responsibility amounts under the no-test option. Columns C and D calculate the annualized acquisition costs for each facility type by multiplying the aggregate financial responsibility amounts under each regulatory option with the respective weighted average annualized costs generated for the model universe, as shown in Table X-3. The extrapolation calculation assumes that the full

universe of owners and operators would have similar financial characteristics as the modeled universe. Similarly, for the financial test option, EPA assumed that a similar proportion of owners and operators would pass the financial test in both the full universe and in the modeled universe. EPA acknowledges that there are uncertainties with this supposition, and request comments from the public.

TABLE X-3—CALCULATION OF ANNUALIZED COMPLIANCE COST

[\$ million]

Facility type	FR amount covered by third party (Option 1) (\$2015 millions) (A)	FR amount covered by third party (Option 2) (\$2015 millions) (B)	Annualized cost of third-party FR instruments—Option 1 (\$ millions) (C) = 2.4 * (A)	Annualized cost of third-party FR instruments—Option 2 (\$ millions) (D) = 2.3 * (A)
Brine Extraction/Processing .....	\$8	\$5	\$0.2	\$0.1
In-situ recovery .....	10	7	0.2	0.2
Processor/Refiner .....	2,496	1,747	60	39
Surface Mine .....	2,961	2,073	72	47
Surface Mine/Processing .....	766	536	18	12
Surface Mine/Processing/Primary Smelter .....	57	40	1	1
Surface/Underground Mine .....	48	33	1	1
Underground Mine .....	284	199	7	4
Underground Mine/Processing .....	172	120	4	3
Primary Smelter .....	263	184	6	4
All Facilities .....	7,064	4,944	171	111

**Note:** This table presents costs discounted using a 7 percent social discount rate. Supplementary results discounted using a 3 percent social discount rate are presented in Appendix E of the RIA.

As shown in the table, under the baseline scenario, the total financial obligation amount for the potentially regulated universe is approximately \$7.1 billion. Under the financial test, the amount of financial obligations covered through third-party instruments is \$4.9 billion, whereas for the no-financial test option, the entire baseline financial responsibility amounts would be covered by third-party instruments. In addition, the annualized industry compliance costs to secure the third-party instruments under the no-financial test option is \$171 million, whereas annualized costs are \$111 million for the financial test option. The difference between the two regulatory options is approximately 35 percent. These values represent the range of

potential incremental costs of the proposed rule to industry.

In addition, EPA's compliance cost estimate also included the administrative reporting and recordkeeping costs to industry associated with the proposed rule for the potentially regulated universe. These costs consist of labor, O&M, and capital costs and include the costs of reading the regulations; submitting initial facility information to EPA and to the public; calculating financial responsibility amounts; choosing a financial responsibility instrument; acquiring and maintaining a financial responsibility instrument, recalculating financial responsibility amounts to reflect any changes in facility operations; and any requirements that

apply to the owners and operators upon the transfer of a facility, owner or operator default, a CERCLA claim against any of the owners and operators, or release of the owners and operators from the regulations. The labor costs are estimated on an annual basis, as of the first year of compliance. Table X-4 presents the annualized administrative cost of the rule under the two options using a seven percent social discount rate.

TABLE X-4—ANNUALIZED ADMINISTRATIVE COSTS

Option 1 (No test)	Option 2 (Financial test)
\$225,302	\$269,038

**Note:** This exhibit presents costs discounted using a 7 percent social discount rate. Supplementary results discounted using a 3 percent social discount rate are presented in Appendix E.

b. Social Cost and Intra-Industry Transfers

The annualized compliance costs calculated and presented in Table X-3 and X-4 represent industry costs, *i.e.*,

costs imposed on owners and operators. However, much of the costs borne by the owners and operators represent a transfer<sup>16</sup> to financial firms that provide financial responsibility instruments. In the context of this rule, the net incremental costs of acquiring capital to secure financial instruments (*i.e.*, insurance) are treated as a transfer. Table X-5 presents the intra-industry transfers of the rule. The RIA estimated the intra-industry transfer amount by tabulating the net acquisition cost of capital excluding transactional costs that are considered social costs.

Some portion of the industry cost is also a social cost,<sup>17</sup> that is, a cost on society as a whole, rather than just the regulated entities. These costs reflect the

value of the real resources (*e.g.*, labor and capital) needed to comply with the rule. These costs include: (1) The fees and commissions paid to financial institutions to obtain financial instruments; and (2) the administrative costs incurred in complying with reporting and recording keeping requirements of the proposed rule. Table X-5 presents the social cost of the rule. EPA estimated the social costs associated with acquiring instruments by taking the difference between the industrial costs less the intra-industry transfers. The table summarizes the annualized social costs and intra-industry transfers using seven percent discount rates.

TABLE X-5—SUMMARY OF SOCIAL COSTS AND INTRA-INDUSTRY TRANSFERS

Outcome	Option 1: No financial test			Option 2: Proposed financial test		
	Annualized cost of third-party FR instruments (\$ millions)	Transfer from mining industry to others (\$ millions)	Annualized social cost (\$ millions)	Annualized cost of third-party FR instruments (\$ millions)	Transfer from mining industry to others (\$ millions)	Annualized social cost (\$ millions)
Annualized Amount .....	171	127	44	111	81	30
Administrative Cost to Industry .....	N/A	N/A	\$0.2	N/A	N/A	\$0.3
Total Social Costs and Transfers .....	N/A	\$127	\$44	N/A	\$81	\$30

**Note:** This exhibit presents costs discounted using a 7 percent social discount rate. Supplementary results discounted using a 3 percent social discount rate are presented in Appendix E.

Under proposed Option 1, of the \$174 million cost to industry, the annualized intra-industry transfer is estimated to be \$127 million. Thus, the social cost amounts to \$44 million. Option 2 engenders slightly lower social costs at \$30 million. As shown in the table, the administrative costs related to the reporting and recordkeeping requirements of the rule are approximately \$0.3 million under the two regulatory options.

c. Government Costs and Risk Transfers

The primary effect of this proposed rule is to transfer the risk associated with CERCLA liabilities from the

taxpayer to the private sector. Table X-6 presents the estimated magnitude of this shift of potential CERCLA liabilities across the baseline and regulatory scenario. For the purposes of estimating changes in government burden due to the rule, EPA calculated the government burden assuming that financial responsibility amounts are representative of costs associated with future CERCLA cleanups. In the baseline, the Government is burdened with the CERCLA cost if an owner or operator defaults, as no third-party instruments will be in place. For the baseline, EPA estimated, the government burden rate using the firm

exit rate derived from the Census Bureau's Business Dynamics Statistics (BDS).<sup>18</sup> This represents a (high-end) estimate that assumes exiting firms fail to meet any of their CERCLA obligations. Under proposed Option 2, government costs were calculated based on estimated probabilities of default for firms in the modeled universe. Under this option, if a company passes the financial test but later files for bankruptcy and defaults on its financial responsibility obligations, EPA assumed that taxpayers would assume these obligations. Under proposed Option 1, there are no government costs, as no company may self-insure.

EXHIBIT X-6—SUMMARY OF POTENTIAL GOVERNMENT COSTS

Cost category	Baseline	Option 1: No financial test	Option 2: Proposed financial test
<b>Industry Liabilities (\$2015 Millions)</b>			
CERCLA FR Amount Insured through Third-Party Instruments .....	N/A	\$7,064	\$4,944

<sup>16</sup> Transfer payments are monetary payments from one group to another that do not affect total resources available to society.

<sup>17</sup> The value of real resources—land, labor, energy and so forth—needed to comply with the regulations.

<sup>18</sup> The BDS provides the number of firms operating and number of firm exits each year in the mining sector. Firm exits identify when all establishments of a firm cease operations for reasons other than reorganization, merger, or acquisition. Because of the “corporate veil” enjoyed

by legal subsidiaries, this analysis uses a facility-based failure rate to model government costs in the baseline due to owner/operator failure. Compared to other measures of failure or default, the BDS firm exit rate also captures both private and public companies.

EXHIBIT X-6—SUMMARY OF POTENTIAL GOVERNMENT COSTS—Continued

Cost category	Baseline	Option 1: No financial test	Option 2: Proposed financial test
CERCLA FR Amount Self-Insured .....	7,064	0	2,120
<b>Expected Government Costs (\$2015 Millions)</b>			
Government Burden Rate .....	7.5%	N/A	0.7%
Government Cost .....	527	0	16
<b>Decrease in Expected Government Costs (\$2015 Millions)</b>			
Expected Transfers from Government to Industry .....		527	511

As shown in Table X-6, under the baseline scenario, the potential liability transfer from private parties to government is \$527 million over the period of analysis (*i.e.*, 34 years). Under the financial test option, the potential burden to taxpayer is reduced to \$16 million. For the no-financial test option, the potential CERCLA liabilities are fully internalized by the regulated community.

4. Economic Impact Analysis

EPA assessed the economic impacts of the proposed rule in two areas: (1) An assessment of the impact of compliance costs on the modeled universe, based on the comparison of compliance costs with relevant financial characteristics of the owner and operator; and (2) an assessment of the potential for employment impacts at the national level of the proposed rule. The following sections summarize the methods and findings for these analyses.

a. Screening Analysis for Potentially Significant Economic Impacts

EPA assessed the economic impacts of the proposed regulatory options relying on the modeled universe for which detailed financial data are available. EPA assessed the impacts using two financial characteristics of the owner and operator: (1) A screening-level assessment which compares the annualized industrial costs to the firms' revenue; and (2) an alternative assessment that utilizes the firms' operating cash flow.

For the 21 firms in the modeled universe, the annual revenues range from approximately \$300 million to over \$60 billion. Their annual cash flow from operations (cash flow associated with their primary business activity) ranges from \$800,000 to over \$3 billion. Relative to the companies' revenues, the per-company annualized costs of financial responsibility range from zero percent to 1.1 percent, with the majority of companies (20 of 21) falling between

zero and 1 percent. Relative to operating cash flow, the range of annualized financial responsibility cost percentages is wider: From zero to over 160 percent (the latter is for the company whose operating cash flow is under \$1 million). Approximately eighty percent of all companies experience impacts that are under one percent of operating cash flow and approximately 95 percent of companies experience impacts under ten percent.

Due to limitation in financial data, EPA did not expand the screening analysis to the full universe of regulated facilities. EPA acknowledges that the results generated based on the modeled universe may not be reflective of the impacts on the entire industry.

b. Employment Impact Analysis

EPA routinely assesses the employment impacts of economically significant regulations. Executive Order 13563, "Improving Regulation and Regulatory Review," states, "Our regulatory system must protect public health, welfare, safety, and our environment while promoting economic growth, innovation, competitiveness, and job creation." In general, the national employment effects of environmental regulation are complex and multi-faceted and very likely involve both negative and positive effects. Neoclassical theory of production and factor demand provides a constructive framework for understanding and conducting employment impacts analysis of environmental regulations. It describes how firms adjust their demand for inputs, such as labor, in response to changes in economic conditions.<sup>19</sup> Theory predicts that regulated firms will respond to regulation by adjusting input demands and output. The theory

<sup>19</sup> For an overview of textbook discussions of the neoclassical theory of production and factor demand, see, for example, Layard and Walters, *Microeconomic Theory* (1978), chapter 9 "The Derived Demand for Factors".

suggests the direction of the total impact of a regulation on the demand for labor in the regulated sector is indeterminate.<sup>20</sup>

EPA did not have sufficient data to model and quantify the potential changes in mines' employment levels as a result of the proposed regulation. Analysis provided by the U.S. Geological Survey (USGS) suggests that "the primary metals industry and the nonmetallic minerals products industry are fundamentally cyclical." The industries are affected both by the domestic business cycle and the global economic environment. Composite indices constructed by USGS suggest that the industry experienced significantly decreased activity surrounding the Great Recession. In 2014, the most recent year analyzed by USGS, industry growth rates were positive.<sup>21</sup>

5. Benefits of the Rule

This section provides an overview of the methodology EPA used to assess or identify benefits of the proposal. EPA expects the CERCLA § 108(b) financial responsibility provisions to yield social welfare benefits because of reductions in overall mining facility environmental obligations and an increase in the proportion of those obligations borne by the private sector through financial responsibility instruments.

Identified benefits of the proposed rule include a reduction in costs the government must bear to fulfill cleanup obligations, improved environmental practices at mining sites, avoided impacts to impaired waters, and faster cleanups. The reduction in the cost to

<sup>20</sup> For theoretic frameworks that conceptualize and incorporate the impacts of regulation, see Berman and Bui, 2001 or Deschenes, 2012, 2014).

<sup>21</sup> See: U.S. Geological Survey, *Mineral Commodity Summaries*, 2015, pp. 4, 7. The USGS generates composite indexes for primary metals and separately for nonmetallic mineral products. Their indices are intended to measure economic activity in these industries using production, employment, and shipments data.



government is the only benefit that can be measured with sufficient accuracy to allow for a quantitative assessment. A qualitative benefit assessment of the proposed rule was performed utilizing literature on related topics, such as the effect of environmental liabilities disclosure on financial markets. The benefits of the proposed rule are as follows:

a. Reduced Costs to Government

The establishment of financial responsibility requirements for potential CERCLA § 108(b) liabilities will reduce the costs incurred by the Government to finance remediation expenditures for companies that are unable to meet cleanup obligations. Section 7 of the RIA considered government costs associated with potentially responsible parties' (PRP) defaults on CERCLA § 108(b) liabilities at mining facilities, including response costs, natural resource damages, and health assessment costs. Without the rule, EPA estimated that the Government would potentially incur a total cost of \$527 million (over the 34-year period of analysis) for the cost categories described earlier. Under the proposed financial test option, the Government would incur an estimated \$16 million in costs, whereas for the no-test option, the taxpayer's burden would be reduced to zero. Thus, the analysis concluded that the public, through the Government, would experience a cost savings from \$511 million to \$527 million over 34 years because of the proposed rule.

b. Improvement in Environmental Performance

Financial responsibility requirements may provide an incentive for regulated entities to minimize future environmental obligations. When regulated entities rely on a letter of credit, insurance policy, or other third-party instrument to meet financial responsibility requirements, the issuer will have an incentive to require sound environmental management as a condition for providing access to these instruments.

To the extent that the proposed rule leads to improvements in facilities' environmental performance, the rule may reduce acid mine drainage and other discharges into waterways caused by mining activities. Waterways identified as impaired waters by section 303(d) of the Clean Water Act (CWA) and waters identified as wild and scenic rivers under the 1968 Wild and Scenic Rivers Act may benefit the most from improved environmental performance. Adverse impacts to waterbodies may be reduced or avoided in accordance with

improvements in the environmental performance of mines. To gauge the potential magnitude of the benefits associated with avoided environmental impacts, EPA identified the number of sites in the potentially regulated universe that are located near CWA impaired waters or wild and scenic rivers. Of the 221 facilities in the potentially regulated universe, EPA identified the status of waterways adjacent to 172 facilities. Overall, EPA believes that the magnitude of these benefits in the context of the proposed rule is contingent upon changes in behavior among regulated entities to reduce the environmental risk.

c. Speed of Site Cleanups

Under the financial responsibility requirements outlined in the proposed rule, the cleanup of sites owned by companies in default could begin more rapidly than under the baseline. Because funding for site remediation would be secured prior to a firm's insolvency, the initiation of cleanup would not be delayed by EPA budget constraints. Expedited cleanups would benefit human health and ecosystems as exposure to harmful contaminants may decline.

## II. Authority

EPA is issuing these proposed regulations under the authority of sections 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, 3 CFR, 1987 Comp., p. 193.

## III. Background Information

### A. Overview of CERCLA § 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<sup>22</sup> 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 also established the Superfund Trust Fund (the Fund) to finance response actions undertaken by EPA. In addition, CERCLA § 106 gives EPA<sup>23</sup> authority to compel action by liable parties in response to a release or threatened 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 transporters of hazardous substances. Such parties are liable for any 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," (NCP).<sup>24</sup> CERCLA § 107 also imposes liability for natural resource damages and health assessment costs.<sup>25</sup> In accordance with CERCLA, in 1990 EPA issued the current version of the NCP.<sup>26</sup> These regulations provide the organizational structure and procedures for preparing for, and responding to, discharges of oil and releases of hazardous substances, pollutants, and contaminants. The NCP is codified at 40 CFR part 300. Among other provisions, the NCP provides procedures for hazardous substance response including site evaluation, removal actions, remedial investigation/feasibility studies (RI/FS), remedy selection, remedial design/remedial action (RD/RA), and operation and maintenance.<sup>27</sup> The NCP also designates Federal, state, and tribal trustees for natural resource damages, and identifies their responsibilities under the NCP.<sup>28</sup>

CERCLA § 108(b) generally requires that EPA develop regulations requiring owners and operators of facilities to establish evidence of financial responsibility, and provides for publication of a "Priority Notice" identifying the classes of facilities for which EPA would first develop requirements. Paragraph (b)(1) 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. This proposed rule for

<sup>23</sup> 1 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).

<sup>24</sup> See CERCLA § 107 (a)(4)(A).

<sup>25</sup> See CERCLA § 107 (a)(4)(C)-(D).

<sup>26</sup> See 55 FR 8666, March 8, 1990.

<sup>27</sup> See 40 CFR 300, Subpart E.

<sup>28</sup> See 40 CFR 300, Subpart G.

<sup>22</sup> 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).

hardrock mining facilities prioritizes among the classes of facilities in that sector, and proposes financial responsibility requirements for those hardrock mining facilities that EPA has identified as presenting the highest level of risk of injury. More details on this analysis are provided in section VI.D.1.A of this preamble.

Under CERCLA § 108(b), classes of facilities must 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.”<sup>29</sup> CERCLA § 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. EPA discusses its interpretation of these provisions in section VI.D.4. of this preamble.

CERCLA § 108(b) also discusses particular instruments for EPA to consider in its regulations. Specifically, paragraph (b)(2) states that financial responsibility may be established by any one, or any combination, of the following: insurance, guarantee, surety bond, letter of credit, or qualification as a self-insurer. Paragraph (b)(2) further authorizes the President to specify policy or other contractual terms, conditions, or defenses that are necessary, or that are unacceptable in establishing evidence of financial responsibility. Paragraph (b)(2) also requires EPA to cooperate with and seek the advice of the commercial insurance industry to the maximum extent practicable when developing financial responsibility requirements. Paragraph (b)(4) provides direction on how the CERCLA § 108(b) instruments are to address multiple owners and operators at a single facility. Section VI.C. of this preamble discusses each of these financial responsibility instruments in detail.

CERCLA § 108(b)(3) requires that regulations promulgated under CERCLA § 108(b) incrementally impose financial responsibility requirements as quickly as can reasonably be achieved, but in no event more than four years after the date of promulgation. Section VI.A.1. of this preamble discusses how EPA intends to

phase in the CERCLA § 108(b) requirements in accordance with this provision.

CERCLA § 108(c) also includes a “direct action” provision, under which CERCLA claims can be brought directly against an insurer or other entity issuing an instrument pursuant to the CERCLA § 108(b) regulations. CERCLA § 108(c)(2) provides that any claim authorized by CERCLA § 107 or § 111 may be asserted directly against any guarantor providing evidence of financial responsibility under CERCLA § 108(b) if the person liable under CERCLA § 107 is: (1) In bankruptcy, reorganization, or arrangement pursuant to the Federal Bankruptcy Code, or (2) likely to be solvent at the time of judgment but over whom jurisdiction in the Federal courts cannot be reached with reasonable diligence. EPA discusses the direct action provision and other ways that it envisions the instruments provided pursuant to the CERCLA § 108(b) program may pay out and otherwise support cleanup efforts in section VI.B.5. of this preamble.

CERCLA § 114(d) is an express preemption provision addressing state, tribal, and local financial responsibility requirements. This provision states:

Except as provided in this subchapter, no owner or operator of a . . . facility who establishes and maintains evidence of financial responsibility in accordance with this subchapter shall be required under any State or local law, rule or regulation to establish or maintain any other evidence of financial responsibility in connection with liability for the release of a hazardous substance from such . . . facility. Evidence of compliance with the financial responsibility requirements of this subchapter shall be accepted by a State in lieu of any other requirement of financial responsibility imposed by such State in connection with liability for the release of a hazardous substance from such . . . facility.<sup>30</sup>

Many states already have financial responsibility requirements applicable to some of the hardrock mining facilities that would be subject to this proposed rule. Thus, in developing this proposal, EPA had to carefully consider the effects of its CERCLA § 108(b) rules on other programs to avoid any unanticipated consequences. The Agency’s conclusions regarding the relationship of CERCLA § 108(b) requirements to financial responsibility requirements under other laws is discussed in Section V. of this preamble.

B. Recent Litigation under CERCLA § 108(b)

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 2009 *Priority Notice* required by CERCLA § 108(b)(1) later that year. The 2009 *Priority Notice* is described in more detail in section III.C. The court later dismissed the remaining claims.

EPA issued the Advance Notice of Proposed Rulemaking discussed in section III.D. in early 2010, and continued to work on this proposed rule for the next several years. Dissatisfied with the pace of EPA’s progress, however, in August 2014, the groups 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, for 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.<sup>31</sup> Companies and organizations representing business interests in the hardrock mining and other sectors also 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 Court’s May 19, 2015 Order further encouraged the parties to confer regarding a schedule and, if possible, to submit a jointly agreed upon proposal. 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 for publication in the **Federal Register** a proposed rule for the hardrock mining industry by December 1, 2016, and a final rule by December 1, 2017.

On January 29, 2016, the court granted the joint motion and issued an Order that mirrored the submitted

<sup>29</sup> Executive Order 12580 delegates the responsibility to develop these requirements to the Administrator of EPA for non-transportation related facilities. 52 FR 2923, 3 CFR, 1987 Comp., p. 193.

<sup>30</sup> 42 U.S.C. 9614(d).

<sup>31</sup> See *In re: Idaho Conservation League, et al.*, No. 14–1149.

schedule in substance. The court Order can be found in the docket for this proposed rule (Docket No. EPA–HQ–SFUND–2015–0781). The signing of this proposed rule for publication by December 1, 2016 will satisfy one component of the court order.

### C. *Hardrock Mining 2009 Priority Notice*

As described earlier in this preamble, CERCLA § 108(b)(1) requires the President to identify those classes of facilities for which requirements will be first developed and to publish notice of such identification in the **Federal Register**. That paragraph also directs that priority in the development of such requirements shall be accorded to those classes of facilities, owners, and operators that present the highest level of risk of injury. As discussed in section III.C., EPA published a **Federal Register** notice entitled “Identification of Priority Classes of Facilities for Development of Section 108(b) Financial Responsibility Requirements.”<sup>32</sup> EPA chose to evaluate indicators of risk and its related effects to inform its decision on the classes of facilities for which it would first develop requirements.<sup>33</sup> EPA specifically pointed to eight factors that it considered,<sup>34</sup> and stated that its review of those factors and the associated information in the docket led the Agency to conclude that hardrock mining facilities present the type of risk that, in light of its then-current evaluation, justified them being the first for which EPA issued CERCLA § 108(b) requirements.<sup>35</sup> The 2009 *Priority Notice* and supporting documentation have been included in the docket for this proposal (Docket No. EPA–HQ–SFUND–2015–0781).

The 2009 *Priority Notice* also provided a working definition of “hardrock mining,” namely, “facilities which extract, beneficiate, or process metals . . . and non-metallic, non-fuel minerals.”<sup>36</sup> EPA generally explained the processes that constitute extraction, beneficiation, and processing, and how those processes relate to one another and how they differ.<sup>37</sup> EPA explained

that because of their interrelationships, EPA was identifying them as a group, yet the distinctions between them made it appropriate to consider such operations as encompassing multiple “classes” of facilities.<sup>38</sup>

It is important to recognize the necessary, but limited, role of the 2009 *Priority Notice*. The 2009 *Priority Notice* directly satisfied the notice requirement in CERCLA § 108(b)(1), by identifying where EPA would start in its development of requirements. The 2009 *Priority Notice* did not, however, serve to comprehensively analyze the universe of hardrock mining facilities that would necessarily be covered by a proposed or final CERCLA § 108(b) rule. As EPA stated in the notice, “[a]dditional research, outreach to stakeholders, proposed regulations, review of public comments, and finalization of those regulations are needed before hardrock mining facilities are subject to any financial assurance requirements.”<sup>39</sup> Nor did that notice purport to identify which “classes of facilities, owners and operators . . . present the highest level of risk of injury” as required by CERCLA § 108(b)(1). The initial identification of hardrock mining facilities provided in the 2009 *Priority Notice* included classes of facilities of varying degrees of risk of injury, and EPA has identified in this proposed rule what it believes are the classes of facilities that present the highest risk from among the classes of facilities identified in the *Priority Notice*.

### D. *Additional Classes Advance Notice of Proposed Rulemaking*

The 2009 *Priority Notice* described in section III.C. stated EPA’s view that classes of facilities outside of the hardrock mining industry may warrant the development of financial responsibility requirements.<sup>40</sup> The Agency committed to gather and analyze data on additional classes of facilities and consider them for possible regulation.

On January 6, 2010, EPA published an Advanced Notice of Proposed Rulemaking (2010 ANPR)<sup>41</sup>, in which the Agency identified three additional industrial sectors for the development of a proposed regulation—the Chemical Manufacturing industry (NAICS 325), the Petroleum and Coal Products Manufacturing industry (NAICS 324), and the Electric Power Generation, Transmission, and Distribution industry

(NAICS 2211). The 2010 ANPR did not set requirements for any of these three sectors. However, for transparency and completeness, this preamble includes information on the development of the 2010 ANPR, the litigation related to these sectors, and the companion notice on these sectors.

In the 2010 ANPR, EPA requested public comment on whether to propose a regulation under CERCLA § 108(b) for any class or classes, or the industry as a whole, including information demonstrating why such financial responsibility requirements would not be appropriate for those particular classes. In addition, the Agency requested information related to the industry categories discussed in the notice, including data on facility operations, information on past and expected future environmental responses, use of financial instruments by the industry categories, existing financial responsibility requirements, and other information the Agency might consider in setting financial responsibility amounts. Finally, EPA requested information from the insurance and the financial sectors related to instrument implementation and availability, and potential instrument conditions.

As noted earlier, the *In re: Idaho Conservation League* case also involved EPA’s actions on these sectors as well. The same order addressing the CERCLA § 108(b) hardrock mining rule also required the Agency to sign for publication in the **Federal Register** a decision on whether to issue a notice of proposed rulemaking for these additional sectors by December 1, 2016. EPA has developed that notice as required by the court order. That notice appears elsewhere in this **Federal Register**.

EPA received comments on the 2010 ANPR, which can be found in the docket for that notice (Docket ID No. EPA–HQ–SFUND–2009–0834). EPA considered those comments as part of its decision whether to proceed with issuing proposed rules for the additional sectors, as described in the companion notice issued by the Agency. EPA intends the future rulemaking processes for these sectors to be the venue through which the public can engage with EPA on issues related to those sectors. In this proposed rule for hardrock mining, EPA is not seeking, nor will it respond to, comments on issues relating only to sectors outside of hardrock mining, including its determinations on whether to proceed with the rulemakings for those other sectors.

<sup>32</sup> See 74 FR 37213 (July 28, 2009)

<sup>33</sup> See *Id.* at 37214

<sup>34</sup> These eight factors were: (1) Annual amounts of hazardous substances released to the environment; (2) the number of facilities in active operation and production; (3) the physical size of the operation; (4) the extent of environmental contamination; (5) the number of sites on the CERCLA site inventory (including both NPL sites and non-NPL sites); (6) government expenditures; (7) projected clean-up expenditures; and (8) corporate structure and bankruptcy potential (see 74 FR 37214, July 28, 2009).

<sup>35</sup> *Id.*

<sup>36</sup> *Id.*

<sup>37</sup> *Id.* at 37214–15

<sup>38</sup> *Id.* at 37214

<sup>39</sup> *Id.* at 37214, n. 5.

<sup>40</sup> *Id.* at 37218.

<sup>41</sup> See 75 FR 816.

### E. Market Capacity Study

In accordance with an instruction regarding the CERCLA § 108(b) proposed rule in the Conference Committee Report for the Consolidated Appropriations Act (2016), EPA conducted a study of the market capacity regarding the necessary instruments (surety bonds, letters of credit, insurance and trusts) for meeting any new CERCLA § 108(b) financial responsibility requirements and post the study on the Agency's website ninety days prior to this proposed rulemaking. The Agency also provided an explanation of how the CERCLA § 108(b) rule will avoid requiring financial responsibility obligations that are duplicative of those already required by other Federal agencies as of the time it was released to the public. EPA also included the Market Capacity Study in the docket for this proposal.

The Market Capacity Study assessed the likely availability of financial responsibility instruments and the capacity of third-party markets to underwrite financial responsibility requirements for responsible parties subject to CERCLA § 108(b). The study relies on a substantial amount of quantitative and qualitative data in the public domain from readily referenced industry sources, as well as information gained in meetings held during 2015 and 2016 with instrument providers regarding factors that may affect instrument availability.

The Agency's evaluation further focuses on characterizing that portion of the commercial insurance and surety markets that specifically underwrite environmental liability coverage as a way to gauge future capacity. The results of the research suggest that sufficient capacity likely will be available to cover the financial responsibility obligations called for under CERCLA § 108(b), but caution that this capacity will be highly dependent upon the overall amount of financial responsibility that the market will need to accommodate. Overall capacity may also be influenced by: (1) The diversity of instruments allowed, (2) whether the rule allows insurance and surety markets to form risk retention groups (RRGs), and (3) whether the proposed rule permits the use of a financial test. All such features, if included in the rule, could help to relieve pressure on third-party surety markets and ensure greater market capacity.

In consideration of these market issues, the rule as currently proposed includes a number of specific features to help ensure that the capacity of the

market for financial responsibility instruments will be sufficient to meet demand subsequent to promulgation. First, preliminary results from draft regulatory impact analyses reveal estimates of total demand for instruments to be below that of the Agency's estimate of overall capacity. The proposal also offers further flexibility by permitting owners and operators to use a variety of alternative instruments to meet the requirements of the rule. Further, RRGs are not prohibited under the proposed provision for insurance, and the Agency is taking comment on their potential permissibility for the final rule. Lastly, as discussed in detail in VI.C.9 of this preamble, EPA has co-proposed options regarding the availability of a financial test and corporate guarantee mechanism. Under Option 1 (EPA's preferred option), use of a financial test and corporate guarantee would not be allowed. However, under Option 2, use of a financial test and corporate guarantee would be allowed, thus those instruments would be available as well if Option 2 were to be adopted in the final rule.

Given the number of unknown factors, the ultimate availability of CERCLA § 108(b) financial responsibility instruments cannot be predicted with certainty until the final rule has been promulgated. At that time, the available instruments will be determined, and the market will have an opportunity to respond.

### F. Approach to Developing This Proposed Rule

This is the first EPA proposed rule under the authority of CERCLA § 108(b). As a result, this proposed rule would establish a financial responsibility program under CERCLA § 108(b), in addition to imposing requirements specific to the hardrock mining industry. EPA anticipates that core financial responsibility program requirements established under this proposal, such as procedures for establishing financial responsibility, public involvement, recordkeeping and reporting, establishing and maintaining instruments, and the wording of some of the instruments would apply to hardrock mining facilities subject to this rule and to classes of facilities subject to further rules promulgated under CERCLA § 108(b) authority. EPA therefore solicits comments on these provisions from all interested parties, including representatives of industries other than the hardrock mining industry.

Other requirements of this proposed rule would likely apply only to the

hardrock mining facilities for which they were designed. For example, the financial responsibility formula proposed in this rule was designed for use by hardrock mining facilities. A method for determining financial responsibility amounts would be identified for future industry sectors in future proposed rulemakings. EPA intends that the provisions of this rule be severable. In the event that any individual provision or part of this rule is invalidated, EPA intends that this would not render the entire rule invalid, and that any individual provisions that can continue to operate will be left in place.

Development of these regulations has proven to be a complex and unique task for EPA, and the Agency has explored a number of options for key components of the proposed rule. Thus, while the Agency is proposing an approach for implementing CERCLA § 108(b), the Agency also has attempted to present a broad range of options and is seeking comment on a variety of issues throughout the preamble. Because this proposed rule represents the initial steps in development of a CERCLA § 108(b) program, EPA is particularly interested in receiving information from a broad range of parties with suggestions for improving EPA's proposed new CERCLA § 108(b) program.

### IV. Major Issues in the Development of the Proposed Rule

This proposed rule is the first to be issued by EPA under the authority of CERCLA § 108(b).<sup>42</sup> In developing this proposal, EPA has given significant consideration to a number of issues. In this preamble section, EPA discusses those issues and its proposed approaches to them. EPA expended considerable effort over several years before deciding how to structure this proposal, and the various options included throughout reflect varying ways that EPA is considering reconciling the policy purposes of the CERCLA § 108(b) rule in light of the information before the Agency and the general statutory direction. EPA explains these considerations in the more detailed discussions of the various provisions in later sections of this preamble. In general, however, this proposed rule would establish requirements for financial responsibility applicable to certain facilities within the hardrock mining industry. Owners and operators of facilities subject to this rule would be required to demonstrate financial responsibility to cover costs

<sup>42</sup> Regulations were promulgated by the Coast Guard under § 108(a) (insert cite).

associated with liabilities identified in CERCLA § 107, that is, for response costs, health assessment costs, and natural resource damage costs.

#### *A. Relationship to Existing Superfund Processes*

The proposed rule would not establish any regime regulating the conduct of hardrock mining and mineral processing activities. Instead, EPA intends for CERCLA § 108(b) requirements to apply alongside other programs that directly regulate the operation of hardrock mines. Nor does the proposed rule modify the existing Superfund enforcement authorities, including those to gather information, identify responsible parties, effect cleanup (especially through EPA's enforcement first policy), assess penalties, or provide for citizen suits. Instead, the proposal is designed to complement and support those existing processes. The impact of this proposal on existing processes would be to increase the likelihood that parties have funds to conduct cleanup; increase the likelihood of successful recovery of costs under CERCLA, including claims brought under CERCLA §§ 107 or 113(f) from the parties providing the financial responsibility instruments, increase the likelihood that funds will be available for owners and operators to settle their Superfund liabilities with the Federal Government, and provide an instrument that may be used by an owner or operator, to assure work required under a CERCLA § 106 unilateral administrative order by EPA and other Federal agencies.

Set within the context of CERCLA's response program, CERCLA § 108(b) establishes a broad authority for EPA to promulgate requirements that classes of facilities establish and maintain evidence of financial responsibility consistent with the risk associated with various hazardous substance management activities. CERCLA as a whole is generally designed to ensure that, ultimately, risks to human health and the environment are addressed by those responsible for contamination in the first instance (commonly called the "polluter pays" principle). The CERCLA § 108(b) requirements can complement this goal in two particular ways. First, the rules should help assure that businesses make financial arrangements to address risks from the hazardous substances at their sites in the event that a CERCLA cleanup ultimately becomes necessary. The rules can thus promote the polluter pays principle underlying the CERCLA scheme. Second, CERCLA § 108(b) rules should serve to create effective incentives for regulated entities

to manage the hazardous substances present at their facilities more carefully and thereby minimize the threats of future releases. These sorts of measures directly promote protection of human health and the environment by preventing the environmental harm caused by releases, and by creating a culture of responsible behavior among the regulated community that will minimize the need for future Superfund actions.

#### *B. Liabilities Covered*

CERCLA § 108(b) does not provide specific direction on the types of liabilities that the regulations for facilities are to cover. Paragraph (a)(1) of § 108 requires evidence of financial responsibility for *vessels* explicitly "to cover the liability prescribed under paragraph (1) of section 107(a)." By contrast, CERCLA § 108(b)(1) provides only that classes of *facilities* establish and maintain evidence of financial responsibility "consistent with the degree and duration of risk" associated with various aspects of hazardous substance management. Thus CERCLA § 108(b) does not include the same direct cross-reference to the categories of liabilities under CERCLA § 107 that it does for vessels. Therefore, in developing this proposal EPA considered whether it was appropriate to require evidence of financial responsibility for all types of CERCLA liabilities, only a subset of those liabilities (for example, only for potential response costs), or even extend the instruments beyond the categories included in CERCLA § 107 (for example, for personal injury costs). EPA is today proposing to make the instruments available for all types of CERCLA liabilities enumerated in CERCLA § 107. EPA believes that this approach furthers both policy objectives described earlier, by helping to ensure adequate funding for all types of potential CERCLA liabilities at regulated facilities, and by encouraging owners and operators to take into account the full breadth of potential CERCLA liability when structuring their operations, thereby minimizing those risks in the first instance. Thus, the instruments provided under this proposed rule would be available to pay costs incurred by a government or private party for response costs, natural resource damage costs, and health assessment costs.<sup>43</sup>

Finally, EPA has not identified a basis for it to exclude any of these particular types of costs based upon the data EPA has gathered in preparing this proposal. All three types of CERCLA § 107 costs

have been incurred by hardrock mining facilities as EPA has documented elsewhere in this preamble. (see Section VI.F.3.).

#### *C. Universe Covered*

Under this proposal, requirements would apply to owners and operators of mining facilities that fall within the classes described in the 2009 *Priority Notice* except for three classes that EPA has identified as presenting a lower level of risk of injury—mines conducting only placer mining activities, mines conducting only exploration activities, and mines with less than five disturbed acres that are not located within one mile of another area of mine disturbance that occurred in the prior ten year period. In addition, requirements under this proposal would apply to owners or operators of mineral processing facilities identified in the 2009 *Priority Notice* with less than five disturbed acres of waste pile and surface impoundment. Other mineral processing facilities identified in the 2009 *Priority Notice* would not be subject to the proposed rule. Further, the proposed rule would apply only to facilities that are authorized to operate, or should be authorized to operate, on the effective date of the rule. The applicability of this rule is described further in section VI.A.1. of this preamble.

#### *D. Notification Requirement*

The proposal would require owners and operators subject to the rule to notify EPA that they are subject to the rule and intend to comply, and to provide basic facility information, within thirty days of the effective date of the final rule. Those owners and operators would then be required to identify a CERCLA § 108(b) financial responsibility amount for their facility, and to submit evidence of financial responsibility to EPA.

#### *E. Determining the Financial Responsibility Amount for Hardrock Mining Facilities*

The rule proposes a hardrock mining financial responsibility formula for determining a financial responsibility amount for response costs, health assessment costs, and natural resource damages. The formula, and EPA's approach and methodology for developing the formula, are described in detail in section VI.D.4. of this preamble. In summary, the proposed formula is designed to reflect the relative risk to human health and the environment, of facility practices for managing hazardous substances, including reductions in risk that may

<sup>43</sup> See 42 U.S.C. 9607(a)(4)(A)–(D).

result from compliance with other regulatory requirements or other facility practices. The formula assigns values for a facility based on facility and unit characteristics (e.g., open pits, waste rock, tailings, heap leach, process ponds, water management, and operations, maintenance, and monitoring). These values correspond to calculated cost levels, and the formula then aggregates these cost levels to establish the facility-wide financial responsibility amount. The formula is not intended to establish any CERCLA liability or define a particular remedy for a unit or facility. Rather, the purpose of the formula is simply to establish an amount of financial responsibility that reflects the costs that might be expected to result, if a Superfund action should ultimately be required at the site, based on the information EPA has compiled on a national basis in the record for this proposal. Any remedy decisions will continue to be developed on a site-specific basis through standard CERCLA processes, including the processes in the NCP. Because the CERCLA § 108(b) cost estimate is necessarily developed in the absence of any site-specific remedy selection, EPA cannot ensure that the particular costs the formula assigns for a particular feature will necessarily ultimately be identical to the actual costs for cleaning up that site feature. Therefore, although the formula employs an aggregation of individual costs to obtain an overall amount for the facility, the individual cost components are not themselves intended to represent any sub-limits within the actual financial responsibility instrument. In other words, the total amount of funds would be available for any future Superfund action anywhere across the facility, and would not be tied to particular site features. Moreover, to impose sub-limits based on the particular values for the formula subcomponents has the potential to result in partial over- and under-funding of unit- and site-specific remedies in the future, once a CERCLA remedy is defined and claims are made against the instrument. In addition, making those claims would potentially require protracted negotiations over which response costs are ultimately payable from the instrument. Such a situation would hinder, instead of support, CERCLA cleanups.

Once the amount is ascertained through the formula, owners and operators would then be required to obtain an acceptable financial responsibility instrument for that amount, submit evidence of the instrument to the Agency, and make

information about the instrument available to the public. EPA is not proposing to require a preliminary review and approval of the application of the formula to the facility's features, nor prior review and approval of the financial responsibility instrument, prior to it becoming effective. The Agency may choose to review and verify the adequacy of a financial responsibility amount, or the terms of the instrument provided to EPA under CERCLA § 108(b), at a facility at any time. If EPA determines the financial responsibility amount submitted by the owner or operator to be inadequate, EPA may choose to initiate enforcement proceedings.

The Agency considered an alternative approach to establishing a CERCLA § 108(b) cost estimate that more closely resembles more traditional financial responsibility programs developed to complement a permit-based regulatory program. Financial responsibility requirements under many other programs<sup>44</sup> are typically components of an overarching regulatory program, such as a permit program, and are designed to assure compliance with the requirements of that program. CERCLA § 108(b) requirements in contrast, are freestanding in that they are not directly associated with regulatory program requirements with which an owner and operator must comply, or with a remedy that has been selected that an owner and operator must implement. Under the "closure plan" alternative EPA considered, the Agency would first identify a set of technical engineering requirements for a facility subject to CERCLA § 108(b) requirements that could be consolidated into a complete facility closure, and in turn could be used as the basis for calculating an amount that ultimately would need to be assured for under CERCLA § 108(b). In effect, the "closure plan" would have had to include the engineering controls necessary to compete a CERCLA-style clean up at a facility where the owner or operator had walked away and failed to complete reclamation and closure activities. The plan itself would not be intended to be enforceable, but would only have served as a method to calculate the amount of financial responsibility that would be required under CERCLA § 108(b), using site-specific information. Based on the closure plan, EPA would then have calculated the amount of financial responsibility necessary under CERCLA § 108(b), after taking into account other

Federal and/or state engineering controls and associated financial responsibility requirements. This could integrate CERCLA § 108(b) requirements into the existing Federal and state financial responsibility requirements applicable at hardrock mining facilities, and allow for more consistency among financial responsibility requirements nationally, as the CERCLA § 108(b) amount would in concept, fill in any gaps EPA identified under other programs.

However, EPA soon recognized that there may be problems adopting such an approach. First, selection of a particular response under CERCLA is determined in accordance with the NCP, but after a release or threatened release is identified, and on a case-by-case basis. By contrast, a permit program has the advantage of identifying the appropriate engineering controls for closure before they become necessary, through the permit process. EPA was unable to identify a basis to specify a site-specific set of engineering controls for a site-specific cost estimate, without going through a process similar to applying the NCP at each facility. Such an approach would present a significant regulatory burden on the Agency. First, it would necessitate a case-by-case evaluation of each facility to determine the appropriate engineering controls that CERCLA might require, and then the Agency would need to compare that set of controls to any applicable regulatory requirements, such as state or Federal reclamation requirements. Second, it would be difficult for EPA to create a CERCLA § 108(b) financial responsibility instrument that would be written to cover only the particular "gaps" the Agency sought to cover for each engineering requirement at a facility without having the instrument overlap with other requirements given that some closure programs conduct activities that reduce CERCLA risks. This would present problems those presented by sub-limits on instruments (discussed earlier). EPA has other important concerns with such an approach aside from these implementation concerns. EPA has policy concerns about overseeing other Federal and state programs' financial responsibility requirements for adequacy, given other authorities' expertise with mining regulation. Based on these considerations, EPA is proposing the formula approach in this rule. EPA solicits comment on the proposed approach.

It should be noted that, as mentioned in section III.F. of this preamble, the financial responsibility formula developed for this proposed rule is

<sup>44</sup> See summaries of state financial responsibility programs in the docket for this rulemaking (EPA-HQ-SFUND-2015-0781).

specific to the hardrock mining industry, and is not designed for use in future rulemakings under CERCLA § 108(b). In future rulemakings under CERCLA § 108(b), EPA will evaluate how to determine financial responsibility amounts for each particular rule, and will propose an appropriate methodology.

#### F. Available Instruments

The proposed rule considers the use of all financial responsibility instruments identified in CERCLA § 108(b)(2) of the statute, that is, insurance, guarantee, surety bond, letter of credit, or qualification as a self-insurer. The proposal includes a trust fund as an available form of qualifying as a self-insurer. The proposed rule would allow owners and operators to demonstrate the financial responsibility amount required at a facility using one or a combination of these instruments. In addition, the proposed rule would allow the owner or operator to demonstrate financial responsibility for multiple facilities using a single instrument.

The Agency is proposing two approaches for qualifying as a self-insurer through a financial test instrument for self-insurance. Under Option 1, EPA would not include a financial test as a form of self-insurance. EPA prefers this option because it believes the weight of the evidence supports more secure forms of financial responsibility. With respect to Option 2, EPA would include a stringent credit rating-based financial test to cover all or partial costs of a facility's obligations, depending on the owner or operator's credit rating. Under Option 2, the owner or operator could use the financial test itself, or the test may be used by a corporate parent, a firm owned by the same parent corporation as the owner or operator, or a firm with a substantial business relationship with the owner or operator, to demonstrate financial responsibility for the owner or operator through a corporate guarantee. The proposed approaches are discussed in section VI.C.4. of this preamble.

The proposed rule includes wording for the financial responsibility instruments. The instruments would be required to conform to this wording. This simplifies administration of the rule. The proposed financial responsibility instruments are designed to pay costs under CERCLA for which the owner or operator is responsible at the facility. Depending on the requirements of the instrument provider, both the owner and operator may or may not be named on the financial responsibility instrument, but

all instruments must be available to pay for costs of either party.

The financial responsibility instruments proposed are designed to pay for CERCLA response costs, health assessment costs, and natural resource damages under three scenarios in addition to, and independent of, the direct action scenario provided in CERCLA § 108(c). First, the instruments are designed to pay the party obtaining the judgment after a court finding of CERCLA liability against any owner or operator covered by the instrument. In this case, the instrument would pay any party obtaining a judgment.

Second, the instruments are designed to pay upon settlement of CERCLA liability with the United States, into an account designated under the settlement. This could include a CERCLA special account under CERCLA § 122, in which those funds can be used for carrying out the settlement at the site, or into the Superfund. In situations where a facility is in bankruptcy or jurisdiction over the owner or operator is not available and a direct action is brought against the instrument provider under CERCLA § 108(c), the instrument would be available to pay in settlement of the owner or operator's CERCLA liabilities upon settlement with the instrument provider, standing in the shoes of the owner or operator.

Finally, the instruments are designed to pay in certain limited administrative order situations under CERCLA § 106; that is, where the financial responsibility instrument is named in an administrative order and a trust fund is established pursuant to the order, the funds would be available to be paid into that trust fund if performance at the facility as required by the order had not occurred.

#### V. Relationship of CERCLA § 108(b) to Other Federal Laws, and to State and Tribal Laws

In considering options for this proposed rule, EPA examined how CERCLA § 108(b) may relate to other financial responsibility authorities currently implemented by EPA and from closure and reclamation programs implemented by other Federal agencies and by states and tribes. EPA has concluded that CERCLA § 108(b) requirements apply in addition to requirements under other Federal law. EPA also believes that preemption of state reclamation bonding programs is not intended by CERCLA, nor necessary or appropriate. Thus, EPA expects CERCLA § 108(b) to effectively complement, not duplicate or disrupt, those programs.

#### CERCLA § 108(b) Applies To Address CERCLA Liabilities at Facilities in Addition to Other Federal Financial Responsibility Requirements

CERCLA authorizes EPA to issue financial assurance requirements to cover CERCLA liabilities, whether or not a facility is subject to financial responsibility requirements under another Federal law. Thus, CERCLA § 108(b) requirements apply even where a hardrock mine or mineral processor may be subject to, for example, Federal reclamation bonding requirements. This interpretation gives full effect to CERCLA § 108(b) and carries out its purpose in ensuring that facilities that manage CERCLA hazardous substances make arrangements to cover any CERCLA liabilities that may arise.

This approach is fully consistent with the plain language of the statute. CERCLA § 108(b)(1) addresses other Federal law only in a very limited way. It states that the requirements under that section are to be "for facilities *in addition to* those under [RCRA] Subtitle C . . . and other federal law." The section does not further elaborate on what "in addition to" means. EPA reads this provision in a most straightforward way: Requirements in this proposed rule are quite literally "in addition to" whatever financial responsibility requirements may be imposed under other Federal laws for other purposes. EPA does not, for instance, see this reference to other Federal law as any limitation on the applicability of the section. Indeed, the phrase "in addition to" is inconsistent with the notion that other Federal law is to be a *limitation* on the scope of CERCLA § 108(b)'s applicability. By contrast, when Congress intended to insert limitations based on other Federal law into CERCLA, it clearly stated them as such. *See, e.g.,* CERCLA § 101(22)(C) (definition of release "excludes . . . (C) release of source, byproduct, or special nuclear material from a nuclear incident, as those terms are defined in the Atomic Energy Act of 1954, if such release is subject to requirements with respect to financial protection established by the Nuclear Regulatory Commission under § 170 of such Act. . . .); 101(39) ("The term 'brownfield site' does not include" facilities to which permits have been issued under RCRA, the Clean Water Act, the Toxic Substances Control Act, or the Safe Drinking Water Act; or facilities subject to RCRA corrective action, RCRA closure, or TSCA clean up obligations). Nor would reading this reference as a limitation on the scope of CERCLA § 108(b) make much practical sense, as

the need for a CERCLA response may arise regardless of whether another Federal law already applies.

EPA's intent in this proposal, consistent with its interpretation described earlier, is to apply CERCLA § 108(b) to address potential CERCLA risks at a facility, even when that facility is subject to regulation and/or financial responsibility requirements under other Federal law, such as mine reclamation bonding requirements required by Bureau of Land Management (BLM) or the U.S. Forest Service (USFS). As explained elsewhere, these proposed regulations are not designed to ensure compliance with technical engineering requirements imposed through a permit, or to ensure proper closure or reclamation of an operating mine. Instead, EPA has structured these rules to address the CERCLA liabilities at a regulated facility, and to create incentive for practices that will prevent the need for future CERCLA responses.

#### Provision of a Financial Responsibility Instrument Under CERCLA § 108(b) Does Not Preempt State Mine Bonding Regulations Under CERCLA § 114(d)

EPA has also considered, in developing the proposed CERCLA § 108(b) regulations for hardrock mining classes, what effect, if any, compliance with the Federal requirements would have under CERCLA § 114(d), an express preemption provision relating to specific state financial responsibility requirements. Many states have mine financial responsibility requirements. EPA compiled summaries of all 50 states' mine bonding requirements to get a general understanding of the types of requirements applicable under other programs. These summaries are also available in the docket. EPA's general understanding of state mining programs indicates that those programs vary, and that states use mine permitting authorities to enforce compliance with state mining regulations. Some states may address different risks, or address risks in a different manner from those for which EPA's proposed Financial Responsibility Formula is designed to account. In developing the proposed rule, the Agency sought the input of several states with significant mining regulatory programs on the state preemption question. EPA received responses from Alaska, Arizona, Colorado, and New Mexico. The comment letters also are included in the docket for this proposal.

EPA does not intend its CERCLA § 108(b) regulations to result in widespread displacement of those programs, nor does EPA believe that

such preemption is intended by CERCLA, necessary, or appropriate.

EPA does not believe that CERCLA § 114(d)<sup>45</sup> gives a broad preemptive effect to EPA's CERCLA § 108(b) financial responsibility regulations, over state reclamation bonding requirements generally.<sup>46</sup> This follows from consideration of the structure and language of the statute and case law. First, both CERCLA §§ 108(b) and 114 are expressly focused on hazardous substances, the risks they present, and financial responsibility associated with liability stemming from their release or threatened release. Consistent with this, as described in section V.B. of this preamble, EPA has interpreted the scope of CERCLA § 108(b)'s mandate for evidence of financial responsibility to reflect the types of costs for which parties may be liable under CERCLA § 107 that result from releases or threatened releases of hazardous substances. As the state commenters have made clear, many state reclamation bonding regimes are not similarly limited to CERCLA hazardous substances or their release. For example, the New Mexico Environment Department stated that reclamation under the state Mining Act is a goal in itself, which may or may not be connected with the release of hazardous substances in a particular instance.

Second, CERCLA § 114 taken as a whole makes clear that states are not prohibited from requiring reclamation bonding. The section begins with a general disclaimer of preemptive effect in paragraph (a), specifically directing that "nothing in this chapter" "be construed or interpreted as preempting any State from imposing any additional

<sup>45</sup> CERCLA § 114 states, in relevant part:

(a) Nothing in this chapter shall be construed or interpreted as preempting any State from imposing any additional liability or requirements with respect to the release of hazardous substances within such State.

(d) Except as provided in this subchapter, no owner or operator of a . . . facility who establishes and maintains evidence of financial responsibility in accordance with this subchapter shall be required under any State or local law, rule, or regulation to establish or maintain any other evidence of financial responsibility in connection with liability for the release of a hazardous substance from such . . . facility. Evidence of compliance with the financial responsibility requirements of this subchapter shall be accepted by a State in lieu of any other requirement of financial responsibility imposed by such State in connection with liability for the release of a hazardous substance from such . . . facility.

<sup>46</sup> By this discussion, EPA is providing its general views on the preemption issue for transparency and to obtain public comment. It is the courts that would make any final determinations about the preemptive effect of CERCLA 108(b) regulations at any particular facility. These determinations would necessarily be based on case-by-case evaluations.

liability or requirements with respect to the release of hazardous substances within such State." This reflects Congressional intent that preemption of state law requirements should be minimized. Moreover, CERCLA § 114(d)'s preemptive effect is qualified—"except as provided in this subchapter"—a reference that logically encompasses the limitations on preemption outlined in paragraph (a). Taken together, these references quite naturally preserve state mine bonding requirements as "additional requirements" to the extent that they may also address the release of hazardous substances.

Third, many state requirements serve significantly different purposes from any final CERCLA § 108(b) regulations, and for this reason alone those state requirements should not be considered to be "in connection with liability for the release of hazardous substances" within the meaning of CERCLA § 114(d). As discussed, the CERCLA § 108(b) regulations being proposed today are intended to address facilities' potential for releases or threatened releases that result in CERCLA liability. By contrast, many mine bonding programs are designed to ensure that a facility can comply with otherwise-applicable regulatory requirements, that may or may not be connected with (or may be only partially connected with) hazardous substance releases or threatened releases. See ALASKA STATUTE § 27.19.040(a), Reclamation Financial Assurance (requiring financial responsibility to ensure performance of a reclamation plan); ARIZ. REV. STAT. § 27-971(B)(11), Submission and contents of reclamation plan (financial responsibility is required to ensure completion of all activities in the approved reclamation plan for mining units); CAL. PUB. RES. CODE § 2773.1(a), Reclamation of Mined Lands and the Conduct of Surface Mining Operations (financial responsibility is required to ensure the completion of the lead agency-approved reclamation plan); 2 COLO CODE REGS. § 407-1 R. 4.2.1(1), Adequacy of Financial Warranties (For mining operations, financial responsibility is required to ensure the fulfillment of the requirements of the reclamation plan that is attached to the reclamation permit application); FLA. ADMIN. CODE ANN. r. 62C-16.0075(5)(f), Financial Responsibility (required to demonstrate financial responsibility in order to cover reclamation through the initial revegetation of the reclaimed area); IDAHO ADMIN. CODE r.20.03.02.070(01), Reclamation Plan



Approval Required and IDAHO ADMIN. CODE r.20.03.02.071(01), Permanent Closure Plan Approval Required (Financial responsibility is required to ensure that all reclamation activities included in an approved reclamation plan and that all closure activities in an approved permanent closure plan are completed for surface mining operations and cyanidation facilities, respectively); MINN. R. 6130.6000 Subp. 1–Subp. 2, Performance Bonds (Financial responsibility also may be required to cover the estimated cost of “satisfactorily accomplishing reclamation of all lands disturbed and unreclaimed up to the date of annual [financial responsibility] review.”); NEV. ADMIN. CODE ch. 519A.350(1), General requirements (Financial responsibility is required to ensure that reclamation activities in the approved reclamation plan will be completed); N.M. STAT § 69–36–11, Existing mining operations; closeout plan required (Financial responsibility under NMMA is required to assure reclamation or “closeout.”); UT CODE ANN. 40–8–4(13)(a), Definitions (Financial responsibility is required to assure reclamation of affected lands); WASH. REV. CODE § 78.44.087(1)(a), Performance security required (Financial responsibility is required for reclamation of affected surface mining lands).

Fourth, it makes sound policy sense for CERCLA § 114(d) to be read to allow these programs to apply in tandem. EPA cannot write its national CERCLA § 108(b) requirements to simultaneously correspond to 50 different states’ reclamation requirements. These requirements can vary substantially, and particular requirements may have only a limited relationship to liability for the release of hazardous substances.<sup>47</sup>

## VI. Section-by-Section Analysis

### A. Subpart A—General Facility Requirements

#### 1. Purpose and Scope (§ 320.1) and Applicability (§ 320.2)

This proposed rule would establish financial responsibility requirements under CERCLA applicable to current owners and operators of hardrock mining facilities that are authorized to

operate or should be authorized to operate, that is, owners and operators that are required to obtain authorization to operate and have done so, as well as those who are required to obtain authorization to operate and have failed to do so. The proposed rule would not apply to owners or operators of past hardrock mining facilities, such as abandoned mines, nor would it apply to former owners or operators of mines that are covered by the rule. The financial responsibility requirements for those current owners or operators would extend to all potential CERCLA liabilities at the facility, based on current conditions at the site. This approach balances the dual goals of providing funds to address CERCLA liabilities at their sites, and of creating incentives for sound practices that will minimize the likelihood of a need for a future CERCLA response.

In developing this proposed rule, EPA considered whether to propose conditions applicable to all owners and operators, past and present, of facilities covered by the rule, or whether to limit the rule to current owners and operators. EPA also considered whether CERCLA § 108(b) requirements could be applied to abandoned facilities. Although CERCLA § 108(b) could potentially be interpreted to cover such owners, operators and facilities, EPA is proposing requirements applicable only to current owners and operators of currently authorized to operate facilities for a number of reasons.

The plain language of CERCLA § 108(b) is ambiguous on the owners, operators and facilities to which it is intended to apply. The section uses the terms “owner” and “operator” and “facility” repeatedly, but says nothing about whether these terms could include *past* owners and operators, or owners or operators of former facilities.

Looking at the statute more broadly, however, indicates that it is appropriate to adopt a narrower interpretation than the bare terms in CERCLA § 108(b) would suggest. First, reading CERCLA § 108(b) as applying to current owners and operators of currently-active or -idled facilities comports with CERCLA § 108 when read as a whole. CERCLA § 108 requires evidence of financial responsibility for three different types of facilities: vessels under CERCLA § 108(a), motor carriers under CERCLA § 108(b)(5), and other facilities under CERCLA § 108(b). The provisions applicable to vessels and motor carriers logically apply to current owners and operators of existing vessels and motor carriers. For example, CERCLA § 108(a) refers, as does CERCLA § 108(b), to “owners” and “operators” of “vessels”

without qualification. However, logically only current owners and operators of existing vessels are able to “use[] any port or place within the United States” as required by CERCLA § 108(a), and only those entities and vessels would be subject to the remedies available to the Secretaries of the Treasury and Transportation in CERCLA §§ 108(a)(2) and (3). Indeed, the U.S. Coast Guard’s CERCLA § 108(a) regulations apply only to current owners and operators of vessels used or capable of being used as a means of transportation on the water. See 33 CFR §§ 138.12 and 138.20. DOT’s motor carrier financial responsibility requirements also only apply prospectively.

Current owners and operators are the primary actors at facilities and as such would be able to evaluate the applicability of the rules and apply the formula to the features present. EPA anticipates that requiring entities that may no longer have the legal rights to access a facility to evaluate it for purposes of determining whether they are subject to the rule and if so, the appropriate amount of financial responsibility, would be difficult in many cases. Thus EPA intends for this proposal to be focused upon an easily-identified, particular subset of parties that has control over and are thus in the best position to control and address hazardous substance management activities. Such incentives would not exist in the case of owners and operators that no longer have activities at the site. Nor does EPA expect that applying the rules to such former owners would further a primary goal of financial responsibility, that is, to develop incentives for good practices.

Similar reasoning leads EPA to propose applying the CERCLA § 108(b) requirements only to currently-active or currently-idled facilities. These facilities are readily identifiable and because they are ongoing concerns, are more likely to be able to obtain the kind of financial responsibility necessary under the regulation, and to further the dual goals of CERCLA § 108(b) regulations. By contrast, EPA is concerned that a rule applicable to facilities that are not currently active or currently idled would be very difficult to implement, and has the potential to divert significant resources from existing Superfund priorities with minimal benefit to the program. Therefore, EPA believes that attempting to regulate and oversee CERCLA § 108(b) requirements for this vast universe of facilities would impose a tremendous administrative burden on the Superfund program, with the likelihood of very little return. EPA

<sup>47</sup> EPA also notes that concerns about duplication are separately addressed in CERCLA’s prohibition on double recovery in CERCLA § 114(b). That section allows for harmonizing recoveries where claims could also be brought under other state causes of action. This helps provide assurance, for example, that reclamation requirements that may otherwise be similar to CERCLA response actions and compensable through a CERCLA 108(b) financial responsibility instrument would not be unfairly paid twice.

believes that the Superfund and existing enforcement processes are significantly better suited for use at sites that are not currently active or currently idled to effect cleanup directly. Thus, EPA expects that the approach in this proposed rule would maximize the effectiveness of CERCLA § 108(b) requirements.

EPA has sought to complement CERCLA's liability provisions by requiring owners and operators subject to the rule, to provide assurance against all potential risks associated with hazardous substance management at their facility. In this way EPA's proposed approach thus also is intended to support CERCLA's broad remedial purposes, while accounting for the differences between CERCLA § 108(b)'s regulatory program and CERCLA's liability and enforcement provisions.

As discussed in further detail in following sections of this preamble, requirements for financial responsibility under CERCLA § 108(b) do not affect the liability of any parties potentially responsible for CERCLA costs. This would include that of any former owners and operators. The existing CERCLA processes for enforcement, contribution, cost recovery, and assignment of liability are unaffected by CERCLA § 108(b) financial responsibility requirements, and are available to ensure that responsible parties pay the costs associated with releases or threatened releases of hazardous substances. In fact, while not required by the proposed rule itself, EPA believes that requiring current owners and operators to demonstrate CERCLA § 108(b) financial responsibility may have the salutatory effect of inducing those subject to the rule to seek out any other parties who may be liable for contamination at their facility in order to obtain their assistance with cleanup. The result could be a potential reduction in threats to human health and the environment at the site which could in turn result in a reduced CERCLA § 108(b) financial responsibility amount. Given the practical difficulties of imposing CERCLA § 108(b) financial responsibility requirements upon past owners and operators, EPA expects that those existing processes are the appropriate means for parties to divide liabilities amongst themselves.

#### Exemption for States and the Federal Government

The proposed rule at § 320.1(c) would exempt states and the Federal Government from the requirements of part 320. This provision is modeled on a similar, long-standing exemption in

EPA's regulations for RCRA Subtitle C hazardous waste treatment, storage, and disposal facilities.<sup>48</sup> In EPA's view, the Federal and state governments have adequate resources and taxing authority to ensure that they will be able to pay for any CERCLA § 107 costs that may arise at facilities where they are owners or operators. Local governments, however, are not exempt. As EPA explained in 1980, local governments can and do become insolvent, and if small enough, may not be able to cover their liabilities. EPA requests comment on this exemption.

#### Non-Transportation-Related Facilities

E.O. 12580 delegates the responsibility for developing regulations under CERCLA § 108(b) for non-transportation-related facilities to EPA. Responsibility for developing regulations for transportation-related facilities is delegated to the Department of Transportation. Thus, transportation-related facilities at hardrock mining sites would not be subject to requirements under this proposed rule. The Agency anticipates that jurisdictional issues between EPA and the Department of Transportation will be worked out in implementation. EPA solicits comment on this approach.

#### 2. Definitions (§ 320.2)

The Agency is proposing the following definitions for use in Part 320:

*Hardrock Mining Facility* means a hardrock mine, as defined in subpart H of part 320, and/or a mineral processor, as defined in subpart H part 320.

*Administrator* means the EPA Administrator, or designee thereof.

#### 3. Availability of Information; Confidential Business Information (§ 320.4)

Section 2.203(b) of this chapter provides procedures through which any person submitting information to EPA in accordance with this Part may assert a claim of business confidentiality covering part or all of that information. Information covered by such a claim will be disclosed by EPA only to the extent, and by means of the procedures, set forth in Part 2, Subpart B, of this chapter. However, if no such claim accompanies the information when it is received by EPA, it may be made available to the public without further notice to the person submitting it.

This rule proposes an option to require owners or operators to post on their company website all information submitted to EPA that is not identified

as confidential business information (CBI). EPA anticipates that owners or operators will claim some of the information submissions required under this rule as CBI. However, the Agency believes that there are categories of information required that will not be CBI including, but not limited to, identification of the type of financial responsibility instrument used, the amount of financial responsibility required at a facility, the facility contact information, failure of instrument providers, an owner or operator entering bankruptcy, claims made against the owner or operator, or an owner or operator's request for release from financial responsibility requirements. To facilitate implementation of this proposed rule, the Agency is considering making Class Determinations for certain types of CBI information. EPA solicits comment on the types of information that owners or operators anticipate would be CBI, and on the value of CBI Class Determinations.

#### 4. Initial Notification Requirement (§ 320.5)

EPA is proposing to require owners or operators subject to the requirements of this rule to submit a notification form to EPA. Owners or operators authorized to operate on the promulgation date of this rule would be required to submit the initial notification form within thirty days of the effective date of the final rule. Owners or operators that become authorized to operate after the effective date of the final rule would be required to submit the notification form and comply with the requirements of this proposed rule prior to beginning operations.

The notification form is specified in proposed § 320.5. Owners or operators would be required to provide, at a minimum, the following information: (1) The name, mailing address, and location of the facility, (2) the facility's EPA ID number, if one has been previously issued, (3) the name and contact information for a contact person for financial responsibility issues, (4) the land type on which the facility is located, (5) owner and operator information, (6) and information about the activities conducted at the facility.

Within thirty days of receiving the notification form, EPA would issue an EPA identification number to the facility, if the facility has not yet received one.

The requirement for this notification form would serve several purposes important to the implementation of financial responsibility requirements under this proposed rule. First, it would

<sup>48</sup> See 45 FR 33198-99 (May 19, 1980); 45 FR 33262 (May 19, 1980).

allow EPA to identify the universe of facilities subject to the rule. In addition, it would assure that all facilities subject to the rule receive an EPA identification number, which will allow EPA to track financial responsibility implementation information. Finally, it would provide EPA information about the facility that EPA anticipates will be important for effective rule implementation. The Agency solicits comment on this proposed notification requirement, on the proposed notification form, and on the timeframe for notification.

#### 5. Information Submission Requirements (§ 320.6)

This proposed rule would require that owners or operators of facilities subject to the rule submit information to EPA. The Agency believes that submission of the information proposed in this rule would be needed for effective implementation of CERCLA § 108(b) requirements. By requiring the owner or operator to submit information about the facility to EPA, these requirements would better enable the Agency to ensure full compliance with the requirements for financial responsibility throughout the time the facility is subject to those requirements.

Under § 320.5, owners and operators would be required to submit an initial notification form. The form would provide EPA basic information about the facility. The form can be found in Appendix A of Part 320. EPA solicits comment on the information required in the form.

Owners or operators would further be required to submit evidence of financial responsibility. The precise submittal requirements for each financial instrument are described in subpart C. Generally, owners or operators demonstrating financial responsibility using a surety bond would be required to submit the surety bond to EPA. Owners or operators using a letter of credit would be required to submit the letter of credit to EPA unless it is held by a trustee, as provided in § 320.40, in which case they would be required to submit a certified copy. Owners or operators using insurance would be required to submit the endorsement. Owners or operators using a trust agreement (either a stand-alone trust or a stand-by trust established for use with another instrument) would be required to provide a duplicate original. If the final rule allows for the use of a financial test and corporate guarantee, owners or operators using the corporate guarantee would be required to submit a signed corporate guarantee, as well as a letter from the Chief Financial Officer (CFO letter), audited financial

statements, and agreed upon procedures report, as required in § 320.44. Finally, owners or operators using the financial test, if allowed in the final rule, would be required to submit the CFO letter, audited financial statements, and agreed upon procedures report, as required in § 320.43. In the case of the corporate guarantee and the financial test, the CFO letter, auditors report, and agreed upon procedures report would be required to be updated annually.

This proposal also requires information submission to assure proper maintenance of financial responsibility. The precise submittal requirements for each of the following are described in § 320.65. These requirements include a requirement to update financial responsibility amount calculations every three years, at a minimum, and to notify EPA of changes in the information on the facility's initial notification form, facility transfer, claims filed against the instrument or owner or operator, intent to close the facility, failure of an instrument provider, instrument provider intent to cancel, and owner or operator bankruptcy.

Owners or operators are also required to submit information that may vary according to facility class. These requirements will be specified in the relevant Subparts to 40 CFR part 320, but for clarity, those submission requirements are also incorporated into the general information submission requirement in proposed § 320.6. Thus, for example, owners and operators of hardrock mining facilities must calculate a financial responsibility amount for their facilities using the formula in § 320.66, and § 320.67 requires submission of information to support that calculation, including data inputs to the proposed formula to determine a financial responsibility amount, and documentation supporting all data inputs and assumptions. Under proposed § 320.6, this information must be submitted to EPA.

The Agency solicits comment on these information submission requirements including comments on the need for these requirements and suggestions for additional information that should be required under this rule.

#### 6. Requirement for Electronic Submission of Information (§ 320.7)

This proposed rule includes information submission requirements throughout the financial responsibility process. These information submission requirements include: (1) Initial notification, (2) demonstration of financial responsibility, (3) notifications pursuant to financial responsibility

maintenance, (4) submission of a financial responsibility amount and support for the amount, and (5) request for release from financial responsibility. The Agency is proposing to require that the submissions under this rule be in electronic format.

##### a. Benefits of Electronic Reporting

Adopting electronic information submission across its programs will benefit the Agency, owners and operators, and the general public. Electronic information submission will save Agency resources and improve data quality by reducing the need for manual data entry, and will help the Agency manage environmental programs more efficiently and effectively. EPA also expects electronic information submission to promote public participation by facilitating EPA's ability to make information submitted more readily accessible to interested parties. In this respect, electronic reporting can work in concert with another requirement in the proposed rule—that owners and operators have a publicly-accessible Web site (*see* Section VI.A.8. of this preamble). In addition, electronic information submission will reduce the time needed for owners and operators to submit information by eliminating the need to print or mail forms, eliminate mailing or courier fees, and allow members of the regulated community to obtain information about the status of their submissions without requesting such information from EPA by phone or mail.

Use of electronic forms should also facilitate the effective submission of required information. Owners and operators may benefit through integration of data entry error prevention and compliance assistance into the reporting tool. Namely, electronic systems can provide automatic data quality checks, such as for improperly formatted addresses, math errors, or significant changes in cost estimates, and flag these for correction, if needed, before submission. A system can also provide automated reminders and prompts (*e.g.*, when annual updates are due) to owners and operators, and pre-populate forms with information from prior reports. EPA does not expect that these or other tools that could be built into such a system would guarantee compliance or be a substitute for an owner or operator's own compliance assessment, since they cannot account for every site-specific situation, but EPA expects that such tools will make it easier for owners and operators to comply with the rules. It can also facilitate communication between EPA, owners and operators,

and instrument providers to immediately address data quality issues and to provide compliance assistance or take other action when potential problems are identified. Finally, the system may also provide a way for entities to maintain records supporting financial responsibility compliance, such as cost estimate documents.

This approach is also consistent with the Agency's 2013 E-Reporting Policy Statement for EPA Regulations, which reflects that, in developing new regulations, EPA will assume that reporting will be electronic and not paper-based.<sup>49</sup> As described by this policy, e-reporting is not simply a regulated entity e-mailing an electronic copy of a document (e.g., a PDF file) to the government, but a system in which an electronic tool guides the regulated entity through the reporting process, often with built-in compliance assistance and data quality checks. This policy embraces the Digital Government Strategy issued by the White House on May 23, 2012,<sup>50</sup> which calls for EPA to continue evolving its reporting systems to take advantage of new technology and improve transparency for all of its stakeholders.

Electronic reporting also is a key component of the Next Generation Compliance Strategy.<sup>51</sup> EPA's Next Generation Compliance Strategy is an integrated strategy to improve regulations with new monitoring and information technology and expanded transparency.<sup>52</sup> It is designed to motivate the regulated community to increase compliance, inform the public about performance, and help ensure the public has access to information about their communities that allows them to more fully engage in environmental protection efforts.

#### b. Financial Responsibility Portal

To realize these benefits, EPA is considering development of a Financial Responsibility Portal to collect information relevant to the rule and to serve as an electronic tool that guides owners and operators through the reporting and submission processes with built-in compliance assistance and data quality checks. EPA envisions that this system would be a component of

EPA's Central Data Exchange,<sup>53</sup> or an equivalent technical architecture. If the Financial Assurance Portal is created using Central Data Exchange, owners and operators will be required to establish an account with Central Data Exchange in order to use the system. Any electronic reporting system will comply with subpart D of EPA's Cross-Media Electronic Reporting Regulation (CROMERR).<sup>54</sup> CROMERR sets performance-based, technology-neutral standards for receiving electronic reports from facilities regulated under EPA programs to protect users and their data.

EPA envisions that users would access the portal through a Web form based on Extensible Mark-up Language (XML). EPA expects that XML schemas and stylesheets, when combined with XML enabled browsers, data bases, and other applications are currently the method of choice for conducting data exchange using the Internet to transfer and manipulate data.<sup>55</sup> The Agency is seeking comment on using an XML format, or if another type of electronic format, such as an Electronic Data Interchange (EDI) would be preferable. EPA also requests comment on the estimated burden reduction if EPA developed an option to submit information electronically using a system-to-system based approach using Extensible Mark-up Language (XML) through EPA's Central Data Exchange.

Once the Financial Assurance Portal is developed, EPA is proposing to require that regulated facilities electronically submit the following categories of information through the portal: (1) Initial notification form required under § 320.5, (2) submission of URL where CERCLA § 108(b) information will be available, (3) financial responsibility formula data (upload documentation), (4) financial responsibility instrument evidence, (5) notification of change in financial responsibility amount, (6) notification of change in instrument, (7) notification of claim filed against the instrument or owner or operator, (8) notification of closure, (9) request for release from financial responsibility; and (10) notice

of owner or operator bankruptcy. In addition, EPA is proposing to provide for both paper and electronic submission of the following notices from instrument providers: (1) Notice of cancellation (by provider), and (2) notice of provider incapacity. Within these categories, EPA expects that certain types of information will need to be submitted using different types of electronic means, which are discussed in detail in later sections.

In order to gain the full benefits of electronic reporting, obtaining as much information as possible in an electronic format is preferable. At the same time, the Agency is considering whether some of the information submission requirements of this proposed rule may not be appropriate for electronic information submission. For example, some of the information submission requirements proposed in this rule will result in more frequent submissions to EPA than will others. An example of submissions that EPA expects to occur more frequently relate to facility conditions—every facility will have to notify the Agency, and the notification form will have to be updated to reflect changed facility conditions. On the other hand, other requirements may be less frequent. For example, EPA's analysis of instrument providers (conducted for purposes of evaluating provider qualifications) indicates that failures are relatively uncommon. Thus, it is possible that few owners or operators will have to submit notification of instrument provider failure. Where infrequent submissions are likely, EPA expects that developing an electronic form for that submission may not have significant benefits. In addition, there may be specific types of documents (e.g., cost estimate data, certain types of financial responsibility instruments that may require wet ink signatures) that cannot be submitted electronically. The Agency solicits comment on types of information that are inappropriate for electronic submission, including the reason they may not be appropriate, and the burden to the regulated community if electronic submission of such information were to be required. EPA also asks for comment on which types of information commenters believe should be highest priority for EPA development of electronic submission tools.

As EPA develops its data system, it is considering technical issues associated with its development as described later in this section. EPA solicits comment on how an electronic submission system can be constructed to appropriately capture submission of the categories of information that EPA proposes to

<sup>49</sup> See E-Reporting Policy Statement for EPA Regulations (September 30, 2013), <http://www.epa.gov/sites/production/files/2016-03/documents/epa-ereporting-policy-statement-2013-09-30.pdf>.

<sup>50</sup> <http://www.whitehouse.gov/sites/default/files/omb/egov/digital-government/digital-government-strategy.pdf>.

<sup>51</sup> See <http://www.epa.gov/compliance/next-generation-compliance-strategic-plan-2014-2017>.

<sup>52</sup> See <http://www2.epa.gov/compliance/next-generation-compliance>.

<sup>53</sup> CDX is EPA's electronic system for environmental data exchange to the Agency. CDX also provides the capability for submitters to access their data through the use of Web services. CDX enables EPA to work with stakeholders, including governments, regulated industries, and the public, to enable streamlined, electronic submission of data via the Internet. For more information about CDX, go to <http://epa.gov/cdx>.

<sup>54</sup> See 40 CFR part 3.

<sup>55</sup> EPA states a similar expectation in the Final Rule for Hazardous Waste Manifest Revisions—Standards and Procedures for Electronic Manifests (79 FR 7517, Aug. 6, 2004).

require. Specifically, EPA requests comment on whether specific technical requirements are called for to support data submission of the following categories of information: (1) The development of a financial responsibility amount, (2) evidence of financial responsibility, (3) updates to the facility's financial responsibility information, (4) notice of closure of the facility, and (5) submission of instruments and cancellations, including how to account for the acceptance of originally signed financial responsibility documents. EPA is also seeking comment on the feasibility and utility of developing tools within the system that would assist users in complying with reporting requirements, such as the use of decision-trees to determine if an entity is regulated, checklists to ensure the proper form/documents are submitted, or reminders when reports or updated documents are due.

#### c. Anticipated Format of Submissions

The electronic system envisioned by EPA would have both mandatory and optional data entry fields. Submissions will not be processed until each of the mandatory fields have data entered, ensuring complete data entry before final submission. Data entry fields are expected to be a variety of drop down lists, number fields, calendars, and open test fields depending on the information that is required. For example, the type of activities occurring at the facility could be chosen from a drop down list, and the date of a facility's last financial responsibility amount calculation or financial test submission could be chosen from a calendar.

EPA expects these types of controls on data input can result in reduced errors. In turn this should provide efficiencies by substantially decreasing the time needed for EPA to review and process the submissions, and the time needed for the submitter to correct deficiencies. As discussed earlier, EPA is considering the ability to duplicate previous submissions when seeking to update or renew information. This will simplify future submissions to only those fields that require updates. To address the issue of CBI (described in § 320.4) the Agency envisions establishing a database that tags information as public or confidential upon receipt. This would allow the system to then auto-populate an EPA webpage to provide information not identified as CBI to the public. EPA solicits comment on this approach.

As discussed earlier, EPA would like to make it possible for users to enter some types of information through

electronic forms available in the Portal. For example, EPA intends that the following information would be entered into the Financial Assurance Portal using smart forms with data-entry boxes that specify the exact information needed: (1) Initial notification; (2) website URL; (3) amount of financial responsibility required; (4) amount of financial responsibility secured; (5) type of instrument; and, if the financial test is used, credit rating, tangible net worth, and assets in the United States; and (6) instrument provider information (*e.g.*, name, address, etc.).

EPA intends other submissions to be accomplished through forms with electronic signatures and verification: (1) Financial responsibility instruments, (2) certain information demonstrating passage of the financial test, (3) notice of a change in financial status if using the financial test, (4) notice of cancellation of a financial assurance instrument, (5) notice of a claim against the instrument, (6) notice of bankruptcy; (7) notice of a change in instrument, (8) notification of change in the amount of financial responsibility required, and (9) notice of incapacity of the instrument provider. Where an electronic signature is required, the proposal requires that the signature be a legally valid and enforceable signature under applicable EPA and other Federal requirements pertaining to electronic signatures.

EPA also expects that the user will need to upload other information from outside the system. EPA expects that this information will need to meet certain document requirements (*e.g.*, downloadable, not encrypted, printable, searchable, etc.). For this category of documents, owners and operators would be required to produce duplicate originals of certain electronic filings upon request by EPA. EPA expects that the following information, if applicable, may fall into this category: (1) Information supporting the financial responsibility amount determination, (2) information to support a financial test showing, for example financial statements; the CFO letter; a CPA audit of financial information; and an agreed-upon procedures document; (3) annual updates on trust properties and (4) evidence of financial responsibility; and (5) PDF copies of instruments that cannot be submitted electronically.

The Agency solicits comment on these expectations for information submission format.

#### d. Access to the System

EPA envisions that owners or operators will receive a password and/or user identification number to access the portal when they notify EPA that

they are a regulated entity. The system will then assist owners or operators in obtaining a unique user identification number, similar to the electronic interface that EPA has recently made available for states and the regulated community to use to electronically submit RCRA Site Identification (Site ID) forms, which are used by facilities to notify regulators that they are involved in RCRA waste activities. EPA intends to establish an electronic notification form for owners or operators to comply with proposed § 320.5. EPA solicits comment on whether instrument providers should be given access to the Financial Assurance Portal in order to submit notices to EPA and to owners and operators as required under this rule (*e.g.*, notice of cancellation). EPA solicits comment from instrument providers specifically, on whether they would use the electronic system described to file their notices electronically.

#### e. Beginning Electronic Reporting Once Portal Developed

Because the Agency anticipates that the Financial Assurance Portal will not be available to receive submissions when this rule is made final, the Agency is proposing that owners or operators be required to initially submit information in paper format until the electronic capability is available. Thus, EPA is proposing to identify an electronic filing compliance date in § 320.7(a). Because that date is not currently known, EPA is proposing to announce that date in the **Federal Register** at least sixty days in advance. The Agency is further proposing that after that compliance date, owners or operators would be required to submit information electronically unless they apply for and receive a waiver from electronic reporting requirements under § 320.7(d). This waiver provision is discussed in more detail later in this section. The Agency solicits comment on this approach.

EPA is considering an alternative approach under which electronic reporting would be phased in over the four-year compliance timeframe. EPA would require the initial notification to be submitted electronically, but would roll out other electronic forms as parts of the rule become effective or required (*e.g.*, the full amount of financial responsibility is not required until four years after the rule is promulgated). This will give EPA time to complete and fully test a number of the electronic documents prior to requiring their use. The disadvantage of this option is the increased burden to industry of having to print and mail paper documents,

along with the Agency's burden of manually entering data into its data system. EPA is considering whether such phasing may help ensure the system is working effectively and efficiently. Under this option, EPA would similarly identify an electronic filing compliance date for each phase in future **Federal Register** notices in a similar manner as described in the proposed option described earlier. Also similarly to the proposed option, the facility would be required to submit information in paper format until electronic submittals are possible for submission of the facility's information, and electronic filing would be subject to waiver.

#### f. Proposed Waivers

As part of the proposal for mandatory electronic reporting, the proposed rule would provide two options through which the Administrator could waive the requirement for electronic submission. EPA recognizes that there may be some circumstances where it may be necessary to provide for paper reporting of information otherwise required electronically, *e.g.*, in areas that lack sufficient broadband access, during large-scale national disasters (*e.g.*, hurricanes) or prolonged electronic reporting system outages, or to accommodate the religious practices of individuals that choose not to use certain technologies (*e.g.*, computers, electricity) in accordance with their religion. The Agency solicits comment on situations where flexibility might be required, and on what types of waivers should be provided under this rule.

EPA has included both a general waiver provision and an emergency waiver provision in the proposed rule. A general waiver could be granted to owners or operators that cannot comply with the requirement for electronic submission. The owner or operator would be required to submit a request for a general waiver to the Administrator at least thirty days in advance of the date the information is due to EPA. The Administrator could grant a general waiver upon a finding that: (1) The owner or operator is unable to gain access to a system allowing electronic reporting because it is located in an area with insufficient broadband access, or (2) religious practices of the owner or operator prohibit the use of necessary technologies. A general waiver could be granted for one year, and the owner or operator would be able to reapply annually.

In addition, the Administrator could grant a waiver of the requirements for electronic submission in emergency situations. To obtain an emergency

waiver, the owner or operator would be required to submit a request within ten days of the date the information is due to EPA. The request for an emergency waiver must describe the conditions that prevent electronic submission of information and must be accompanied by a paper copy of the information due. The Administrator may grant an emergency waiver upon a finding that the owner or operator was unable to comply with the requirement for electronic information submission due to: (1) A large-scale national disaster (*e.g.*, hurricane), (2) a prolonged electronic reporting system outage, or (3) a prolonged outage of the owner's and operator's computer system. The Agency solicits comment on the adequacy of these waiver provisions.

#### 7. Recordkeeping Requirements (§ 320.8)

EPA is proposing that owners or operators be required to develop and maintain a facility record that includes information documenting compliance with the financial responsibility requirements of this proposed rule. The facility record must include at least all information required to be submitted to EPA under this Part, comments received from the public, and all notifications received from EPA related to the financial responsibility obligations of the facility. The rule would require owners or operators to maintain this information until three years after the Agency releases the owner or operator from the requirement for financial responsibility. EPA solicits comment on these recordkeeping requirements.

#### 8. Requirements for Public Notice (§ 320.9)

EPA is proposing requirements for public notice for owners and operators subject to CERCLA § 108(b) requirements. This approach will add the benefit of transparency to implementation of CERCLA § 108(b) requirements. In addition, these proposed requirements are consistent with EPA's commitment to assuring that the public is aware of EPA's Superfund activities at sites, even when there may not be an active Superfund action underway.<sup>56</sup> EPA believes that the proposed requirements for public notice would enhance the implementation of the proposed rule in two respects.

First, such public notice would help to ensure that the financial responsibility formula is applied as intended, so that the resulting financial responsibility level reflects the degree

and duration of risk at the facility. As discussed in the financial responsibility formula section of this preamble, § 320.63, the financial responsibility formula is intended to be implemented by owners or operators, rather than by EPA. While EPA expects that in the vast majority of cases the financial responsibility formula will be applied accurately, EPA believes that providing information to the public can enhance the incentives for owners and operators to fully comply with regulatory requirements. The reliance on public notice as an incentive for compliance under this proposal is consistent with the 2010 guidance issued by the Office of Management and Budget (OMB), where that office recognized that the public disclosure of information is an increasingly common and important regulatory tool.<sup>57</sup>

Second, the proposed rules are structured to support CERCLA responses undertaken by the Federal Government, states, and private parties—a structure that is consistent with the CERCLA scheme. EPA is proposing to require owners and operators to make readily available to the public information about the levels of financial responsibility, information on claims made, and information that may relate to the continued validity of the instruments—for example, any notices of instrument cancellation by providers. EPA believes that ready access to this information will help ensure that parties with CERCLA claims, and parties potentially impacted by the CERCLA claims of others, will have the opportunity to monitor changes in the facility's financial responsibility.

EPA is today proposing two approaches for public notice procedures. Under the first approach, the owner or operator would be required to maintain a web site to convey information regarding its compliance with the requirements of proposed part 320. Under the second, EPA would provide information to the public on the Agency's Web site.

Under the first approach, owners and operators would be required to post information on a Web site created and maintained by the owner and operator. EPA is considering this approach because, as those generating the information, owners and operators are in the best position to track information about their facilities. In addition,

<sup>56</sup> See Superfund Community Involvement Handbook, 2005 page 5.

<sup>57</sup> See United States Office of Management and Budget. *Sharing Data While Protecting Privacy*. Memorandum from Jeffrey D. Zeints and Cass R. Sunstein. November 3, 2010. Available at: <https://www.whitehouse.gov/sites/default/files/omb/memoranda/2011/m11-02.pdf>

requiring owners and operators to update information related to their financial responsibility requirements would eliminate lag times between when the information is submitted to EPA and when EPA can make that information publicly available. Thus, EPA expects that requiring owners and operators to create and maintain their own Web sites may be an efficient way to ensure timely dissemination of information related to CERCLA § 108(b) financial responsibility.

The owner or operator would be required to establish a Web site titled “CERCLA § 108(b) Financial Responsibility Information” within sixty days of the date it first becomes subject to CERCLA § 108(b) requirements to and provide EPA with the URL of the location on its company Web site where it will make information available to the public about the implementation of financial responsibility requirements at the facility.

EPA would be required, within thirty days of receiving the URL, to post on its Web site the facility name, company EPA identification number, and the URL where information will be made available to the public by the owner or operator.

The proposed rule would then require the owner or operator to provide information on its company Web site beginning ninety days after the date it becomes subject to requirements under CERCLA § 108(b). The initial posting of information must include the name and contact information for a person that can provide the public information about the facility’s CERCLA § 108(b) requirements. In addition to this information, the rule would require the owner or operator to make public at least the following information: (1) Any information that the owner or operator is required to submit to EPA under this proposed rule, and (2) notifications from EPA to the owner or operator.

This approach would also establish conditions for maintenance of the information on the company Web site. For example, § 320.9(e) would require that the information be posted in a location where a visitor to the Web site would reasonably expect to see announcement of issues related to compliance with requirements of CERCLA. In addition, that section would require that the owner or operator assure freely available access to the information, and that the access not be obstructed by complex access processes or passwords. The Agency believes these requirements are necessary to assure meaningful access to information.

To assure that current information is made available to the public, this approach would require the owner or operator to post all information submitted to EPA within thirty days of its submission. Thus, for example, the rule would require the owner or operator to submit to EPA the Initial Notification Form required under § 320.5 within thirty days of the promulgation date of this rule, and to post that form on the company’s Web site within thirty days of submitting it to EPA. By requiring that the owner or operator post information submitted to EPA, the proposed rule will require that the Web site information be updated at key financial responsibility implementation points including: (1) When the level of financial responsibility required at the facility is initially determined and when it changes, (2) upon application for release from financial responsibility requirements, (3) when a claim is made on the instrument, (4) upon receiving notification of cancellation of an instrument, (5) upon transfer of ownership of the facility, and (6) upon submitting notice to a regulator of closure of the facility. The Agency believes that this approach will allow the public or claimants the opportunity to follow the implementation of financial responsibility requirements and the facility and be aware of changes that occur.

Under the second approach proposed in this rule, the owner or operator would not be required to post information on a Web site; rather, EPA would make the required information available to the public on the Agency’s Web site.

EPA solicits comment on these approaches to providing notice to the public regarding the CERCLA § 108(b) financial responsibility at a facility. EPA particularly solicits comment on whether the owner or operator should be required to post information, what information would be of most benefit to the public in the implementation of CERCLA § 108(b) financial responsibility, and how the information would be used for that purpose.

#### Class Determinations for Confidential Business Information

As discussed in section VI.A.3. of this preamble, some information that owners and operators would be required to submit under this proposed rule may be claimed as CBI. This proposal would not require or allow posting of CBI. However, the Agency expects that much of the information submitted to EPA under the proposal would not be CBI, and could be made available. EPA is

considering issuing a Class Determination under 40 CFR 2.207 notifying parties how it intends to treat information submitted under this rule. The purpose of a Determination is to state the Agency’s position regarding the manner in which information within a class will be treated when information received by the Agency shares characteristics and necessarily results in identical treatment of the information. EPA expects that a Class Determination would clarify the Agency position on what does and does not constitute CBI under this rule. The Agency solicits comment on this approach. In particular, the Agency requests information regarding what the information that would be required under this proposed rule might owners or operators consider to be CBI.

Finally, EPA notes that it is planning to develop a Financial Responsibility Portal to receive and track financial responsibility information. Ultimately, when developed and populated, the goal is for that system to auto-populate an Agency public database and make available to the public information submitted under this rule. EPA solicits comment on whether, when the EPA public database becomes available, the requirement for the owner or operator to maintain a Web site should continue if that requirement is adopted in the final rule.

#### B. Subpart B—General Financial Responsibility Requirements

This proposed rule is designed to set up a regulatory program for multiple classes of facilities. Thus, the proposed rule includes several basic provisions that are intended to be used in conjunction with the class-specific requirements in Subparts D–Z.

These requirements are intended to guide the regulated community through the general requirements to establish the required evidence of financial responsibility, and also provide requirements that EPA anticipates will be applicable to multiple facility classes.

##### 1. Applicable Financial Responsibility Amounts and Procedures for Establishing Financial Responsibility (§ 320.20 and § 320.21)

EPA has included a general requirement that owners and operators calculate a current amount of financial responsibility at their facilities in accordance with this part. Because this proposed rule also includes requirements for hardrock mining classes, proposed § 320.20 includes a cross reference to Table A–1 in § 320.2, which identifies the class-specific

requirements applicable to hardrock mining facilities. Those class-specific requirements are found in subpart H, where the Financial Responsibility Formula developed for those facilities is proposed. Upon addition of future classes to the CERCLA § 108(b) program, EPA anticipates that additional cross references will be added to Table A-1.

Each instrument included in the proposed rule has its own particular supporting information. The specific instruments proposed in this rule are further discussed in section VI.C.1. of this preamble.

## 2. Maintenance of Instruments (§ 320.22)

The proposed rule would require the owner or operator to recalculate the financial responsibility level three years after the date the facility is required to provide the full amount of financial responsibility at its facility under § 320.61, every three years thereafter, and within sixty days after every successful claim against a CERCLA § 108(b) financial responsibility instrument. The recalculation must use the most current facility information available. The owner or operator must submit the revised financial responsibility amount to EPA, along with supporting documentation.

Whenever the required financial responsibility amount changes, the owner or operator would be required to compare the new amount with the value of the financial responsibility instrument(s). If the resulting amount of financial responsibility required is greater than the amount of financial responsibility provided by the current CERCLA § 108(b) financial responsibility instrument(s), the owner or operator, within sixty days after the change in the required financial responsibility amount, would be required to increase the value of the instrument(s), or obtain a new instrument(s), in accordance with Subpart C, so that the value of the instrument(s) is at least equal to the newly required financial responsibility amount. This proposed provision ensures that adjustments to the required level are made promptly.

Conversely, if the resulting amount of financial responsibility required is less than the amount of financial responsibility provided by the current CERCLA § 108(b) financial responsibility instrument(s), the owner or operator may send a written request to the Regional Administrator to lower the required financial responsibility amount at the facility. The request must include updated information to support the revised financial responsibility

amount as required in § 320.22. The amount of financial responsibility required at the facility would be reduced to the recalculated amount only with written approval by the Administrator.

This provision would ensure that the owner or operator first receive approval from EPA that the financial responsibility may be lowered, which provides a check against improper implementation of the requirements. Furthermore, under the proposed wording of the trust agreement, EPA would need to provide notification to the trustee that funds may be released (*see* § 320.50(a)).

This proposed requirement is intended to ensure that the amount of financial responsibility at the facility continues to reflect the level of risk at the facility. EPA recognizes that facility conditions and operations may change over time, or that new information may be available that may affect the amount of financial responsibility required. EPA thus is proposing a three-year periodic recalculation of the required financial responsibility amount to ensure the amount reflects the current risk at the facility. EPA expects that three years was a frequent enough requirement to provide current information while not overly burdening owners, operators and EPA with a more frequent implementation of the recalculation requirements. EPA requests comment on requiring recalculation of the amount of financial responsibility every three years.

Furthermore, EPA recognized that claims against the instrument may be successfully made that would correspondingly reduce the amount of financial responsibility at the facility. In some cases, the claims may be the result of responses that lower the risk at the facility. However, this is not expected to always be the case. Accordingly, EPA believes it is necessary for owners and operators to recalculate the required amount of financial responsibility after successful claims against the CERCLA § 108(b) financial responsibility instruments in order to compare the new required amount to the remaining financial responsibility at the facility.

## 3. Incapacity of Owners or Operators, Guarantors, or Financial Institutions; or Instrument Cancellation (§ 320.23)

Under this proposed rule, an owner or operator would be required to notify the Administrator by certified mail of the commencement of a voluntary or involuntary proceeding under Title 11 U.S.C. (Bankruptcy), naming the owner or operator as debtor, within ten days after commencement of the proceeding.

[Option 2 only: A guarantor of a corporate guarantee would be required to make such a notification if he is named as debtor, as required under the terms of the corporate guarantee. Those requirements are discussed in section VI.C.5. of this preamble.]

This provision is modeled after a similar requirement in the requirements for hazardous waste treatment, storage, and disposal facilities at 40 CFR part 264 and 265. EPA believes it is important for EPA to be made aware of the owner or operator entering bankruptcy, as that event may have implications for the owner's or operator's ability to meet financial obligations under CERCLA. Likewise, EPA believes it is important for the Agency to be aware of situations where a guarantor of a corporate guarantee is entering bankruptcy as it may have implications for the guarantor's ability to meet financial obligations under the guarantee.

An owner or operator who demonstrates CERCLA § 108(b) financial responsibility for CERCLA liabilities by obtaining a trust fund, surety bond, letter of credit, or insurance policy would be deemed to be without the required financial responsibility in the event of bankruptcy of the trustee or issuing institution, or a suspension or revocation of the authority of the trustee institution to act as trustee or of the institution issuing the surety bond, letter of credit, or insurance policy to issue such instruments. The owner or operator would be required to provide other evidence of financial responsibility within sixty days after such an event. This provision is also modeled on existing RCRA Subtitle C requirements. As with those regulations, EPA expects that this requirement will make clear what must be done by the owner or operator when the institution providing trustee services or issuing a bond, letter of credit, or insurance policy goes bankrupt or loses its authority to act as a trustee or issue such instruments.

## 4. Notification of Claims Brought Against Owners, Operators, or Guarantors (§ 320.24)

The owner or operator would be required to notify the Regional Administrator by certified mail, within ten days of a CERCLA claim being filed against the owner or operator or financial responsibility guarantor. The proposed rule also requires that this notification include certain key information: a copy of any papers filed by the claimant with a court, or other information allowing the Regional Administrator to identify the court, case



name and number, and parties. This notification requirement would apply to owners or operators regardless of the instrument they have elected to use. This proposed notification requirement is important because EPA will not, in many cases, be involved in the claims process against a financial responsibility instrument. It is appropriate for EPA to monitor potential claims because claims made may affect the adequacy of the instrument provided under the regulations, because those claims may reduce the amount available to below that which is required for that facility class. In addition, EPA is also proposing these requirements to apprise the Agency of potential issues at a site that could ultimately lead to EPA or another governmental agency having to take a response at the facility. This provision thus helps the CERCLA § 108(b) requirements support the broader CERCLA response program.

#### 5. General Provisions on Instrument Payment

In this section of the preamble EPA discusses generally the key payment methods that are associated with each instrument. Proposed Subpart B does not contain corresponding language. Instead, this is contained in Subpart C of the proposed regulations, in the required wording of each instrument. Instead of addressing these considerations multiple times, however, EPA is presenting its approach to these common provisions once in this section of this preamble.

Under this proposed rule, the funds from all types of financial responsibility instruments except the financial test would be available under three circumstances and also under direct action scenarios. In essence, EPA has sought to allow for maximum flexibility in how the instruments pay out through the payment terms. EPA believes this approach will help integrate the operation of the CERCLA § 108(b) instruments into the various CERCLA enforcement and cleanup processes and therefore will efficiently support the goal of ensuring that funds be made available for the payment of CERCLA response costs, health assessment costs, and natural resource damages.

It is EPA's intent that each payment term as well as direct action be available independently of one another, and claimants may use any or any combination of the terms as the circumstances dictate. Similarly, use of one payment term by a particular claimant would not prevent its reuse or use of another payment term by another claimant. Again, this is to maximize flexibility in the manner in which the

instruments can be payable, to promote the goal of ensuring cleanup while avoiding unnecessary litigation over whether the instruments are in fact payable. EPA seeks comment on these proposed payment terms.

#### a. Payment of an Unsatisfied CERCLA Judgment

Under this proposed rule, the financial responsibility instruments would be available to pay a final judgment from a Federal court awarding CERCLA response costs, health assessment costs, and/or natural resource damages associated with the facility against any of the current owner or operators for which payment as required by the judgment has not otherwise been made within thirty days. This is intended to cover all types of CERCLA actions, including those under CERCLA §§ 107 or 113(f). This is also intended to cover judgments in favor of both governmental claimants (*e.g.*, EPA or another Federal agency, a state, or an Indian tribe) as well as private claimants. EPA solicits comments on this approach.

EPA is requiring that the claim be reduced to a final judgment under this payment term for two reasons. First, this provision provides court oversight to ensure the validity of the claims. This is important because EPA or another regulatory agency may not be directly involved in a particular cleanup. Second, the requirement to present a valid final court judgment may help alleviate concerns of potential instrument providers about instruments that could pay to multiple potential claimants. In discussions with representatives of the financial industry, certain representatives expressed concern that the availability of the instruments to multiple claimants would either: (1) Raise the risk to the instrument provider of fraudulent claims, or (2) increase the potential claims management and investigation costs of determining which claims are valid. While the preferred option of several representatives of the financial community was to have EPA specified as the beneficiary of the instrument, EPA had concerns with such an option in the context of CERCLA § 108(b) (see, for example, discussion in Section VI.C.1. of this preamble in the section titled “*two letter of credit constructions*”). Representatives did, however, express greater comfort at a court having first ordered payment as that would limit the prospect for fraudulent or specious claims against the instruments. Further, having an objective documentary payment trigger limits the amount of due diligence

required on the part of the instrument provider.

This payment provision also requires that the party may only make a claim if they have not recovered or been paid the funds from any other source. This is intended to provide further assurance to providers and current owners and operators that the claims are valid and that the claimant is not being paid twice for the same costs or damages.

It should be noted that EPA does not intend for this provision to displace the standard manner in which CERCLA claims are brought and resolved outside of the CERCLA § 108(b) instrument. Claims can continue to be asserted against the owner and/or operator in the first instance, and EPA expects that in most instances, the owner or operator would pay the claim itself, without resort to the instrument.<sup>58</sup> Indeed, EPA expects owners and operators to continue to do so to the extent they are able, in order to avoid the costs incurred in drawing upon the instrument which in many cases would result in the provider seeking to recoup those costs from the owner or operator. For example, were a successful third-party CERCLA claimant to make a draw on a CERCLA § 108(b) letter of credit, the owner or operator would be obligated to pay the financial institution that issued the letter of credit for the amount paid under the instrument. Owners or operators also have an obligation to reimburse the issuer of a surety bond for payment made in accordance with the terms of the bond. The surety bond issuer's right to reimbursement helps to ensure that it is the owner or operator rather than the issuer of the surety bond that ultimately bears the cost of fulfilling the CERCLA obligations owed to the claimant. However, should the owner or operator fail to satisfy the final judgment, the instruments are structured to become available to the claimant within thirty days. EPA identified this time period based upon current EPA settlement practice which typically provides thirty days for performance to occur. EPA believes it provides adequate time for payment to occur while not providing more time than under a settlement scenario which may create a disincentive to settle. In this role, the financial responsibility instruments serve as a backstop to help assure that recovery will be successful.

<sup>58</sup> Similarly, provision of financial responsibility under CERCLA § 108(b) by an owner or operator would not affect a party's ability to make CERCLA claims against other potentially responsible parties at a site.

#### b. Payment for a CERCLA Settlement With the Federal Government

Under this proposal, the financial responsibility instruments also would be available to pay for a CERCLA settlement with agencies of the Federal Government, including but not limited to administrative settlements and consent decrees. Specifically, the instruments provide for payment to the Administrator or another authorized Federal agency if payment has not been made as required by a CERCLA settlement associated with the facility with a current owner or operator. EPA's current CERCLA model settlements often include a financial responsibility component to ensure that funds are available, should the respondent fail to perform. EPA expects that future settlements could rely on an owner or operator's CERCLA § 108(b) instrument for this purpose if the settling parties agreed to employ the instrument in this manner. EPA expects to review and, if necessary, modify its existing models to account for the possibility that CERCLA § 108(b) instruments could be used to assure the work required by future settlements. Additionally, some settlements are structured on a "cash out" basis, where the respondent is not doing work, but is instead resolving liability as a lump-sum payment to the United States. EPA's intent is for this payment term to function in any of these settlement scenarios. Such payments, in the case of settlements with EPA, would be expected to be made into the Superfund and/or a CERCLA special account.<sup>59</sup> For settlements with other Federal government agencies acting pursuant to delegated CERCLA authority, such as the Bureau of Land Management, the payments would be made pursuant to the terms of the settlement.

Again, EPA does not intend for this provision to displace the standard manner in which CERCLA claims are brought and resolved outside of the CERCLA § 108(b) instrument. Federal agency claims may continue to be asserted against the owner and/or operator, where appropriate, and the parties would remain free to settle those claims as they determine appropriate under the circumstances. EPA expects that in most instances, the owner or operator would make the payment required in the settlement directly, in order to avoid the costs incurred in

drawing upon the instrument which may result in the owner or operator incurring costs as discussed earlier. However, should the owner or operator fail to make payment as provided in a settlement, the instruments are structured to become available for payment to (an) authorized Federal government agency(ies).

EPA is proposing including this term for several reasons. First, the Agency intends to make express provision for settlement accomplished under direct Federal oversight to assure that any necessary response actions are completed in a manner that protects human health and the environment. Such a provision would provide the flexibility for payment into special accounts under CERCLA § 122(b)(3), when appropriate as determined in the particular settlement, in order to provide an avenue for settlement funds to be used at a particular site. This provision also would allow for money recovered by the Federal Government to be deposited back into the Superfund Trust Fund under 26 U.S.C. 9507(b). EPA expects that this payment term would therefore provide a further incentive for owners and operators to undertake necessary CERCLA response actions at their sites or otherwise settle their liabilities without protracted litigation, even where their ability to pay for such a settlement would otherwise be limited. In this role, the instruments would help promote the goal of CERCLA § 108(b) to support CERCLA's "polluter pays" principle.

As noted earlier, this payment term is independent of other payment terms. Thus for example, in the absence of any settlement, the instruments could be made available upon obtaining a CERCLA judgment. Similarly, this would not affect settlements between non-Federal parties and owners and operators. Such settlements could also proceed under the payment term discussed in the previous subsection, but would require court approval and reduction to a CERCLA judgment for costs. EPA solicits comment on this approach.

#### c. Payment Into a Trust Fund Established Under a Unilateral Administrative Order

This proposal would also allow the financial responsibility instruments to pay into a trust fund established pursuant to a unilateral administrative order under CERCLA § 106(a) under certain circumstances. Specifically, under the proposal, the Administrator or another Federal agency may make a claim against the instrument requesting payment into a trust fund established

pursuant to a CERCLA unilateral administrative order issued to a current owner or operator if performance at the facility as required by the order had not occurred. The proposed rules also provide that the Administrator or another Federal agency may only make the claim against the instrument if the owner or operator has provided a written statement that the instrument may be used to assure the performance of the work required in the order.

These provisions of the proposed rule are intended to complement existing EPA model orders. Under EPA's existing models, EPA requires recipients to provide evidence of financial responsibility to ensure that funds will be available to complete the work, should the recipient fail to perform as required under the unilateral administrative order. In essence, the owner or operator chooses the instrument to comply with the financial responsibility provisions of the order. EPA expects to review and, if necessary, modify its existing model administrative orders to account for the possibility that CERCLA § 108(b) instruments could be used to assure the work required by future unilateral administrative orders. EPA believes that this approach would provide owners and operators the maximum amount of flexibility to use the CERCLA § 108(b) instrument, should they become subject to a unilateral administrative order.

#### d. Payment Through the Direct Action Provision

Finally, CERCLA § 108(c)(2) contains a "direct action" provision, under which claims can be brought against the guarantor, instead of against the owner or operator, as in the case of the other payment triggers discussed earlier. CERCLA § 108(c)(2) generally provides that any claim authorized by CERCLA §§ 107 or 111 may be asserted directly against the provider of the financial responsibility instrument in situations where the owner or operator is in bankruptcy or is unavailable. In addition, CERCLA § 108(d)(1) generally provides that the total liability of any guarantor in a direct action suit is limited to the aggregate amount of the monetary limits of the policy of insurance, guarantee, surety bond, letter of credit, or similar instrument obtained from the guarantor by the person subject to liability.

The proposed CERCLA § 108(b) instruments are intended to account for direct actions authorized by these provisions. Where an owner or operator is bankrupt or unavailable, there is uncertainty around a claimant's ability to obtain a judgment. Thus, the ability

<sup>59</sup> EPA retains money received through settlements with potentially responsible parties in site-specific "special accounts" to conduct planned future cleanup work at a site based on the terms of a settlement agreement. These special accounts are sub-accounts within the Superfund.

to take direct action against the financial responsibility instrument may be critical for assuring that funds will be made available for necessary cleanup.

The direct action provisions of the statute received attention during meetings EPA held with representatives of financial institutions that provide financial instruments or services being considered for use in the proposed rule. Information on these meetings is available in the docket for this proposed rule (Docket No. EPA-HQ-SFUND-2015-0781). Specifically, EPA asked representatives how the direct action provision may affect their willingness to provide instruments for the CERCLA § 108(b) rule. Financial industry representatives indicated that providers' willingness to issue instruments was impacted by the availability of direct action and the potential scope of claimants, although to varying degrees across the instruments. With the exception of insurance providers, financial instrument providers expressed some degree of aversion to the direct action provision.

Representatives of the insurance industry informed the Agency that the industry is familiar with direct action because it is required under some state insurance laws. Insurance providers indicated that direct action would not generally have an effect on market participation.

Representatives from the surety industry had a mixed reception to the direct action provision. Sureties typically have some ability to step into the shoes of the owner or operator to perform or fulfill the obligation insured by the bond. Sureties have experience stepping into the shoes of an owner or operator and thus had some level of comfort in assuming the owner or operator's responsibilities in negotiating a settlement for CERCLA response costs, health assessment costs, and natural resource damages on behalf of the facility. However, surety representatives were concerned about the risk of direct action attracting class action suits and suits from environmental groups who did not have valid claims. The representatives also communicated concern over legal fees incurred in responding to numerous invalid suits.

Members of the banking community who issue or are expert in letters of credit or serve as trustees expressed great concern about the direct action provision. Letter of credit specialists asserted that direct action would be out of the realm of the typical responsibilities of a bank providing letters of credit. In fact, EPA was told that banks in their role as issuers of letters of credit can only be subject to

suit if they do not complete the obligation to pay according to the specifications of the letter of credit.

Banking institutions that serve as trustees expressed that trust institutions would not participate in a program where the institution can be subject to any liability. Trustees also communicated that there is a distinction between a trust and the trustee—the trust itself holds the financial assurance, whereas the trustee executes the trust agreement in order to manage the instrument. Following this argument trustees suggested that the trust itself might qualify as a CERCLA “guarantor” and therefore direct action could be applied against the trust itself. Trustees stated that the possibility of liability on the trust institution would greatly and negatively impact their participation in providing trustee services to facilities subject to the proposed rule.

While the ability to bring a direct action against a guarantor is created by the statute itself, EPA has nonetheless sought to address the major issues raised by the financial community to the extent possible, in development of the proposed rules. EPA has included language in the instruments that mirror the terms of the direct action provision, specifically referring to claims authorized by CERCLA §§ 107 or 111.

EPA has also sought to lessen the perceived barriers for participation of banks issuing letters of credit and trustee institutions acting as guarantors. Specifically, EPA is proposing two structures for use of a letter of credit—first a letter of credit payable directly to claimants, and second a letter of credit held and managed by a trust fund. The owner or operator could choose either option. In the second arrangement the trustee would have direct access to draw on the letter of credit to satisfy the claims. EPA intends for this arrangement to address concerns about direct action claims for letters of credit, because claimants would bring those claims to the trust fund holding the letter of credit, instead of the letter of credit provider. In addition, EPA has structured the trust fund instrument with the express intent that direct action would be taken against the trust fund itself, not the trustee. This is intended to address concerns about potential trustee liability from their role as trustee under the trust agreement. Section 3 of the proposed trust agreement states explicitly that the trust Grantor and Trustee do not intend for the Trustee to qualify as a “guarantor” as that term is used in CERCLA §§ 101(13) and 108(c)(2), and therefore intend that the Trustee will not be subject to a direct action by Trustee's agreement to act as

Trustee for the trust fund. The proposed trust agreement further states that the Grantor and Trustee intend for the trust fund to qualify as a “guarantor” as that term is used in CERCLA §§ 101(13) and 108(c)(2), and therefore intend that only the trust fund will be subject to any direct action brought pursuant to CERCLA § 108(c)(2). The trust agreement provides further that any claim authorized by §§ 107 or 111 of CERCLA may be asserted directly against the trust fund as provided by CERCLA § 108(c)(2) subject to the limitations in CERCLA § 108(d). Stand-alone, funded trusts are structured similarly. The proposed structure of the trust fund is discussed in more detail in VI.C.6 of this preamble. EPA seeks comment on the effectiveness of this structure for the proposed trust and letter of credit to increase the likelihood that a bank or trustee institution will issue letters of credit or agree to be a trustee under the proposed regulations.

EPA recognizes that the direct action provision is an important and potentially unfamiliar feature to potential instrument providers, and the Agency requests comment on how its function in practice may affect the availability of instruments.

#### 6. Facility Transfer (§ 320.25)

This proposed rule would require that the owner or operator subject to the rule maintain financial responsibility in accordance with part 320 upon transfer of ownership, in whole or in part, to a new owner, or upon transfer of operations to a new operator, until the Administrator releases the previous owner or operator. EPA would provide a release to the former owner or operator upon the new owner or operator's demonstration of financial responsibility in accordance with this proposed rule.

These requirements assure continuity of financial responsibility coverage and prevent circumvention of the requirements by changes in facility ownership or operation. The Administrator's release of the old owner and operator would not affect the old owner's and operator's liability under CERCLA, only their responsibility to maintain financial responsibility for the facility under Part 320. EPA solicits comment on these requirements.

#### 7. Notification of Cessation of Operations (§ 320.26)

Section 320.26 requires a facility owner or operator to notify the Administrator thirty days prior to either the date the facility will no longer be authorized to operate or the date the owner or operator is required under

another applicable regulatory program to notify the relevant regulatory authority that the facility is ceasing operations, whichever is earlier. This requirement provides EPA notice of upcoming changes at the facility that will likely affect the level of required financial responsibility under CERCLA § 108(b). EPA solicits comment on this requirement.

The proposed rule provides that CERCLA § 108(b) requirements continue until EPA releases the owner or operator from such obligations. Thus, closure of a facility would not, in and of itself, trigger release from requirements under proposed part 320. Owners or operators of closed facilities would be required to maintain financial responsibility instruments until CERCLA § 108(b) obligations are released by EPA. In developing this proposed rule, the Agency has considered whether some financial responsibility instruments might be better suited than others where the owner or operator no longer is operating the facility. For example, EPA has considered whether owners or operators should be able to continue to use a financial test to provide financial responsibility where they are no longer operating the facility, or whether financial responsibility should be converted to a trust instrument at facilities where obligations continue after the facility ceases operation. EPA has not identified any reasons to restrict the options for instruments, and is therefore proposing that the same instruments available to owners and operators of operating facilities would continue to be available to owners and operators of facilities that cease operation. However, EPA solicits comment on the reliability of instruments where an owner or operator is no longer operating a site.

#### 8. Release From Financial Responsibility Requirements (§ 320.27)

Under this proposed rule, owners or operators and operators subject to CERCLA § 108(b) requirements under part 320 would remain subject to those requirements until released by EPA. Thus, those obligations would continue regardless of the operating status of the facility.

Proposed § 320.25 discussed earlier provides for release of the owner or operator from its obligations under part 320 upon transfer of ownership of the facility, or transfer of operations of the facility, where the new owner or operator provides evidence of financial responsibility that satisfies the requirements of this proposed rule. Where release from the regulations is not accompanied by a transfer of the

regulatory obligation to maintain CERCLA § 108(b) financial responsibility, EPA is proposing a different process that reflects the final nature of the determination. EPA also explains the importance of this determination in its discussion of the public involvement requirements in proposed § 320.9.

Proposed § 320.27 provides that the owner or operator may petition to be released from its CERCLA § 108(b) obligations by submitting a request to the Administrator. The request must include evidence demonstrating that the degree and duration of risk associated with the production, transportation, treatment, storage and disposal of hazardous substances is minimal. The opportunity provided in § 320.27 is not intended to provide for adjustments of financial responsibility levels, but is intended to be limited to decisions to release the owner or operator from CERCLA § 108(b) requirements. Thus, owners or operators that cannot demonstrate minimal levels of risk at the facility would not be eligible to petition the Agency under this provision. A demonstration of minimal levels of risk at the facility is important because following the owner's and operator's release from the CERCLA § 108(b) requirements financial responsibility would not be available if needed at a later date. Upon receiving such request, proposed § 320.27 provides that the Administrator would evaluate facility information, including the information submitted by the owner or operator, regarding the degree and duration of risk associated with the production, transportation, treatment, storage, and disposal of hazardous substances at the facility, and make a determination regarding the owner or operator's request.<sup>60</sup>

If the Administrator determines that the degree and duration of risk associated with the production, transportation, treatment, storage, and disposal of hazardous substances at the facility is minimal, and that the facility should therefore be released from CERCLA § 108(b) requirements, the Administrator would follow the procedures described in § 320.9 to involve the public in the decision. Under those procedures, EPA would post the draft decision on the Agency's Web site, provide the public opportunity to comment on the decision, and post the Agency's final

<sup>60</sup>Note that the proposed rule does not limit the ability of the Administrator to take other measures (for example, under the authority of CERCLA § 104) if appropriate, to obtain relevant information.

decision, and response to comments received, on the EPA Web site.<sup>61</sup>

If, on the other hand, the Administrator determines that the degree and duration of risk associated with the production, transportation, treatment, storage, and disposal of hazardous substances is not minimal, the Administrator would not release the owner or operator from the requirement to maintain financial responsibility in accordance with this part. Section 320.9 provides that upon a finding that the owner or operator should not be released from financial responsibility requirements, the Administrator would provide notice of the Agency's final decision, and response to comments received, and will provide the owner or operator with written notice of its decision. EPA is considering whether to make these available through EPA's Web site, or alternatively through traditional **Federal Register** notices. EPA solicits comment on this approach, and method of public notice.

The Agency is proposing not to initiate a public involvement process in cases where the Agency decides to deny the request of the owner or operator to release its financial responsibility obligation. In these cases, the obligation to maintain financial responsibility continues, and thus continues to be available should CERCLA liabilities arise. Thus, EPA does not see any benefit for public comment in these situations. EPA solicits comment on this approach.

EPA is proposing a site-by-site evaluation of facility risk for decisions to release an owner or operator from CERCLA § 108(b) requirements for a number of reasons. First and foremost, EPA has not identified a set of circumstances that if followed, would allow it to determine on a national basis that every facility across the country would demonstrate a minimal degree and duration of risk. Moreover, EPA has substantial experience making individualized determinations of site risk, as this practice is consistent with EPA's practice under the Superfund program, for example, in selecting remedies under the NCP. EPA solicits comment on the proposed approach to releasing owners or operators from CERCLA § 108(b) financial responsibility requirements.

The proposed rule also provides that owners or operators may petition the Administrator for a renewed determination regarding its continued

<sup>61</sup>It should be noted that any release from CERCLA § 108(b) obligations does not affect the ability of the Federal Government to make a CERCLA claim.

requirement to maintain financial responsibility. The Administrator will consider a petition for a renewed determination only when it presents new and relevant information not previously considered by the Administrator.

While beyond the scope of this rulemaking, EPA notes in the interest of transparency that EPA and the owner or operator might, in some cases, elect to enter into a CERCLA settlement regarding the facility. The work provided for in such a settlement, depending upon its scope, may provide the basis for a renewed determination by the agency that results in a release from part 320.

Finally, EPA recognizes that in some instances, facilities may be located in locations under the jurisdiction, custody or control of another Federal agency. In that instance, EPA will work with the other agencies to gather the necessary information for it to make a determination on whether to release an owner or operator from the requirements of part 320.

### C. Subpart C—Available Financial Responsibility Instruments

Under this proposed rule, an owner or operator would have to establish financial responsibility by obtaining one or a combination of mechanisms as specified in proposed subpart C. CERCLA § 108(b)(2) states that “financial responsibility may be established by any one, or any combination, of the following: Insurance, guarantee, surety bond, letter of credit, or qualification as a self-insurer. In promulgating requirements [under CERCLA § 108(b)], EPA is authorized to specify policy or other contractual terms, conditions, or defenses which are necessary, or which are unacceptable, in establishing such evidence of financial responsibility in order to effectuate the purposes of [CERCLA].”

EPA is proposing to establish required wording for all of the instruments (including the financial test and corporate guarantee) for several reasons. By specifying the instrument terms, EPA reduces the administrative burden to the Agency of reviewing the wide range of potential instrument wording that may otherwise be employed. EPA does not wish to create a situation where resources that otherwise would have been devoted to cleanups would be expended reviewing the myriad possible instrument constructions. EPA is also specifying the terms of the instruments so that they operate in a manner that integrates the CERCLA § 108(b) instruments into the overall CERCLA

scheme and are uniformly enforceable by the Agency or other parties seeking compensation for costs and damages. Third, EPA’s RCRA Subtitle C, subpart H financial assurance requirements (see 40 CFR 264.151) similarly specify the required wording of the instruments and EPA has found this to be a beneficial feature. Fourth, EPA has received comment as it developed this proposal from stakeholders that the RCRA Subtitle C instruments are well-understood by regulated entities and the financial industry. Without nationally-consistent provisions, EPA does not expect that a similar familiarity with the CERCLA § 108(b) regulations would be as likely to develop.

Those same commenters suggested that EPA use the RCRA Subtitle C regulations as the basis for its proposed CERCLA § 108(b) instruments because those instruments are well-developed and understood by regulators, the regulated community, and the financial-services industry. This proposal does in fact use the instruments specified in the RCRA Subtitle C, subpart H regulations as the model from which EPA developed its proposed CERCLA § 108(b) instruments, in part, for that reason.<sup>62</sup> EPA discusses particular provisions adapted from these RCRA regulations in its discussions of individual instruments later in this preamble, as well as new aspects necessitated by the CERCLA 108(b) rule structure. In addition, this proposal reflects some of the lessons EPA has learned in administering the RCRA Subtitle C financial assurance program. For example, to ease administration EPA is proposing that contact information for key parties (e.g., the EPA, the representative of the financial institution) be identified in the instruments to facilitate the notification requirements and other necessary communication. More information on the required wording of the instruments and the rationale for such wording is in the background document entitled “*Potential Requirements for Insurance, Surety Bonds, Letters of Credit, and Trust Agreements and Standby Trust Agreements under CERCLA Section 108(b)*,” which is in the docket for this proposal (Docket No. EPA–HQ–SFUND–2015–0781). EPA requests comment on the proposed wording of the financial responsibility instruments including the proposed required documentary

<sup>62</sup> EPA is not, however, reopening the RCRA Subtitle C, Subpart H regulations by this proposal, nor will EPA respond to comments related only to those regulations.

conditions required to make a claim under several of the instruments.

#### 1. Letter of Credit (§ 320.40)

An owner or operator would be able to satisfy the requirements of this section by obtaining an irrevocable standby letter of credit in accordance with the proposed requirements of § 320.40 and the proposed wording of § 320.50(b). A letter of credit is an independent agreement by the issuer (e.g., a bank) to pay up to a specified amount to parties upon the presentation of certain documents on behalf of its customer. Through a letter of credit, the bank provides assurance that the CERCLA response costs, health assessment costs, and natural resource damages for which the owners and operators are responsible would be paid. The financial strength of the bank would backstop that of the owner and operator, reducing the credit risk to potential claimants. EPA requests comment on the required wording and specification of the letter of credit in this proposed rule.

#### Issuer Eligibility (§ 320.40(a))

The issuing institution would be required to be an entity that has the authority to issue letters of credit and whose letter of credit operations are regulated and examined by a Federal or state agency. These proposed requirements ensure that the letter of credit operations are overseen by a regulator, a requirement that EPA intends to help protect against failure of the issuing institution by ensuring that the operations are regularly examined (e.g., lending limits are being observed). This requirement is the same as that in the RCRA Subtitle C financial assurance requirements for closure and post-closure care,<sup>63</sup> which EPA believes has worked well, and would be familiar to the regulated community and to the Agency. EPA considered additional qualifications for banks providing letters of credit but is today proposing the same qualifications as are required in the Subtitle C regulations. Some of the alternative criteria considered were minimum ratings from a rating agency or differentiating between state or nationally chartered institutions. Additional information on the consideration of alternative provider qualifications is in the background document titled “*Potential Issuer Eligibility Requirements for Insurance, Surety Bonds, Letters of Credit, and Trust Agreements and Standby Trust Agreements under CERCLA § 108(b)*.” EPA is proposing a standard similar to

<sup>63</sup> See 46 FR 2826, January 12, 1981

the Subtitle C standard so as to not unduly constrain supply because additional requirements beyond the existing framework of Federal and state examination and regulation would limit the pool of available providers and also to avoid the administrative burden on EPA of verifying additional qualifications.

The Institute of International Banking Law and Practice (IIBLP) suggested to EPA that the minimum issuer qualifications may be improved by specifying that the institution must be one that “regularly issues standby letters of credit.” IIBLP’s stated intent of the recommended specification was to align the EPA requirement with the Uniform Commercial Code<sup>64</sup> (UCC) § 5–108(e) that obligates issuers to observe the standard practice of “financial institutions that regularly issue letters of credit”. However, such a provision would require EPA to determine what constitutes regularly issuing letters of credit and would increase the administrative burden of implementation. Because the UCC would apply in the background as state law the Agency does not expect it is necessary to include such a requirement in the proposed regulations, and so is not proposing such a requirement.

#### Required Standardized Wording (§ 320.40(b))

EPA is proposing required wording of the letter of credit. The proposal would require that instruments be worded identically to the language proposed in § 320.50(b) of this proposed rule, except that the instructions in brackets would be replaced with the relevant information and the brackets deleted. The IIBLP also suggested that EPA should allow for greater flexibility to accommodate confirmations, other parties obtaining the letter of credit or state variations. Specifically, IIBLP recommended that the letter of credit wording be “substantially in accordance with” the specified instrument language. While flexibility may help accommodate a wider range of circumstances, EPA has found in its financial assurance programs that standardized wording is generally acceptable to providers, and provides significant benefits. Most significantly, standardized wording saves EPA staff from having to review and assess the myriad variations in instrument wording that may arise, which the

Agency may not have the technical expertise to readily undertake. However, EPA requests comment on whether specific additional aspects of the proposed wording could benefit from additional flexibility. Specifically, EPA requests comments on additional variations that should explicitly be provided for in brackets that may improve the effectiveness of the proposed letter of credit specifications.

#### Two Letter of Credit Constructions (§ 320.40(b)–(d))

The proposed required wording provides for two separate letter of credit constructs—one in which the letter would be issued in favor of any and all third-party CERCLA claimants and one in which the letter of credit would be issued in favor of the trustee of a trust fund established by an agreement worded identically to the language for the proposed trust fund. EPA is proposing to allow for two possible letter of credit constructions based on feedback the Agency received during discussions with the banking community. Providing both options enhances flexibility and is consistent with the RCRA third-party liability program where a similar letter of credit arrangement is employed.<sup>65</sup>

The first option for a letter of credit is for it to be issued in favor of any and all third-party CERCLA claimants. Under this arrangement, parties seeking payment from the letter of credit for CERCLA claims against the current owners or operators of the facility would be able to make claims by presenting the necessary documents directly to the issuing institution. This would provide a streamlined approach for paying claims and may entail lower fees and expenses than the second option. EPA intends for the CERCLA 108(b) instruments to be available to any potential CERCLA claimant. Given that the identity of potential claimants is both difficult to ascertain at a given point and because they may change over time, EPA is concerned that attempting to name particular beneficiaries would be unworkable. For example, EPA would be unable to determine in many cases what claims made by what parties would arise. In addition, EPA wishes to avoid a claims administration role that could result if EPA were the named beneficiary. EPA is concerned about the resources that would be necessary to assess the merits of and make all CERCLA claims that may be made against the instruments nationwide. Such a role would have the potential to redirect Superfund programmatic

resources away from cleanups and other high priority activities to assessing claims at facilities where EPA may not otherwise have been involved or considered a priority. Further, in instances where EPA is involved, EPA may be a claimant. EPA was concerned that the Agency may be placed in the awkward position of administering and prioritizing claims in that situation. Finally, EPA is concerned that specifying EPA as the beneficiary of the instruments may be inconsistent with the direct action provision and preclude other claimants from taking direct actions against the instruments as provided by 108(c)(2).

At the same time, several industry representatives expressed their concerns about the possibility of such a wide range of potential claimants who could not possibly be ascertained at the time the letter of credit is established. Instead, these representatives indicated a strong preference for a named beneficiary.

In light of this feedback, and because EPA does not intend to restrict options such that institutions may be unwilling to issue letters of credit, EPA is also proposing letter of credit language that would provide the option for the letter of credit to be issued in favor of a single named beneficiary, specifically the trustee of a trust fund that would be established pursuant to the proposed trust fund regulations. In this case, the letter of credit would authorize the trustee to make draws on the letter of credit to administer the claims process for CERCLA response costs, health assessment costs, and natural resource damages in accordance with the terms of the trust agreement. Parties seeking payment from the letter of credit for CERCLA claims against the current owners or operators of the facility would be able to present claims against the trust fund in accordance with the proposed trust agreement language. The trustee would, upon receipt and review of the required documents, accordingly make a draw on the letter of credit and provide the claimant with payment.

This latter option also appears to provide other advantages. First, letter of credit issuers indicated to EPA that this option is more consistent with commercial practice. Second, representatives of trustee institutions expressed a high level of comfort and willingness to provide such administrative services over a letter of credit. Third, the trust fund itself could be the subject of any direct actions authorized by CERCLA § 108(c). Accordingly, in this proposal, the language acknowledging that direct action claims may be brought against

<sup>64</sup> The Uniform Commercial Code (UCC) is a comprehensive code of law addressing commercial transactions in the United States created to serve as a model for state adoption. Use of standby letters of credit is governed by state laws that track Article 5 of the UCC.

<sup>65</sup> See 40 CFR 264.151(k)

the issuing institution is required only for letters of credit issued in favor of any and all third-party CERCLA claimants, and is not required for those letters of credit issued in favor of a trustee. Considerations regarding the direct action provisions are discussed in more detail in section IV.B.5. of this preamble.

Even with these advantages, EPA expects that the principal disadvantage in having the trustee hold the letter of credit and channel claims through the trust fund is that it will result in higher trustee expenses and fees in comparison with the letter of credit issued in favor of any and all third-party CERCLA claimants. This is because the trustee would need to hold the letter of credit and review the documents presented as part of the claims process to determine whether payment was merited under the terms of the trust. EPA is proposing nevertheless to offer such an arrangement in order to provide additional flexibility in compliance options for the owners and operators subject to the rule as well as offer an option that the Agency has been told is more consistent with commercial practice.

EPA considered a third possible letter of credit option. Under this option, EPA would be the named beneficiary of the letter of credit and would administer the claims process but would require that the letter of credit provide for assignment of proceeds to other parties as identified by EPA. EPA recognized that this approach may provide the familiarity of a named beneficiary for issuers of letters of credit and may reduce trustee expenses because they would not need to provide a custodial service over the standby letter of credit. However, as discussed earlier in this preamble section, EPA's concerns about administering the claims process has led EPA not to include provisions for this option in this proposal. However, EPA solicits comment on this option.

Finally, the proposed rule also includes specific information submission requirements in proposed § 320.40(c) and (d). Where the beneficiary is a trustee, the original letter of credit would be held by the trustee as part of the trust fund property. A certified copy of the letter of credit would be required to be submitted to the Administrator. In addition, the owner or operator would be required to submit the original letter to the trustee authorized to make draws on the letter of credit, and then submit to the Administrator an acknowledgment of receipt of the letter of credit by the trustee. Submission of this information to EPA is intended to assist the Agency

in monitoring compliance as part of its program oversight role.

If the letter of credit is issued in the favor of any and all third-party CERCLA claimants, under proposed § 320.40(d) the original letter of credit would be submitted to EPA, also to assist the Agency to monitor compliance.

Requirement To Establish a Trust Fund, Automatic Extension and Irrevocability Provisions of the Letter of Credit (§§ 320.40(e) Through (f) and (k) Through (l))

Standby letters of credit are typically issued for specific, finite periods of time although they may automatically extend provided the issuer has the right to allow the credit to expire. In developing this proposal, one consideration for EPA was how to assure funds would be available when necessary. One consideration with the letter of credit was that the issuer may wish not to extend the letter of credit at some point potentially leaving the owner or operator without the required evidence of financial responsibility. EPA was concerned that the decision not to extend a letter of credit may occur at a time when the owner's or operator's finances were in decline at which point the ability of the owner or operator to obtain alternate financial responsibility may be constrained. To ensure continuity of financial responsibility coverage EPA is proposing a suite of regulatory provisions intended to provide strong assurance that funds would be available when necessary.

First, an owner or operator who uses a letter of credit to satisfy the requirements of this regulation would also be required to establish a trust fund and update Schedule A of the trust agreement within sixty days after a change in the amount of CERCLA § 108(b) financial responsibility. The requirement to establish a trust fund is included regardless of whether the letter of credit is issued in favor of all third-party CERCLA claimants, or in favor of the trustee of a trust fund. EPA is proposing to require that a trust fund either hold the letter of credit or be established alongside the letter of credit to provide a repository for funds drawn from the letter of credit in instances where the issuing institution declines to extend the letter of credit and the owner or operator fails to obtain replacement financial responsibility.

This standby trust fund would be worded identically to the proposed trust fund language (see § 320.50(a) for the proposed wording of the trust agreement) and would meet the same requirements specified for the trust funds (see § 320.45 for proposed trust

fund regulations) with two exceptions. The first is that an originally signed duplicate of the trust agreement would be submitted to the Administrator with the original or the certified copy of the letter of credit. The second is that, unless the standby trust fund was funded pursuant to the requirements of this part including holding a letter of credit as specified in § 320.40 and described earlier, the following would not be required: (1) Payments into the trust fund as specified in § 320.45; (2) annual valuations as required by the trust agreement; and (3) notices of payment as required by the trust agreement.

Second, EPA is proposing that the letter of credit must be irrevocable and issued for a period of at least one year. Without this provision the letter of credit could potentially be withdrawn or modified for any reason and at any time by the issuer unilaterally, without notification to the current owner or operator. With this provision, the owner or operator, third-party CERCLA claimants, and EPA are assured of at least one year of coverage.

Further, EPA is proposing that the letter of credit must provide that the expiration date would automatically be extended for a period of at least one year unless, at least 120 days before the current expiration date, the issuing institution notifies the owner or operator, the trust fund trustee (if the letter of credit is held by the trustee) and the Administrator by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days would begin on the date when the owner or operator, the trust fund trustee (if the letter is issued in favor of the trustee), and the Administrator have received the notice, as evidenced by the return receipts. This proposed automatic extension provision would help to ensure that coverage continues. Combined with the irrevocability provision, the owner and operator, EPA and other third-party CERCLA claimants can be assured of continuous coverage unless notified by the issuing institution.

As a final proposed provision to ensure continuity of coverage, the proposed rule would provide for the possibility for the letter of credit to fund the trust fund in one of two ways if the letter of credit were not extended. The first way would apply when the letter of credit is issued in favor of any and all third-party CERCLA claimants. In that scenario, if the owner or operator did not establish alternate financial responsibility as specified in this proposed rule and obtain written

approval of such alternate financial responsibility from the Administrator within ninety days after receipt of a non-extension notice by the owner or operator and the Administrator, the Administrator would draw on the letter of credit if the letter of credit is issued in favor of any and all third party CERCLA claimants. The issuing institution would then deposit the unused portion of the credit into the standby trust. The second way would apply when the letter of credit is issued in favor of the trust fund trustee. In such scenarios, if the owner or operator did not obtain alternate financial responsibility and obtain written approval of such alternate financial responsibility from the Administrator within ninety days after receipt of a non-extension notice by the owner or operator, the Administrator and the trustee, the Administrator would inform the trustee that the owner or operator had not established alternate financial responsibility. This would prompt the trustee to draw on the letter of credit and deposit any unused portion of the credit into the trust fund.

The Administrator would be able to delay the drawing of funds or the notification to the trustee of the trust fund that the owner or operator had not established alternate financial responsibility, if the issuing institution grants an extension of the term of the credit. During the last thirty days of any such extension, if the owner or operator has failed to provide alternate financial responsibility as specified in this section and obtain written approval of such financial responsibility from the Administrator, the Administrator would draw on the letter of credit or notify the trustee of the trust fund that the owner or operator had not established alternate financial responsibility and obtained written approval of such alternate financial responsibility. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the Administrator or the trust fund trustee in the circumstances described in this paragraph would be deposited by the issuing institution directly into the trust fund.

A similar arrangement is required under the RCRA Subtitle C closure post closure financial assurance regulations and the Agency has found it to be a valuable feature. The accompanying trust fund and the automatic extension provisions for letters of credit are an important feature of this proposal because letters of credit might otherwise not be extended after a release of hazardous substances or after marked financial decline of the owner or operator. Absent the ability for the

trustee or the Administrator to make a draw on the letter of credit in instances of issuer notice of non-extension and the owner's or operator's failure to obtain replacement financial responsibility, financial responsibility may not be available when necessary. After notice of non-extension, a CERCLA claim may not necessarily be possible for some time because the CERCLA processes leading to a claim may be lengthy. In such an instance, the letter of credit may expire, leaving no financial responsibility instrument available. The proposed arrangement would ensure that funds are still available to pay the valid CERCLA claims. This provision, and the similar provisions for other proposed instruments, as well as alternatives are discussed in more depth in section VI.C.7 of this preamble.

IIBLP also provided comments to EPA on these proposed automatic extension and non-extension notification requirements. With respect to the non-extension notification, the IIBLP suggested that the wording of the letter of credit should not explicitly require notification to the owner or operator of the decision not to extend the credit as discussed earlier. Rather, IIBLP noted that the means of how issuers and their applicants communicate is typically left to a separate agreement from the letter of credit itself. However, EPA believes that specifying such a notification term in the letter of credit itself, including notice to the owner or operator, is preferable because timely receipt of such notice by both EPA and the owner or operator is important as it would establish the timeframe in which the owner or operator must obtain alternate financial responsibility. Further, the provision helps prevent expiration from taking place without the knowledge of EPA and the owner or operator, or a draw being necessitated due to pending expiration without the knowledge of the owner or operator. Finally, while it may be unusual as a general matter of commercial practice, such a provision is a common feature of government financial responsibility programs. For example, similar notification requirements are required in the RCRA Subtitle C closure and post closure letter of credit which has been broadly used as a financial assurance instrument by regulated entities in that program.

With respect to the automatic extension provisions, the IIBLP stated that a date should be identified beyond which extension should not be able to occur. However, such a provision would be inconsistent with other EPA financial assurance programs and necessitate more frequent re-establishment of

financial responsibility on the part of the owner or operator or draws on the letter of credit prompted by pending expiration. Further, given that the time horizon over which an owner and operator must maintain financial responsibility under CERCLA § 108(b) may vary on a case-by-case basis, EPA could not identify a nationally-uniform date beyond which the letter of credit should be allowed to expire.

#### Claims Against a Letter of Credit Issued in Favor of Any and All Third-Party CERCLA Claimants (§§ 320.40(j) and 320.50(b))

Under the proposed letter of credit language (§ 320.50(b)) and regulations (§ 320.40(j)), when the letter of credit is issued in favor of any and all third-party CERCLA claimants, it would provide payment to third-party CERCLA claimants under three scenarios provided that the claimant provides the necessary documentation, in addition to authorizing direct action claims against the issuing institution itself. Under the proposed regulations the following claims would be authorized against the letter of credit when issued in favor of any and all third-party CERCLA claimants:

(1) Any party that obtained a final court judgment from a Federal court awarding CERCLA response costs, health assessment costs, and/or natural resource damages associated with the facility against any of the current owners or operators to whom payment as required by the judgment had not been made within thirty days would be able to make a claim against the letter of credit. However, the party would only be able to make a claim if it had not recovered or been paid the funds from any other source.

(2) The Administrator or another authorized Federal agency would be able to make a claim against the letter of credit requesting payment if payment had not been made as required by a CERCLA settlement associated with the facility between a current owner or operator and EPA or another Federal agency.

(3) The Administrator or another authorized Federal agency would be able to make a claim against the letter of credit requesting payment into a trust fund established pursuant to a CERCLA unilateral administrative order issued to a current owner or operator if performance at the facility as required by the order had not occurred. The Administrator or other Federal agency would be able to make the claim against the letter of credit only if the owner or operator had provided a written statement that the letter of credit may be



used to assure the performance of the work required in the order.

In order to make a draw on the letter of credit under these three scenarios, claimants would need to present one of two sets of documents. The first set of documents would consist of a demand for payment bearing reference to the letter of credit by number, a final court judgment dated at least thirty days earlier from a Federal court, in favor of the claimant, awarding CERCLA response costs, health assessment costs, and/or natural resource damages associated with the facility against any of the current owners or operators, and a certification from the claimant that reads as follows: "I hereby certify that the amount of the demand is payable pursuant to regulations issued under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 as amended."

Because a claimant seeking satisfaction of a final court judgment awarding CERCLA response costs, health assessment costs, and/or natural resource damages may be any of a wide range of potential parties including Federal and state government officials, natural resource trustees, or private parties, EPA was told by several representatives of the financial industry that the potential for inappropriate claims in this scenario may be higher than in typical financial assurance programs where a particular regulator is the only named beneficiary. (The RCRA Subtitle C closure and post-closure letter of credit at 40 CFR 264.151(d) is an example of a single-beneficiary letter of credit). EPA was informed by one bank representative that documentary payment conditions requiring presentation of a court judgment would help ease concerns in this regard. Specifically, the representative suggested that the risk of fraud would be reduced if the rules required production of a court judgment in addition to a demand and certification. EPA does not expect that such a requirement would present a significant burden to legitimate claimants, and wishes to lower any perceived barriers to issuing the necessary instruments under this proposed rule. Thus, EPA is proposing that the language of the letter of credit issued in favor of any and all third-party CERCLA claimants require not just a demand for payment and a certification from the claimant but the presentation of the final court judgment as well.

As discussed in the general payment provisions section of the preamble, the proposed regulatory text in § 320.40(j) regarding letters of credit includes other requirements for making draws on the letter of credit. EPA's proposed letter of

credit certification requirement is intended to encompass these requirements and thereby to help ensure that those supplemental criteria have been met. These requirements are designed to foster fairness for both potential claimants as well as to the owners or operators who provide the CERCLA § 108(b) financial responsibility. These requirements are (1) that a claim for satisfaction of a final court judgment may only be made against a CERCLA § 108(b) financial responsibility instrument if the judgment has been obtained against a current owner or operator at the facility and if the owner or operator has failed to make payment on the judgment within thirty days; and (2) that the claimant may only make such a claim if they have not recovered or been paid the funds from any other source. EPA is aware that letters of credit are designed to be an independent undertaking that would preclude the issuing institution from considering non-documentary conditions such as whether the previously-mentioned supplemental criteria had been met. EPA is thus requiring that claimants certify that the funds are payable pursuant to regulations issued under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 as amended. EPA believes this additional documentary condition helps curb the potential for inappropriate draws when the letter of credit is issued in favor of any and all third party claimants.

The second set of documents that could be presented in order for EPA or another authorized Federal agency to make a draw when the letter of credit is issued in favor of any and all third-party CERCLA claimants is a demand for payment bearing reference to the letter of credit by number and a certification from the Administrator or another Federal agency that reads as follows: "I hereby certify that the amount of the demand is payable pursuant to regulations issued under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 as amended." EPA intends for this second set of documents to be presented by EPA or another authorized Federal agency in order to obtain payment for a CERCLA settlement or into a trust fund established pursuant to a CERCLA § 106 unilateral administrative order in instances where either (1) payment was not made as required by a CERCLA settlement associated with the facility with a current owner or operator, or (2) performance at the facility had not

occurred as required by a CERCLA § 106 unilateral administrative order issued to a current owner or operator.

Because these payment scenarios are explicitly provided for in the proposed rules at 320.40(j)(2) and (3), and because those scenarios are limited to Federal agencies acting pursuant to CERCLA, EPA sees no reason to require any additional documentation beyond the demand for payment and the certification. A similar documentary payment condition is employed in the RCRA Subtitle C closure and post-closure letter of credit. See 40 CFR 264.143(d)(8); 264.151(d). Requiring only a certification and a demand for payment also streamlines the claims process in these scenarios and imposes a lower administrative burden on the claimants and on the issuing institutions because fewer documents would require review.

Other supplementary documentary requirements EPA considered were the presentation of the CERCLA settlement agreement or CERCLA unilateral administrative order themselves. However, EPA did not believe these additional requirements provided significant value beyond the certification from the Administrator or other authorized Federal agency. In discussions with representatives of the banking community, participants suggested a high degree of comfort with a certification from a Federal government agency as a documentary payment requirement, provided it was specified in the letter of credit. Thus, to avoid unnecessary documentary provisions, EPA is proposing that the required wording of the letter of credit issued in favor of any and all third-party CERCLA claimants not include a requirement to produce the underlying settlement or unilateral administrative order, in the scenarios limited to Federal government claimants.

Further, EPA is today also proposing letter of credit wording that does not require that the original letter of credit itself be presented by claimants requesting a draw. EPA's financial assurance programs under RCRA Subtitle C (closure/post-closure letters of credit and liability coverage letters of credit) similarly do not require presentation of the original letter of credit itself. Such a requirement would entail a greater level of administrative burden on both EPA and claimants, in particular due to the wide range of potential claimants and the need to coordinate between EPA and potential claimants. In discussions with representatives of the banking community, EPA was told that banks are likely to prefer that the presentation of

the original letter of credit not be a requirement and that such a requirement is a relic of the past. However, this does not mean there could be no value in such a requirement. The issuing institution may have noted on the letter of credit any prior payments that may help keep EPA informed of the remaining balance; however, EPA should be able to remain apprised of the value of the letter of credit based on claims and payment notification requirements included elsewhere in the proposal (see for example § 320.24). On balance, EPA is proposing to forgo such a requirement to be more consistent with current commercial practice and reduce the administrative burden entailed in the claims process. However, EPA solicits comment on whether such a requirement would be useful.

#### Draws on the Letter of Credit When Held by a Trust Fund Trustee (§§ 320.40(i) and 320.50(b))

If the letter of credit is issued in favor of the trust fund trustee, parties would be able to make claims against the trust fund in accordance with the terms of the trust agreement in order to receive payment from the letter of credit. Accordingly, the proposed language of the letter of credit (§ 320.50(b)) would require only a demand for payment from the trust fund trustee bearing reference to the letter of credit by number. This is similar to the required documentary provisions in the RCRA Subtitle C third-party liability letter of credit when it is issued in favor of a trustee. Other documentary requirements appear unnecessary under this construction because the third-party CERCLA claimants would be making claims against the trust fund instead of the letter of credit and would therefore need to meet the documentary conditions laid out in the trust agreement or successfully make a direct action claim against the trust fund itself. (Payments from the trust fund are discussed further in the trust fund section of the preamble.) This arrangement provides for a very streamlined process for the trustee to draw on the letter of credit when necessary to make payments to the successful claimants. EPA did not intend to burden this process with extra documentary conditions as that would only occasion greater fees and expenses on the part of the trustee and provide no clear benefit beyond the documentary review already performed by the trustee.

Such a documentary requirement would also provide the trustee of the trust fund the ability to make draws on the letter of credit when necessary to cover trustee expenses. While the

proposed required wording of the trust agreement specifies that fees and expenses would be first paid by the grantor of the trust agreement, the proposed language also provides that all expenses not paid directly by the grantor shall be paid from the corpus of the trust fund which may require a draw on a letter of credit held by the trust fund. This allowance is important to allow trust expenses to be covered in instances where the grantor may cease to exist or is otherwise unavailable.

EPA recognizes that, when a letter of credit is issued in favor of a trustee of a trust fund, the trustee may incur significant fees and expenses in determining whether or not payment should be made from the trust fund, particularly in instances of a direct action against the trust fund. These expenses would likely reduce the value of the trust fund (and by extension potentially the value of the letter of credit held by the trust fund). However, given the apparent reluctance of institutions that issue letters of credit to provide letters of credit that could pay to a wide range of unnamed beneficiaries and institutions' expressed concerns regarding the institution itself being potentially subject to direct action suit from CERCLA claimants, EPA is proposing this compliance option. EPA requests comment on both options: (1) Where the letter of credit may pay to CERCLA claimants directly (i.e. be issued in favor of any and all third-party CERCLA claimants) or (2) where the letter of credit may pay to the trustee of a trust fund issued in accordance with the proposed trust fund regulations who would then pay valid claims (i.e. be issued in favor of the trustee). EPA is also interested in provisions or specifications that may allow for lower expenses or fees or that would protect the value of the trust fund (and thus the letter of credit) from expenses and fees when the letter of credit is issued in favor of the trust fund trustee.

#### Direct Action Language in the Letter of Credit (§ 320.50(b))

Under the proposed regulations, the issuing institution would be subject to direct action claims only when the letter of credit is issued in favor of any and all third-party CERCLA claimants. Because direct action is authorized by the statute, the possibility of a direct action suit should be clearly acknowledged by issuing institutions. Thus EPA has included required language acknowledging that direct action suits may be brought against the issuing institution for letters of credit issued in favor of any and all third-party CERCLA claimants and that the issuing

institution consents to suit in those circumstances. The language further acknowledges that the liability of the issuing institution is limited by CERCLA § 108(d) and that the institution is entitled to the rights and defenses provided to guarantors in CERCLA § 108(c). The reader should note that this language is not required for those letters of credit issued in favor of a trustee. In the latter case, EPA intends the trust fund itself would be the subject of direct action suits. However, under the proposed regulations, the issuing institution would be subject to direct action claims when the letter of credit is issued in favor of any and all third-party CERCLA claimants.

Also included in the direct action language in the letter of credit is a provision that the issuing institution will provide notice of any such claims and payments resulting from a direct action to the Administrator. EPA has included a similar provision applicable to the owner and operator in proposed § 320.24, under which they are obligated to provide notice to EPA of claims made. However, EPA is including this proposed term as part of the letter of credit, because it expects that the owner or operator may not be able to provide such a notice of payment in a direct action scenario. Providing a mechanism for EPA to remain informed of claims against the instrument and of the value of the letter of credit in case of a direct action, is appropriate for similar reasons as described in proposed § 320.24.

#### Identification of Facility Information in Letter of Credit (§ 320.50(b))

The proposed language of the letter of credit would require the identification of the facilities covered, and the amount of financial responsibility provided by the letter of credit. EPA is today proposing language that allows (but does not require) a single letter of credit to cover multiple facilities if that is determined to be optimal by the owner and operator and their letter of credit provider. EPA anticipates that allowing coverage of multiple facilities simultaneously may have administrative efficiency benefits. As discussed in section VI.3.9. of this preamble, providing for one instrument to cover multiple facilities may provide for some administrative ease in the compliance and implementation process and is a common feature of EPA financial assurance programs.<sup>66</sup>

Thus, EPA has made provision in the letter of credit language for facility-specific sub-limits (i.e. the identification

<sup>66</sup> See for example, 40 CFR 264.143(h).

of an amount available for claims associated with each facility covered by the letter of credit beyond which the issuer would have no obligation to pay claims associated with that facility) when a letter of credit is covering multiple facilities. The proposed letter of credit would require the EPA identification number(s), name(s), address(es) and CERCLA § 108(b) financial responsibility amount(s) covered by the letter of credit for facility(ies) that would be covered by the instrument.

EPA recognizes that such information may not typically be included in letters of credit, where the preference is typically for the simplest and briefest language possible. However, this approach allows the letter of credit to reflect the site-by-site amounts of financial responsibility required, and at the same time, it will assist all parties (e.g. the issuing institution, third-party CERCLA claimants) in knowing the amount of financial responsibility available for claims associated with any of the facilities.

EPA is also considering whether to limit each letter of credit to coverage of a single facility. The additional information about other facilities and facility-specific sub-limits would not need to be included. In this way the letter of credit could be drafted in a simpler manner. However, as the EPA is not proposing to require that multiple facilities must be covered by one letter of credit, EPA believes the proposed language provides the flexibility to draft a relatively simple letter of credit. As such, EPA is today proposing language that allows the letter of credit to cover multiple facilities if that is determined to be optimal. EPA requests comment on this proposed provision and the alternative option of requiring only one facility per letter of credit.

## 2. Surety Bond (§ 320.41)

An owner or operator would be able to satisfy the proposed CERCLA § 108(b) financial responsibility requirements by obtaining a surety bond in accordance with the proposed requirements including the proposed required wording and submitting the originally signed bond to the Administrator. Through a surety bond, the Surety would guarantee that it will pay third-party CERCLA claims for response costs, health assessment costs, and natural resource damages associated with the facility against any of the current owners and operators, even if not listed as the principal on the bond, under certain circumstances in the event the claims are not satisfied by the owners or operators, up to the bond limits.

## Issuer Eligibility (§ 320.41(b))

The surety company issuing the bond would be required to, at a minimum, be among those listed as acceptable sureties on Federal bonds in Circular 570 of the U.S. Department of the Treasury. This requirement for providers of surety bonds is the same as that in the RCRA Subtitle C financial assurance regulations which EPA believes has worked well and will provide familiarity for implementing staff and the regulated community. In selecting this eligibility criteria EPA is also taking advantage of a pre-existing Federal examination and authorization process designed specifically for sureties. EPA recognizes that a Federal government agency will not be listed as the obligee of CERCLA § 108(b) surety bonds under the proposed language and thus Circular 570 listing may not be strictly necessary to comply with Treasury regulations. However, EPA and other Federal government agencies are likely to be claimants under the proposed CERCLA § 108(b) construct and thus EPA believes a similar level of oversight of the solvency of a surety providing a bond is merited. Further, upon examination of eleven years of data EPA did not identify any instances of default of a surety listed on Circular 570 suggesting the criterion is robust. EPA considered additional qualifications for surety companies but is today proposing the same qualifications as are required in the RCRA Subtitle C regulations. This decision was based largely on the desire to not unduly constrain supply, a desire to leverage the pre-existing robust criterion for sureties already well established, and to avoid the administrative burden on EPA of verifying additional qualifications. For more information on the consideration of alternative provider qualifications, please see the background document on instrument provider qualifications titled "Potential Issuer Eligibility Requirements for Insurance, Surety Bonds, Letters of Credit, and Trust Agreements and Standby Trust Agreements under CERCLA § 108(b)."

## Requirements To Ensure Continuity of Financial Responsibility Coverage (§§ 320.41(f), (g)(4) and (k))

EPA is proposing a suite of regulatory provisions in order to ensure continuity of CERCLA 108(b) financial responsibility coverage. First, an owner or operator that elected to use a surety bond to satisfy the requirements of this section would also be required to establish a standby trust fund and update Schedule A of the trust

agreement within sixty days after a change in the amount of CERCLA § 108(b) financial responsibility. This standby trust fund would have to be worded identically to the proposed trust fund language in § 320.50(a) and meet the same requirements specified for the trust funds, except that: (1) an originally signed duplicate of the trust agreement would be submitted to the Administrator with the surety bond; and (2) until the standby trust fund is funded pursuant to the requirements of this section, the following would not be required by the proposed regulations: (1) payments into the trust fund as specified in § 320.45, (2) annual valuations as required by the trust agreement; and (3) notices of payment as required by the trust agreement.

The second proposed provision designed to ensure continuity of the CERCLA § 108(b) financial responsibility is the cancellation provision in the bond. EPA is proposing that, under the terms of the bond, the surety would be able to cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Administrator. Cancellation would not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Administrator, as evidenced by the return receipts.

Finally, EPA is proposing that, under the terms of the bond, the surety would become liable up to the penal sum<sup>67</sup> of the bond in the event the owners or operators failed to provide alternate financial responsibility and obtain the Administrator's written approval of the financial responsibility provided, within ninety days after receipt by both the owner or operator and the Administrator of a notice of cancellation of the bond from the surety. Under the proposal, payment from the bond into the standby trust would then occur.

A similar arrangement is required under the RCRA Subtitle C hazardous waste financial assurance regulations for closure and post closure care and the Agency believes it has been a valuable feature. EPA believes the standby trust and cancellation provisions are an important feature of this proposal as bonds could otherwise be cancelled after a release of hazardous substances from the facility or after marked financial decline of the owner operator. A CERCLA claim for payment from the bond would not necessarily be mature

<sup>67</sup>The penal sum represents the maximum amount the surety will pay for CERCLA response costs health assessment costs and/or natural resource damages under the bond.

for some time and thus financial responsibility may not be available when necessary. EPA believes the proposed arrangement however will ensure that funds are still available to pay the CERCLA response costs, health assessment costs, and natural resource damage claims of third parties. This provision, and the similar provisions for other proposed instruments, as well as alternatives are discussed in more depth in the preamble section headed 'issuer cancellation provisions.'

#### Claims Against the Surety Bond (§§ 320.41(g) and 320.50(c))

In addition to guaranteeing that replacement financial responsibility will be obtained in the event the surety provides notice of cancellation of the bond, the bond would also guarantee payment of CERCLA response costs, health assessment costs, and natural resource damages to third-parties. Under the proposed terms of the bond, the bond would guarantee that the owner or operator would make payments for or ensure payments are made for CERCLA response costs, health assessment costs, and/or natural resource damages associated with a facility covered by the bond as required in a final court judgment from a Federal court awarding such costs against any of the owners or operators within thirty days to the parties obtaining the judgment. In these circumstances a claimant would present the unsatisfied final court judgment dated at least thirty days earlier from a Federal court, in favor of the claimant, awarding CERCLA response costs, health assessment costs, and/or natural resource damages associated with the facility against any of the current owners or operators at the facility to the surety directly. Additionally, the claimant would be required to provide a signed statement from the claimant certifying that the amounts sought had not been recovered or paid from any other source, including, but not limited to, the owner or operator, insurance, judgments, agreements, and other financial responsibility instruments.

Upon receipt of these documents the surety would then make payment in accordance with the instructions of the successful claimant. These documentary payment requirements were selected as it removes EPA from the claims administration process but ensures that a court has determined that payment is due to the party making the claim under CERCLA and that the party has not already recovered or been paid the funds from another source. Further, by relying on objective documentary submissions the Surety should be able

to determine whether payment should occur under the terms of the bond with only minimal due diligence.

Additionally, the bond would guarantee the owner or operator would make payments or ensure payments were made as required in a CERCLA settlement associated with the facility between any of the current owners and operators at the facility and EPA or another authorized Federal agency. The Administrator or the other Federal agency, in these situations, would present a written signed statement to the surety requesting payment from the surety on the grounds that payment had not been made as required by a CERCLA settlement associated with the facility and with any of the current owners or operators. Additionally, the Administrator or the Federal agency would need to present a signed statement certifying that the funds sought had not been recovered or paid from any other source, including, but not limited to, the owner or operator, insurance, judgments, agreements, and other financial responsibility instruments.

EPA believes that, similar to EPA's thinking on the documentary payment conditions for the letter of credit issued in favor of any and all third-party CERCLA claimants (discussed in section VI.C.1. of this preamble), in the instances when the potential claimants are limited to Federal government agencies a more streamlined payment condition is optimal. EPA believes that the requirement of a signed statement from the Administrator or another Federal agency is a clear documentary condition and will require minimal due diligence on the part of sureties.

Finally, the bond would guarantee that the owner or operator performs or ensures the performance of the work at the facility as required by a CERCLA unilateral administrative order issued to any of the current owners or operators by EPA or another Federal agency for which the owner or operator has provided a written statement allowing for the bond to assure performance of the work. Payments would be made at the request of EPA or another Federal agency into a standby trust established pursuant to the administrative order if the work was not performed in accordance with the order.

In this scenario, to make a claim against the surety bond the Administrator or the other Federal agency would present a written signed statement requesting payment from the surety into a trust fund established pursuant to a CERCLA unilateral administrative order on the grounds that performance at the facility had not

occurred as required by a CERCLA administrative order issued to a current owner or operator. Additionally, the EPA Regional Administrator or the Federal agency would need to present a signed statement certifying that the funds sought had not been recovered or paid from any other source, including, but not limited to, the owners or operators, insurance, judgments, agreements, or other financial responsibility instruments.

As discussed earlier, in the two payment scenarios limited to Federal government claimants EPA is attempting to limit the complexity of the documentary requirements. EPA believes the relatively simple requirements of signed statements from EPA or another Federal agency will streamline the claims process and reduce uncertainty on the part of the surety as to whether or not payment should be made.

EPA requests comment on the proposed documentary requirements for payment from the surety bond. In particular, EPA is interested in hearing if there are other documentary payment requirements that could further limit the discretion required on the part of the surety and yet still provide assurance against inappropriate claims being paid.

EPA recognizes that the payment mechanics of the surety bond involve multiple parties that will not be listed explicitly on the surety bond. In discussions with representatives of the surety bond industry, EPA learned that such a construction may likely be less palatable to potential providers of surety bonds than a construction with one designated claimant. Similarly, the Surety and Fidelity Association of America (SFAA) recommended that EPA be the only claimant on the bond. SFAA stated that multiple claimants enlarges the surety's exposure to claims and possibly dilutes the protection to EPA as the Agency may have less assurance of the proper use of the funds by third-parties other than EPA. However, EPA is not proposing to list EPA as the sole obligee on the bond for several reasons. First, non U.S. Government claimants would need a final court judgment from a Federal court awarding payment for CERCLA response costs, health assessment costs, and/or natural resource damages ensuring that a court had reviewed the merits of the claim (e.g. the consistency of the action with the national contingency plan) and found the claim to be valid. As a result, EPA does not share the concern that payment of funds to parties other than EPA will compromise the protection of human health and the environment. EPA

believes that, given the nature of CERCLA where any number of parties may have claims under CERCLA § 107, it is necessary to provide payment from the bond to a range of third-party CERCLA claimants.

EPA considered an option whereby EPA would be listed as the obligee and administer the claims process however, as discussed in the letter of credit § 320.40 of the preamble. EPA is not proposing this option for several reasons. First, EPA would not necessarily be involved in all CERCLA actions at facilities and did not wish to redirect its programmatic resources away from high priority sites to administer the claims process for CERCLA § 108(b). Moreover, EPA may not be able to assess the merits of all CERCLA claims which include natural resource damages and health assessments that are primarily the responsibility of other entities. Finally, it may create a perception of partiality were EPA to administer the claims process in scenarios where the Agency was one of the claimants. EPA believes that the proposed construction best achieves the need of providing payment to the full range of potential CERCLA claimants while simultaneously protecting against improper claims and preventing the sub-optimal redirection of Superfund resources away from high-priority sites.

#### Surety Liability (§ 320.41(h))

Under the terms of the bond, the surety would become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond. EPA believes that this is an additional advantage of the proposed instrument payment terms. In discussions with representatives of the surety industry, representatives stressed to EPA that the surety company should be secondary to the owners and operators and claimants should first look to the owner or operators for satisfaction. EPA hopes that this feature of the proposed CERCLA § 108(b) surety bond's consistency with that aspect of surety practice will encourage participation on the part of surety companies in the CERCLA § 108(b) program.

The liability of the surety would be limited to the penal sum<sup>68</sup> of the bond plus the amount of any investigation or legal defense fees incurred by the surety. EPA, to the greatest extent possible, wishes to preserve the value of

the financial responsibility to pay CERCLA claimants. EPA is thus proposing that any legal or investigation fees incurred by the surety remain outside the penal sum of the bond and not erode the value of the financial responsibility. A similar provision is also being proposed for insurance and the corporate guarantee. EPA requests comment on these proposed provisions.

#### Direct Action Language in the Surety Bond (§ 320.50(c))

In addition to the payment triggers described earlier, the proposed language of the CERCLA § 108(b) surety bond would also include language that the surety acknowledges that direct action suits may be brought against the surety. The direct action provision would allow for parties with CERCLA § 107 or § 111 claims, in certain instances identified in CERCLA § 108(c)(2), to take actions directly against the surety. It is a cause of action authorized by the statute and EPA expects it would operate independently of the three previously-described payment scenarios. In these instances, as described in the proposed bond language, the surety would have the rights and defenses identified in CERCLA § 108(c) and the liability protections in CERCLA § 108(d).

Similar to the corporate guarantee, insurance and letter of credit issued in favor of any and all third-party CERCLA claimants, EPA is proposing that the required wording of the bond include a provision that the surety notify EPA of any claims and payments made as a result of a direct action. EPA believes this notification requirement is valuable as the owner or operator may not be available to provide such a notice of claims and payments in a direct action scenario yet EPA wishes to remain informed of claims against the instrument and the value of the financial responsibility.

The SFAA also expressed concern that the direct action provision in a CERCLA § 108(b) surety bond may expose the sureties to too many claims. Specifically, SFAA stated that a surety bond is a conditional obligation under which the surety's obligation is triggered when the principal defaults. SFAA stated that bankruptcy (one of the preconditions for a direct action identified in CERCLA § 108(c)) is too broad as, in many cases, an owner or operator may still be able to fulfill its responsibilities even though bankrupt. EPA agrees that the owner or operator could still potentially fulfill its obligations even though bankrupt. Claimants could still pursue the potentially responsible party directly without implicating CERCLA § 108(b)

instruments. EPA believes including the direct action provision is important as in some cases it may not be possible for EPA, or another third-party CERCLA claimant to obtain satisfaction from or obtain a court judgment against the party liable under CERCLA § 107 (or other necessary documents to make a claim against the bond) and thus recognizes the need for the surety, as guarantor, to stand in the owner's or operator's shoes

#### Multiple Sureties (§§ 320.41(e) and 320.50(c))

The surety bond would be able to be issued by multiple sureties provided that each is liable for its individual vertical percentage share of the total penal sum of the bond. (§ 320.41(e)) EPA is proposing surety bond language that would provide the option for owners and operators to obtain surety bonds from multiple issuers in the required amount of financial responsibility. EPA expects the required amounts of CERCLA § 108(b) financial responsibility may be relatively large at some facilities and wishes to provide this flexibility. The proposed arrangement for allowing multiple sureties to cover a single facility is consistent with the approaches employed by all of the financial responsibility programs EPA reviewed. All financial responsibility programs reviewed, including the Coast Guard CERCLA § 108(a), RCRA Subtitle C liability coverage, RCRA Subtitle C closure/post-closure, and RCRA Subtitle I Underground Storage Tanks, require sureties to bind themselves jointly and severally for purposes of allowing a joint action(s) against the issuers of the surety bond, but allow for payment based on pre-determined proportions of the penal sum (several liability).

In the proposed CERCLA § 108(b) surety bond language, individual sureties would identify percentage limits of their liability in the surety bond for which they would each be liable while these individual surety limits would sum to the total penal sum of the bond. EPA believes that such an arrangement may increase surety bond issuers' capacity to collectively cover greater amounts of financial responsibility because the surety's level of coverage would not be impacted by the potential risk for non-payment by other sureties.

When multiple sureties issue a single bond, the proposed regulations would require that each surety be liable for their individual vertical percentage share of the total penal sum of the bond. EPA is proposing that the sureties' individual amounts of liability be

<sup>68</sup>The penal sum of a bond is the specified maximum amount that the surety will be required to pay and is a required input in the proposed surety bond language.

specified in the bond as a percentage of the penal sum of the bond. The proposed specification would create a vertical relationship whereby a surety's liability is not affected by other co-sureties' abilities to pay their shares. EPA believes this provides greater protection against the insolvency of one of the participating sureties. This approach also simplifies the claims process as the exhaustion of one surety's liability does not need to be determined before payment can be received from another surety. An additional advantage of this proposed structure is that sureties would be binding themselves jointly and severally for purposes of allowing a joint action(s) against the issuers of the surety bond. This would allow for a simpler claims process for claimants.

An alternative EPA considered was proposing that multiple sureties could form a tower of coverage comprised of horizontal layers. In such an arrangement each surety in the horizontal tower would be agreeing to cover its layer of the tower, not a percentage of the total. Those sureties higher up the horizontal tower become responsible on a layer-by-layer basis as the limits of each underlying surety's obligation become exhausted. However, EPA is not proposing such an arrangement due to several concerns with such an arrangement. First, a horizontal arrangement presents the opportunity for sureties covering higher coverage layers to avoid liability if a surety on a lower level becomes insolvent and cannot cover the liability within its layer. This was a concern also identified by the U.S. Coast Guard in development of its CERCLA § 108(a) regulations (*see* 59 FR 34220 (July 1, 1994)). Secondly, such an option would raise the administrative burden on EPA because EPA would need to ensure that each layer of coverage fits with the layers above and below and EPA would also need to ensure that the layers contained exhaustion provisions.

EPA requests comment on the proposed arrangement for allowing multiple sureties to execute one bond by identifying their vertical percentage share of the penal sum. Specifically, EPA is interested in other potential arrangements that may encourage surety participation in the program and provide for relatively high amounts of financial responsibility coverage yet not overly complicate implementation of the claims process.

#### Written Statements From Attorneys General and Insurance Commissioners (§ 320.41(d))

EPA believes a bond written as required under this proposal may implicate state insurance law and thus the validity of any such bond may depend on state law. This issue has come up in other EPA rulemakings including the financial responsibility requirements for underground storage tanks containing petroleum (*see*, for example, 52 FR 12786, April 17, 1987) and the RCRA Subtitle C third party liability requirements (*see*, for example, 53 FR 33941, September 1, 1988). State insurance regulation and law is by and large the purview of the states and thus the Agency does not believe it can state with certainty whether any particular bond would subject the issuer to state insurance law, and whether it would be valid with respect to such law. Similar to the way the issue was handled in those programs, EPA is proposing that a surety bond may be used to satisfy the requirements of this section only if the Attorneys General or Insurance Commissioners of (i) the state in which the surety is incorporated, and (ii) each state in which a facility covered by the surety bond is located have submitted a written statement to EPA that a surety bond executed as described in the regulations is a legally valid and enforceable obligation in that state. EPA believes that the surety bond would be an important compliance option and welcomes comments from state Attorneys Generals and Insurance Commissioners on this issue.

#### Termination of the Bond by the Owner or Operator (§§ 320.41(l) and 320.50(c))

The owner or operator would be able to terminate the bond if the Administrator has given prior written consent based on his receipt of evidence of alternate financial responsibility as specified in Part 320 or if the Administrator releases the owner and operator from the financial responsibility requirements of that part. To assist in implementing this requirement the proposed wording of the surety bond includes a provision governing the principal's (i.e. the owner's or operator's) termination of the bond. The proposed bond language states that the principal may terminate the bond by sending written notice to the surety(ies), provided however, that no such notice shall become effective until the surety(ies) receive(s) written authorization for termination of the bond by the Administrator. In this way, the owner or operator would not be able

to unilaterally terminate the bond without the authorization of EPA.

#### Performance Bond

In meetings with potential providers EPA was told that sureties typically prefer having an option of either performing or paying under a bond. EPA considered providing such an option as the Agency believed it may encourage greater participation from sureties in the CERCLA § 108(b) program as well as potentially allow sureties to conduct work in certain cases, which may be more economical than EPA or another Federal agency conducting the work itself. Specifically, EPA thought that the option of performance could be advantageous in some situations, for example, when the surety became liable because an owner or operator either did not perform as required by a CERCLA unilateral administrative order or failed to perform work as required by a CERCLA settlement.

However, EPA could not determine how to specify a workable performance option into the CERCLA § 108(b) surety bond in light of some of the features of the rule's framework. Unlike typical reclamation and closure programs, CERCLA § 108(b) does not include a series of defined and costed-out activities (e.g. closure) which the surety guarantees will be completed. In such programs, if the principal defaults and the surety elects to perform, the surety is typically liable until the defined tasks are all completed. CERCLA § 108(b) does not include any pre-defined obligations. Rather, a CERCLA § 108(b) financial responsibility instrument could be subject to multiple claims by a variety of claimants under the various payment scenarios over the life of the instrument. Therefore, a very accurate accounting of the liability of the surety is necessary with respect to the claims paid and the penal sum of the bond. Such accounting would be difficult if claims were satisfied by performance as it is not clear how the performance should be valued absent a pre-existing accounting of the activities to be conducted. Therefore, surety performance would leave questions about the remaining value of the bond which would create uncertainty around future claims and the availability of financial responsibility. Further, as CERCLA § 108(b) financial responsibility amounts may be relatively large, EPA anticipates that multiple sureties may issue single bonds. This would create even greater complexity around coordinating performance and determining the remaining value of the bond. In light of these considerations, EPA is today

proposing surety bond language that provides only for payment, not performance. EPA requests comment on how EPA could specify a performance option in the CERCLA § 108(b) surety bond in light of the considerations discussed.

### 3. Insurance (§ 320.42)

An owner or operator would be able to satisfy the CERCLA § 108(b) financial responsibility requirements by obtaining insurance for CERCLA response costs, health assessment costs, and natural resource damages which conforms to the requirements of the regulations. Through the policy the insurer agrees to pay for the CERCLA response costs, health assessment costs, and natural resource damages associated with the facility of the current owners and operators under certain circumstances should the current owners or operators fail to do so. Each insurance policy would be required to be amended by the attachment of a CERCLA § 108(b) insurance endorsement as worded in § 320.50(d).

#### Issuer Eligibility (§ 320.42(b))

At a minimum, the insurer would be required to be licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more states. These proposed minimum criteria for an insurer providing insurance under the regulations are the same as those used under the RCRA Subtitle C financial assurance program, which EPA believes have worked well. Additionally, these requirements would be familiar to the regulated community and implementing EPA staff. EPA believes that such standards help assure the integrity of the insurers whose policies are being used by owners or operators to meet the financial responsibility requirements. EPA believes these qualifications will assure that insurers are subject to some regulatory oversight by state insurance departments but will still permit broad participation in providing the insurance. EPA considered alternative qualifications for providers of insurance but is proposing that providers of insurance policies meet the requirements described in this section. In making this decision EPA attempted to balance the benefit of potentially lower default rates by insurers providing insurance under the proposed regulations on the one hand, and the potential impact on the supply of instruments and the administrative burden on the Agency entailed in verifying providers met additional qualifications of these alternatives on

the other. For more information on alternatives considered, please see the background document that addresses instrument provider qualifications.

EPA also requests comment on allowing owners and operators to obtain insurance policies from captive insurers and/or risk retention groups. A captive insurer is an insurance company that provides insurance primarily or exclusively to its owner(s). A pure captive is defined as having only one owner and providing insurance coverage to only one corporate entity, whereas a group captive is defined as having more than one owner and providing insurance coverage only to members of the group. A risk retention group (RRG) is a liability insurance company owned by its members (policy holders) and organized under the Federal Liability Risk Retention Act.

EPA is aware that some observers have noted concerns with such forms of insurance suggesting that captive insurance and risk retention groups may present a higher level of risk than commercial insurance. EPA is particularly concerned about the risk that captive insurers may present. Specifically, the EPA Inspector General in its 2001 and 2005 reports on the RCRA financial assurance program has pointed to the limited financial independence between the insurer and the owner or operator as one source of risk. The OIG, in the 2005 report, explained that the financial health of the captive insurer is tied to the parent company. Most captive insurance companies are wholly owned subsidiaries, so there is a lack of independence between the captive and the parent company. If the parent company has financial difficulties, then the captive insurer may not have the funds to cover the assured costs. (see Office of Inspector General, Audit Report: RCRA Financial Assurance for Closure and Post-Closure, Report No. 2001-P-007 March 30, 2001; and Office of the Inspector General, Continued EPA Leadership Will Support State Needs for Information and Guidance on RCRA Financial Assurance, Report No. 2005-P-00026, September 26, 2005). EPA has concerns that pure captive insurers in particular may offer insufficient assurance in the context of CERCLA § 108(b) financial responsibility. Pure captive insurance has a limited ability to fulfill a basic purpose of insurance: To spread the risks of potential losses among multiple parties. In their 2007 report on captive insurance the Environmental Financial Advisory Board (EFAB) noted that the greatest risk to the solvency of a captive insurer is an infrequent, large insurance claim.

(See Environmental Financial Advisory Board. The Use of Captive Insurance as a Financial Assurance Tool in Office of Solid Waste and Emergency Response Programs. March 2007.) This may be the very nature of claims for CERCLA response costs, health assessment costs, and natural resource damages associated with hardrock mining facilities, which can be quite large and difficult to predict with certainty, for which the 108(b) financial responsibility instruments would be intended to pay.

EPA believes that risk retention groups may also carry potentially higher risk than commercial insurance but may be better suited to provide insurance under CERCLA 108(b) than pure captive insurers due to their greater ability to spread risk across multiple insureds. Risk retention groups were the subject of a 2005 GAO report that identified some concerns with risk retention groups. One of the primary concerns identified by the GAO was the 'patchwork' nature of state regulation and oversight of risk retention groups. (See Government Accountability Office, Risk Retention Groups: Common Regulatory Standards and Greater Member Protections Are Needed, GAO-05-536. August 2005.) Such a patchwork regime of state regulation and oversight may allow some risk retention groups to operate with limited oversight, including solvency regulation.

EPA also recognizes that allowing insurance policies written by captive insurers and risks retention groups may add potential insurance capacity. EPA believes insurance is an important financial responsibility instrument under CERCLA § 108(b). EPA also understands from its discussions with representatives of the commercial insurance industry as it developed this proposal that environmental insurance policies commonly issued may be narrower in scope than the proposed CERCLA § 108(b) requirements. The Agency was also told that the scope of the insurance coverage the Agency is proposing to require today would likely be viewed as a hybrid between a closure and risk transfer policy.<sup>69</sup> EPA recognizes that a market for this type of hybrid coverage thus may not currently exist and may need some time to fully develop. EPA believes one benefit of allowing owners and operators to purchase policies written by captive insurers and risk retention groups may be, at least initially, a deeper market for

<sup>69</sup> A closure policy would assure the performance or satisfaction of certain known or foreseeable obligations. A risk transfer policy, on the other hand, addresses losses arising from fortuitous events (e.g. releases) that may or may not occur.

insurance policies to meet the CERCLA § 108(b) regulations. EPA's expectations in this respect are strongest for risk retention groups, and are informed by the 2005 GAO report, which noted that many insurance regulators have commented that risk retention groups have filled voids where commercial insurers may not have had a strong interest. The report identified medical malpractice insurance as an area where risk retention groups were able to provide coverage where the availability of affordable commercial insurance was limited. Furthermore, EPA's evaluation of markets for financial responsibility instruments suggested that risk retention groups may present an opportunity for creation of additional capacity to serve the financial service needs of the hardrock mining industry. Specifically, the report stated RRGs have been able to offer additional capacity to the insurance markets to cover volatile, capital-intensive risks like those associated with hardrock mining.

In light of these tradeoffs between potentially higher risk to third-party claimants and taxpayers presented by captive insurers and risk retention groups and the possible additional capacity they may provide, EPA requests comment on allowing policies written by these types of insurers. Specifically, EPA requests comments on allowing policies issued by captives or risk retention groups provided the issuer had a minimum financial strength rating from A.M. Best or a comparable rating from another Nationally Recognized Statistical Ratings Organization (NRSRO). EPA believes requiring, at a minimum, that captives and risk retention groups have a minimum financial strength rating may address some of the concerns associated with these types of policies. First, recognizing the limited financial independence between the owner or operator and the insurer and that captive insurance in particular has some similarities to self-insurance, a financial strength rating would help to demonstrate that the insurer has the financial wherewithal to pay claims on behalf of the owner or operator. Secondly, the financial strength rating provides an independent and common assessment of the financial strength of the insurer and thus may alleviate the concerns of the state-by-state variation in oversight and solvency examination the GAO noted with respect to risk retention groups. Such a provision would also be consistent with one of the findings in the 2007 EFAB report that the use of independent credit analysis

(*i.e.*, credit ratings) is a cost-effective mechanism for demonstrating the financial strength of a captive insurer and that these ratings help address the limited capacity of state regulatory bodies to undertake extensive credit analysis.

The value of a potential rating requirement for a captive insurer or risk retention group can also be illustrated by lower historical default rates for higher rated insurers. In 2015 AM Best reported<sup>70</sup> that US life/health and property/casualty insurers rated by AM Best over the period 1977–2014 with secure ratings had a cumulative three-year impairment rate of 1.05 percent. The same impairment rate for life/health and property/casualty insurers rated by AM Best with vulnerable ratings over that time period was 10.45 percent suggesting that ratings requirement could meaningfully reduce the impairment risk of a risk retention group or captive insurer.

EFAB also recommended to EPA in its 2007 report on captive insurance that in addition to the captive insurer having a minimum rating, the financially responsible affiliate (*e.g.* the owner or operator demonstrating financial responsibility with insurance from a captive) should also hold a minimum credit rating. EPA requests comments on this additional potential requirement for captive insurance should captive insurance be allowed in the final rule. EPA believes that such a requirement would address some of the concern associated with the similarities between pure captive insurance and a financial test but would increase the administrative burden on the Agency.

EPA recognizes, however, that a requirement for a financial strength rating would not address all concerns with these instruments. These remaining concerns would include: (1) A concern that state insurance regulation of captives and risk retention groups may not be as uniform as that for commercial insurance and may be limited to only the state in which the insurer is chartered;<sup>71</sup> (2) a concern that

<sup>70</sup> A.M. Best, *Best's Impairment Rate and Rating Transition Study—1977–2014*. U.S. Property/Casualty & Life/Health. Exhibit 2. Pg 5. (August 21, 2015)

<sup>71</sup> This concern is one of the concerns identified in the 2005 GAO report but may not be unique to captive or risk retention groups in the context of environmental insurance. Similar to captive insurers and risk retention groups, an excess or surplus lines insurer must be licensed in the state that serves as its domicile and must meet the solvency requirements of that state alone. Excess or surplus lines insurers cover difficult to standardize risks which often includes environmental insurance and, the Agency anticipates, may include CERCLA 108(b) coverage initially due to the relatively high

captives and risk retention groups may not be able to spread risk across many insureds given the limitations inherent in for whom they can write policies. EPA is therefore seeking comment on these issues, and on suggested approaches to address these remaining concerns.

For example, EPA requests comment on the concept of allowing policies issued by risk retention groups or group captives that met a certain minimum rating, but not allowing pure captive insurers to meet the CERCLA § 108(b) financial responsibility requirements. The rationale for such a distinction would be that risk retention groups and group captives may be able to spread risk across a larger pool of financially and legally independent policy holders than a pure captive insurer that may be restricted to spreading risk amongst its own financially-related affiliates. As such, accepting insurance policies from risk retention groups or group captives, but not pure captives, may address the second concern identified. EPA also requests comment on whether insurance policies provided by risk retention groups and group captive insurers more generally should be treated equivalently.

EPA recognizes that a financial strength rating would not necessarily be available in the near term as some captive insurers or risk retention groups, were they to ultimately be considered acceptable issuers, may be newly created in response to these regulations. EPA is thus accepting comment on whether, if EPA ultimately allows policies written by captives and/or risk retention groups, to phase in the ratings requirement. A phased ratings requirement could operate by requiring that owners and operators provide evidence of the requisite financial strength of a captive insurer or risk retention group beginning five years after the effective date of the rule. In this way, a rating agency would be able to review a multi-year track record of the insurer's performance which may be necessary in order to accurately rate the insurer.

#### Submission of Endorsement (§ 320.42(c))

Typically, financial responsibility regulations require submission of either a certificate of insurance or an endorsement as evidence of the required insurance coverage. A certificate of insurance is a form that typically is completed by an insurance broker or agent at the request of an insurance

dollar limits of liability and high risk facility classes.



policyholder, which evidences the fact that an insurance policy has been written. An endorsement to an insurance policy is a valid and binding part of the contract considered to be part of the insurance contract. EPA is today proposing that an endorsement be submitted as evidence of financial responsibility by owners and operator that choose to obtain insurance coverage as the means of complying with the CERCLA § 108(b) insurance requirements. Specifically, the owner or operator would be required to submit a signed duplicate original of the CERCLA § 108(b) financial responsibility endorsement to the Administrator, or to regional delegates of the Administrator, if applicable, if the endorsement covers facilities located in multiple regions. For more information on the required wording of the endorsement and alternatives considered please see the discussions later in this preamble, and the background document “Potential Requirements for Insurance, Surety Bonds, Letters of Credit and Trust Agreements and Standby Trust Agreements under CERCLA § 108(b)” regarding instrument specifications.

In discussions with representatives of the insurance industry, EPA was told by the participating representatives that they were indifferent between a certificate of insurance and an endorsement as the form of the evidence of financial responsibility. EPA did not want to require the whole policy be submitted in all cases and is thus today proposing that an endorsement be submitted as evidence of financial responsibility. Other financial responsibility programs specify either certificates, endorsement or both. In order to reduce the complexity of the proposed regulations and provide a narrower range of documents EPA would need to review during implementation, the Agency is proposing an endorsement be submitted. Further, because an endorsement is part of the insurance contract itself, it may provide greater certainty with respect to the insurance coverage provided by the policy than a certificate of insurance.

#### Requirements To Ensure Continuity of Financial Responsibility Coverage (§§ 320.42(f)(k) and (l))

An owner or operator using insurance to satisfy the requirements of this section would also be required to establish a standby trust and update Schedule A of the trust agreement within sixty days of a change in the amount of CERCLA § 108(b) financial responsibility. Similar to the requirements for the letter of credit and

surety bond, the standby trust is being required alongside the insurance instrument to ensure continued coverage, in conjunction with the automatic renewal provision of the policy and the potential liability of the insurer if the owner or operator does not obtain replacement financial responsibility. EPA's concern is that an insurance policy might be cancelled, not renewed or otherwise terminated leaving no financial responsibility in place for the payment of valid third-party CERCLA claims. EPA is especially concerned that policies may be cancelled, terminated or otherwise not renewed following the issuance of a notice letter of potential liability for the release of hazardous substances or marked financial decline of the owner or operator, and financial responsibility may not be in place when a claim is made. Amplifying these concerns is the recognition that the CERCLA processes leading to a claim (e.g. cost recovery) may be lengthy, which may make it particularly difficult to ensure continuity of CERCLA § 108(b) insurance coverage without these requirements.

As a result, in addition to the requirement to establish a standby trust, EPA is proposing an automatic renewal provision. Specifically, EPA is proposing that the endorsement provide that cancellation, failure to renew, or any other termination of the insurance by the insurer will be effective only upon written notice to the owner and operator and the Administrator by certified mail and only after the expiration of 120 days beginning with the date of receipt of the notice by both the Administrator and the owner or operator, as evidenced by the return receipts. Such an automatic renewal provision in the policy would be required to provide the insured with the option of renewal at the face amount of the expiring policy. In this way, insurance coverage could only lapse after 120 days' notice providing the owner and operator an opportunity to obtain replacement financial responsibility.

The cancellation and termination language in the endorsement proposed today was intended to closely follow the language used in the RCRA Subtitle I insurance endorsement for underground storage tank financial responsibility. A 2004 court decision held that those regulations preclude rescission as a remedy for misrepresentation and provide only for prospective cancellation of the insurance.<sup>72</sup> EPA is

concerned that at the time a claim was made against a CERCLA § 108(b) insurance policy, rescission (retrospective cancellation) of the policy due to misrepresentation of the insured, would result in the financial responsibility being unavailable and leave valid claims unsatisfied. EPA recognizes the public policy merits of protections to insurers in the event of misrepresentation. However, in the CERCLA § 108(b) context, EPA would not have access to the owner or operator's application for insurance and any investigations into misrepresentations or omissions would potentially be burdensome to the Agency and redirect resources away from cleanups and other programmatic priorities. EPA believes that the insurer is in the best position to conduct investigations as to the accuracy of the information provided in the application for insurance and thus should retain the risk from misrepresentation rather than any CERCLA claimants. EPA's intent today is to preclude rescission of the insurance coverage as a remedy for misrepresentation and instead provide that prospective cancellation, non-renewal or other termination of the insurance are the sole remedies. EPA requests comment on this proposed provision and endorsement language.

Finally, the endorsement would be required to specify that in instances where the owner or operator fails to obtain alternate financial responsibility and obtain written approval of such alternate financial responsibility from the Administrator within ninety days after receipt by both the owner or operator and the Administrator of a notice from the insurer that it has decided to cancel, not renew or otherwise terminate the insurance policy, the insurer would be liable up to the face value of the policy for payment into the standby trust in accordance with the terms of the endorsement. EPA believes the combination of the requirements for a standby trust, a notice of cancellation, failure to renew or other termination of the policy and the insurers potential liability if the owner or operator did not obtain alternate financial responsibility would provide assurance to EPA and other claimants that funds will be available to make payment for CERCLA response costs, health assessment costs, and natural resource damages as required under the proposal. This requirement would be similar to those for owners and operators using letters of credit or surety bonds. This arrangement, and the similar provisions for other proposed instruments, as well as alternatives are

<sup>72</sup> See: *Zurich Am. Ins. Co. v. Whittier Props., Inc.*, 356 F.3d 1132 (9th Cir. 2004).

discussed in more depth in the preamble section headed 'issuer cancellation provisions.'

A notable feature of the issuer cancellation provision proposed today for insurance is how failure to pay the premium would be treated. Under this proposed rule, if failure to pay the premium was the rationale for the insurer's decision to cancel, not renew, or otherwise terminate the policy, the insurer would be liable on the policy to fund a standby trust if the owner or operator failed to obtain alternate financial responsibility and obtain written approval of such alternate financial responsibility from the Administrator within ninety days after receipt by both the owner or operator and the Administrator of the notice of the insurers intent to cancel, not renew, or otherwise terminate the policy. EPA believes that this is the appropriate treatment of the insured's failure to pay the premium. EPA believes that the instances in which the owner or operator is unable to pay the premium are likely instances where financial responsibility coverage is most needed as the owner's or operator's ability to satisfy valid third-party CERCLA claims is likely limited. EPA believes one of the benefits of CERCLA § 108(b) is that the credit risk of the owners and operators of facilities managing hazardous substances can be transferred from the taxpayer and other third-party CERCLA claimants to the insurance and financial responsibility providers better able to manage, assess and make arrangements for such credit risks.

One alternative option would be to allow cancellation in the event of the insured's failure to pay the premium, without potential insurer liability. While, for the reasons discussed earlier, EPA is not proposing such an arrangement, the Agency requests comments on this alternative and the proposed treatment of failure to pay the premium on the part of the insured.

Payment for Third-Party CERCLA Claims From the Insurance (§§ 320.42(h) Through (j) and (l) and § 320.50(d))

Under the proposed regulations the insurance would provide for payment to third-party CERCLA claims with three payment triggers in addition to providing for direct action as provided by CERCLA. EPA anticipates these four payment scenarios would operate independently of each other. These payment scenarios are the same as for the other instruments and are discussed more fully in section VI.B.5. of this preamble.

The policy would be required to provide for the payment awarded in

final court judgments from a Federal court against any of the current owners and operators awarding CERCLA response costs, health assessment costs, and/or natural resource damages associated with the facility to the party obtaining the judgment should such payment not be made within thirty days.

The policy would be required to provide for payment as required by a CERCLA settlement associated with the facility between any of the current owners or operators at the facility and EPA or another Federal government agency should the payment as required by the settlement not be made.

The policy would also be required to provide for payment into a trust fund established pursuant to a CERCLA unilateral administrative order issued to any of the current owners or operators at the facility by EPA or another Federal agency in instances where performance at the facility as required by the order does not occur. The owner or operator must have provided a written statement allowing the insurance policy be used to assure performance of the work required in the order.

In addition to the three proposed payment scenarios identified for which EPA intends to provide insurance coverage, the proposed CERCLA § 108(b) insurance would also be required to provide for direct action against the insurer in instances identified in CERCLA § 108(c)(2). Specifically, the proposed required wording of the CERCLA § 108(b) insurance endorsement includes language stating that in the case of a release or threatened release of (a) hazardous substance(s) from a facility covered by the policy, the insurer acknowledges that any claim authorized by CERCLA §§ 107 or 111 may be asserted directly against the insurer as provided by CERCLA § 108(c)(2). The endorsement would also state that the insurer consents to suit with respect to these claims subject to the limitations in CERCLA § 108(d), and that the insurer will be entitled to all rights and defenses provided to guarantors by CERCLA § 108(c). Further, under the proposed terms of the endorsement the insurer would provide notice of any such resulting claims and payments to the Administrator. EPA believes this notification requirement is valuable as the owner and operator may not be available to provide such a notice of payments or claims in a direct action scenario yet EPA wishes to remain informed of claims against the instrument and the value of the financial responsibility.

General Performance Clause (§ 320.50(d))

The proposed insurance endorsement language includes a general or blanket performance clause as a means to address the myriad number of ways the scope of insurance coverage provided by an insurance policy may be limited. EPA recognizes that the ability to tailor insurance coverage to the specific needs of the insured is one of the virtues of insurance contracts; however, the Agency believes that in the context of statutorily required financial responsibility such limiting provisions of the policy may conflict with the intended scope of the financial responsibility coverage and may frustrate the realization of the public policy goals. Environmental insurance policies can be long, complex contracts that operate as a whole to define and restrict the coverage provided.

EPA believes it is necessary to propose a performance clause in the language of the endorsement that would amend any terms of the policy inconsistent with the regulatory requirements for CERCLA § 108(b) insurance or the terms specified in the endorsement. Similar performance clauses are employed in the certificate of insurance required as evidence of financial assurance for closure and post-closure care of hazardous waste facilities in the RCRA Subtitle C program (*see* 40 CFR 264.151(e)) and in the required wording of the endorsement used in the RCRA Subtitle C third-party liability program (*see* 40 CFR 264.151(i)). EPA believes that the proposed performance clause in the endorsement will provide EPA evidence of financial responsibility submitted by owners and operators electing to use insurance without necessitating EPA review of the entire insurance policy. Without such a provision, the administrative burden involved with reviewing insurance submissions would be significantly higher and may require expertise not readily available within EPA.

The proposed performance clause states that the insurance afforded with respect to the covered facilities is subject to all of the terms and conditions of the policy; provided, however, that any provision, exclusion, definition, condition, retroactive date, clause, defense, or other term of the policy inconsistent with 40 CFR 320.42 or certain identified required specifications in the endorsement are hereby amended to conform with 40 CFR 320.42 and the required specifications in the endorsement. EPA intends for the performance clause to

help ensure that financial responsibility coverage will continue and that the insurer will satisfy valid third-party CERCLA claims as intended by the proposed regulations. In light of the fact that insurance policies are often long, complex documents that may include numerous exclusions, definitions, conditions, or other terms that may undercut the intended coverage, EPA requests comment on the proposed performance clause in the CERCLA § 108(b) insurance endorsement. Furthermore, EPA is interested in comments as to whether or not the proposed insurance specifications, including the performance clause, will reliably provide for the intended coverage (e.g. payment under the scenarios described in IV B 5 “General Provisions for Instrument Payment” of the preamble).

#### Retroactive Dates (§ 320.50(d))

The most notable aspect of the proposed performance clause may be the specification that any retroactive date<sup>73</sup> contained in the policy inconsistent with the intended scope of CERCLA § 108(b) financial responsibility coverage is amended to conform with the regulatory specifications and the terms of the endorsement. EPA believes that such a specification is necessary to effectuate the purpose of CERCLA § 108(b) and has public policy merits. CERCLA § 108(c)(2) provides a cause of action against insurers providing CERCLA § 108(b) coverage in certain instances for any claim authorized by CERCLA §§ 107 or 111. CERCLA’s liability scheme is established in CERCLA § 107 and is retroactive and includes costs incurred addressing the threat of a release. EPA believes a retroactive date would be inconsistent with the intended scope of CERCLA § 108(b) financial responsibility which is intended to cover the full suite of potential CERCLA liabilities including threatened releases, which could be a significant driver of costs and risk and may exist at many facilities subject to CERCLA § 108(b) financial responsibility requirements.

This issue relates to the concept of CERCLA § 108(b) presenting a hybrid risk from the viewpoint of insurers mentioned earlier. In discussions with representatives of the insurance community, EPA was informed that the scope of a CERCLA response cost is

broad and has elements suited to risk transfer policies that commonly have retroactive dates (e.g. costs incurred responding to fortuitous releases) and closure insurance that typically would not have a retroactive date (e.g. costs incurred responding to the threat of release). EPA recognizes that for this reason, the CERCLA § 108(b) financial responsibility scope of coverage may, at least initially, be perceived as an unfamiliar or hybrid risk by insurers yet believes that allowing retroactive dates inconsistent with intended scope of coverage could result in many valid third-party CERCLA claims being unsatisfied on the basis that the pollution condition pre-dated the retroactive date of the policy. EPA requests comment on the performance clause and in particular the proposed language amending any retroactive dates inconsistent with the scope of coverage prescribed by the regulations.

One possible arrangement that representatives from the insurance community offered was to separate the financial responsibility requirements into two separate obligations. Such an arrangement for CERCLA § 108(b) would allow EPA to specify an appropriate retroactive date for the fortuitous risks and not have one for the more “known” CERCLA response and health assessment costs. In the RCRA Subtitle C financial assurance program EPA was able to specify separate instruments for known costs (e.g. closure) and third-party liability financial assurance which is more fortuitous in nature. However, such a construct is not possible in the case of CERCLA § 108(b) financial responsibility. Because CERCLA § 108(b) financial responsibility does not support a permitting program EPA cannot establish, by regulation, performance requirements for owners and operators subject to the rule (e.g. closure requirements that might address a threat of release) which would be the basis for a separate amount of financial responsibility. Further it is important to recognize that the determination of a CERCLA § 108(b) financial responsibility amount does not constitute a determination of CERCLA liability for regulated entities or establish any presumptive remedy which could be the basis of an amount for costs amenable to a closure policy. This is one of the reasons why CERCLA § 108(b) financial responsibility is inherently different from financial responsibility that complements reclamation and closure programs. Given the uncertainty around what Superfund actions may ultimately be required at a facility, EPA believes it

unwise to establish different pots of money. Such an approach would only be optimal in instances where there is established certainty that particular actions will need to take place at a facility (e.g. in a program with regulatory requirements for closure or post-closure).

#### Multiple Insurers (320.42(d))

EPA is proposing that up to four insurers would be able to provide the required amount of CERCLA § 108(b) financial responsibility at a single facility. EPA expects the required amounts of CERCLA § 108(b) financial responsibility may be relatively large and wishes to provide this flexibility. The proposed endorsement language would require that the participating insurers identify their percentage share of the coverage at facilities covered by the policy and the corresponding dollar value of that percentage share.

The proposed arrangement for allowing multiple insurers to cover a single facility is consistent with the proposed arrangement for multiple sureties with a few exceptions. As described in the surety bond section of the preamble, the proposed language of the surety bond requires sureties to bind themselves jointly and severally for purposes of allowing a joint action(s) against the issuers of the surety bond, but allow for payment based on pre-determined proportions of the penal sum (several liability). Unlike in the case of surety bonds where such a provision has a great deal of precedent, such a provision for insurers participating in vertical towers of coverage is less common in the financial assurance programs EPA reviewed. As a result, EPA is proposing that participation by multiple insurers be limited to four insurers to ensure a manageable claims process. The U.S. Coast Guard included the same cap on the number of participating insurers (59 FR 34220 (July 1, 1994)). EPA does not want to create a scenario whereby claimants need to take action against many insurers which would complicate the claims process and create a protracted process for the satisfaction of valid claims. EPA requests comment on this limitation. Specifically, EPA is interested in comments as to whether, in instances where multiple insurers provide coverage at a single facility, requiring participating insurers to bind themselves jointly and severally for the purposes of allowing a joint action(s) against the group of insurers would be possible and how such a provision might best be specified.

When multiple insurers do provide coverage at a single facility, the

<sup>73</sup> The “retroactive date” or “continuity date” (terminology varies) establishes the foregoing temporal limits of insurance policies: Pollution conditions commencing before the specified date are not covered, even if a claim about such a pollution condition is first made during the policy term.

proposed regulations would require that each insurer be liable for their individual vertical percentage share of the total CERCLA § 108(b) financial responsibility amount. The proposed specification would create a vertical relationship whereby an insurer's liability is not affected by the other insurers' abilities to pay their shares. EPA believes this provides greater protection against the insolvency of one of the participating insurers. The U.S. Coast Guard also restricted multiple insurers to only providing vertical towers of coverage.<sup>74</sup> This approach also simplifies the claims process as the exhaustion of one insurer's liability does not need to be determined before payment can be received from another insurer.

An alternative EPA considered was proposing that multiple insurers could form a tower of coverage comprised of horizontal layers. In such an arrangement each insurer in the horizontal tower would be agreeing to cover its layer of the tower, not a percentage of the total. Those insurers higher up the horizontal tower become responsible on a layer-by-layer basis as the limits of each underlying policy become exhausted. However, EPA is not proposing such an arrangement due to several concerns. First, a horizontal arrangement presents the opportunity for insurers covering higher coverage layers to avoid liability if an insurer on a lower level becomes insolvent and cannot cover the liability within its layer. This is a concern also identified by the U.S. Coast Guard when it developed its CERCLA § 108(a) regulations.<sup>75</sup> Secondly, such an option would raise the administrative burden on EPA because the Agency would need to ensure that each layer of coverage fits with the layers above and below by ensuring the insurance included the necessary "follow form" provisions.<sup>76</sup> Further, EPA would also need to ensure that the layers contained "drop down" provisions to address exhaustion issues that might arise as a result of insolvency of an underlying insurer.<sup>77</sup>

<sup>74</sup> See 33 CFR 138.80(c)(1)(i).

<sup>75</sup> See 59 FR 34220 (July 1, 1994).

<sup>76</sup> A "follow form" provision means that the excess insurer agrees to abide by the terms of the primary or underlying policy(ies) to the extent that the excess policy does not contain a conflicting parallel term. The intent of an EPA requirement for such a provision would be to eliminate coverage gaps that may arise when excess policies do not "follow form" of underlying policies. For example, a gap may arise when the primary policy covers gradual pollution but the excess policy does not.

<sup>77</sup> An exhaustion provision states that an excess layer of coverage cannot be triggered until all primary and underlying layers have been exhausted. Problems in accessing excess layers can

EPA requests comment on the proposed regulatory provision allowing up to four insurers to provide coverage at one facility by identifying their vertical percentage share of the total CERCLA § 108(b) financial responsibility amount in the submitted endorsement. Specifically, EPA is interested in other potential arrangements that may encourage insurer participation in the program and provide for relatively high amounts of financial responsibility coverage yet not overly complicate implementation or the claims process.

Termination of Insurance Coverage by the Owner or Operator (§ 320.42(n) and (p))

The owner or operator would be required to maintain the insurance in full force and effect until the Administrator consents to termination of the insurance by the owner or operator. The Administrator would give written consent to the owner or operator that he or she may terminate the endorsement when: (1) An owner or operator substitutes alternate financial responsibility as specified in this section; or (2) the Administrator releases the owner or operator from the requirements of this section in accordance with § 320.26. This provision is intended to ensure that the coverage of the financial responsibility does not cease, and that funds remain available when needed, until the release provisions are met or alternate financial responsibility is provided.

#### 4. Financial Test (§ 320.43)

##### a. Overview and Introduction

CERCLA § 108(b) (2) provides that financial responsibility may be established by any one, or any combination of, the instruments listed in that paragraph, including "qualification for self-insurance." A financial test is a financial responsibility instrument that allows an owner or operator to qualify for self-insurance by demonstrating that it has sufficient financial strength to meet its environmental obligations. When allowing the use of a financial test, the Government accepts the facility's demonstration of financial strength as the only assurance that the owner or operator will meet its environmental obligations, and does not require that it establish a trust fund or obtain

arise when either the insured or an underlying insurer cannot pay due to insolvency. A "drop down" specification can address the situation of insolvency on the part of an underlying insurer, although other terms and conditions in the excess policy will affect whether the coverage will drop down.

additional security in the form of a third-party financial instrument, such as insurance, a surety bond, or letter of credit.

The Agency is co-proposing two separate regulatory approaches in the form of options regarding the use of a financial test to assure that this important issue is thoroughly considered before the Agency makes a decision in the final rule. The Agency is proposing, under Option 1, not to allow the use of a financial test or corporate guarantee, and is proposing under Option 2 allowing the use of a credit rating-based financial test and corporate guarantee. At this time, EPA prefers Option 1. However, the Agency is proposing both options to fully evaluate this issue, and to gather as much information as possible to inform its ultimate decision on whether the financial test and corporate guarantee mechanisms are appropriate for use by hardrock mining facilities under CERCLA § 108(b). EPA has identified, and presented in this preamble discussion, a number of factors that the Agency will consider in making its final decision, and seeks public comment on these factors, as well as additional information from the public that could inform the Agency's final decision.

By replacing the requirement to obtain a third-party instrument with a demonstration of financial strength, the financial test results in significant cost savings to eligible owners or operators, from not having to purchase a third-party financial responsibility instrument. However, by allowing a financial test, EPA would accept the risk that, if the company's financial situation deteriorates and it cannot obtain a third-party instrument or fund a trust fund to meet its environmental obligations, the costs of addressing the environmental risk at the facility could fall to the public. With the added layer of a third-party financial responsibility instrument, however, the risk of default to the public would be lessened by the financial strength of the instrument provider. Nonetheless, EPA recognizes that the risk of default exists regardless of the type of financial responsibility instrument. For example, even in the case of secured financial responsibility instruments, the possibility remains that the banks and insurance companies underwriting these instruments could also fail. Regardless of the scenario, with or without a financial test, EPA and the public are not without some risk of having to cover such obligations.

EPA also is carefully considering the elements of the financial test. Financial tests can vary in approach and in sensitivity. The combination of terms

and conditions impacts the balance of cost savings to the regulated community and the risk to the public, as well as a test's efficacy. Thus for example, bond ratings and financial ratios are commonly used measures of financial strength in financial tests. For bond-rating-based tests, establishing a lower minimum rating(s) requirement for self-insurance, can expand the availability of the test to the regulated community. At the same time, such entities with lower credit ratings also possess a higher likelihood of defaulting on their obligations. Thereby, permitting less credit worthy companies the ability to use the financial test increases the chance that an obligation may go unpaid and be borne by the public.

Further, the financial strength of an owner or operator as measured by a financial test represents a snapshot in time. Thus, for a financial test to be effective, the owner or operator must provide periodic evidence that it continues to pass the financial test and that it can meet the costs associated with its facility over time. For a financial test to be effective: (1) The financial test must accurately reflect the financial strength of the owner or operator; (2) the Agency and/or owners and operators must identify when the owner or operator no longer qualifies for self-insurance under the financial test; (3) the owners or operators that no longer qualify for the financial test must be able to quickly obtain an alternate instrument(s) to cover their obligations instead of self-insuring; and (4) the requisite instruments must in turn be available to such owners and operators who no longer are able to self-insure. The Agency is concerned, however, that third-party financial instruments may not be available to a company that is experiencing a period of financial hardship. While, in general, such an issue has not been a widespread problem in other EPA financial responsibility programs, the Agency is concerned that the highly cyclical, capital-intensive nature of the mining industry may present unique challenges under a CERCLA § 108(b) rule for hardrock mines.

There are several other broader considerations with respect to the adoption of a financial test. First, EPA has concerns regarding the extent to which sufficient resources and expertise will be available to implement a financial test under CERCLA § 108(b). Second, EPA has policy concerns about: (1) Whether offering a financial test would adversely affect the incentives created by the rule for better practices; (2) the potential inequity of offering a test due to the advantage that the test

may create for larger versus smaller owners and operators; and (3) whether, given the potentially significant costs associated with Superfund liabilities, should the financial test fail as an instrument, these costs may not be paid or may fall to the taxpayer to pay. All of these considerations are discussed elsewhere in the preamble. The Agency remains extremely concerned regarding the boom and bust nature inherent to the hardrock mining industry and recent volatility in commodity prices and global markets. History suggests that the increased risk of default for these companies makes this sector particularly problematic from the perspective of allowing them to self-insure through a financial test. Finally, many hardrock mining facilities require long-term care, such as long-term water treatment of acid mine drainage. Allowing owners or operators to self-insure where such long-term liabilities are anticipated may be ill-advised given that some sites require treatment into perpetuity. It should be noted that, although EPA currently allows the use of a financial test under various agency programs,<sup>78</sup> other agencies have chosen not to allow the use of a financial test for owners and operators in the mining sector.<sup>79 80 81</sup> EPA discusses all of these factors in the following sections of this preamble.

#### b. Option 1—No Financial Test (Preferred Option)

Under this option, which EPA prefers, the Agency is proposing an approach under which a financial test would not be available for use by hardrock mining facilities subject to this rule. Under this approach, owners or operators could demonstrate financial responsibility only by using a trust fund, insurance, a letter of credit, or a surety bond, or a combination of those instruments. A corporate guarantee, which is based on the financial test, would not be available. EPA is proposing this option as a preferred option based on a number of factors. Covered initially are four broader factors of concern regarding the

<sup>78</sup> The financial test is an allowable instrument under RCRA Subtitle C, Subtitle D, and Subtitle I regulations, as well as under the Underground Injection Control (UIC) program.

<sup>79</sup> See 43 CFR § 3809.570(a) through (c) related to self-insurance and pre-existing self-bonds under BLM regulation.

<sup>80</sup> See U.S. Forest Service, Forest Service Manual §§ 2817.24; 6562 (2008).

<sup>81</sup> For example, the Federal agency that regulates surface mining of coal recently advised states to not allow self-insurance by mining companies and also announced that it was changing the federal rules regarding self-insurance under the Surface Mining Control and Reclamation Act (SMCRA).

See: <http://www.eenews.net/eenewspm/stories/1600041689>

appropriateness of financial tests under CERCLA § 108(b). Further discussion follows that also outlines factors for why the use of any financial test would be particularly problematic for the hardrock mining industry. (1) Concerns regarding the use of a financial test under CERCLA § 108(b).

The Agency considered several concerns regarding the use of a financial test under this proposed rule. The Agency first considered the work involved in overseeing a financial test in the context of CERCLA § 108(b). EPA is particularly concerned about the administrative burden of a test under CERCLA § 108(b) given the freestanding nature of the CERCLA § 108(b) obligation that would not be buttressed by a permitting program. Observers, more generally, have commented that the financial test poses additional administrative burden. For example, in a 2001 audit of the RCRA Subtitle C financial assurance program, the Agency's OIG reported that financial tests pose unique administrative complexities that raise their implementation burden.<sup>82</sup> In 2005, when GAO was tasked with identifying obstacles to full realization of the "polluter pays" principle, GAO observed that financial tests and corporate guarantees are among the instruments that pose the greatest financial risk to the Government and are an administrative burden since they require specialized expertise to oversee.<sup>83</sup> The Agency is considering whether the unique characteristics of the CERCLA § 108(b) financial responsibility program and of the hardrock mining industry may increase the administrative burden of implementing a financial test, and make the use of a financial test less appropriate under this proposed rule than under other Agency programs. EPA solicits comment on this issue.

As discussed earlier, successful use of a financial test requires adequate oversight by the regulatory agency to assure that financial submissions are accurate and adequate, and that when owners or operators no longer meet the requirements of the financial test they secure an alternative financial responsibility instrument in a timely manner. Generally, where a financial responsibility requirement is tied to a permit, EPA has ongoing oversight of the owners or operators of the facility,

<sup>82</sup> See EPA Office of Inspector General. *RCRA Financial Assurance for Closure and Post-Closure*. March 30, 2001. 2001-P-007.

<sup>83</sup> See Government Accountability Office. *Environmental Liabilities: EPA Should Do More to Ensure That Liable Parties Meet Their Cleanup Obligations*. August 2005. GAO-05-658.

which supports implementation of a financial test at that facility. For example, under EPA's RCRA Subtitle C regulations for permitted hazardous waste treatment, storage, or disposal facilities, EPA receives extensive information about the facility in its permit application under 40 CFR part 270, and conducts regular and detailed inspections of the facility, including both the physical operations and financial assurance information required under the permit. As described earlier, however, CERCLA § 108(b) is an independent financial responsibility requirement that is not associated with a permit program, so the Agency may have less immediate access to information regarding the current status of the facility.

The Agency has attempted to address some of these concerns by structuring the proposed financial test to reduce implementation concerns, for example, by including reliance on credit rating. (This issue is discussed in section VI.C.4. of this preamble). However, even with the proposed financial test, the Agency would still be required to, at a minimum, verify the credit ratings, and to annually review financial submissions to assess whether the company meets other test requirements, such as coverage multiple requirements<sup>84</sup> related to a company's tangible net-worth and the value of their U.S. Assets. This review is potentially complex and may require a level of financial expertise not readily available in all ten EPA Regional Offices. For example, the data in the Chief Financial Officer (CFO) letter<sup>85</sup> may vary from the latest annual financial statements. Professional judgment may be needed to evaluate deviations between the CFO letter and audited statements, which increases the administrative burden and the demand for technical expertise to implement the financial test.

In addition, the efficacy of the financial test proposed under Option 2 depends on the accurate and accessible accounting of covered environmental obligations company-wide to meet the U.S. assets and tangible net worth coverage multiple requirements. These

<sup>84</sup> In this proposal, an owner or operator eligible to use this financial test for any portion of its CERCLA § 108(b) obligations also would be subject to a coverage multiple requiring them to have both a tangible net worth and U.S. Assets each equivalent to at least six times the amount of environmental obligations covered by a financial test. The U.S. Asset requirements could also be met by demonstrating that at least ninety percent of total assets are located in the United States.

<sup>85</sup> To demonstrate passage of the financial test, owners or operators would be required to annually submit a standardized letter to the Administrator signed by its CFO.

requirements will be implemented by EPA Regional offices, but the proposed financial test includes nationwide obligations as part of the calculation, to ensure effectiveness of the test. This may necessitate verification of information located in another region or held by another agency or state entity, which could be a very timely and costly process.

The Agency has found implementation of a financial test under other Agency financial responsibility programs to present challenges. EPA is concerned that under CERCLA § 108(b), without the structure of a permit program and the level of interaction and knowledge of site conditions that it provides, it may be even more challenging to successfully oversee and implement.

Second, EPA is concerned that the use of a financial test may limit the realization of one of the potential benefits of this rule—the development of better mining practices. EPA believes that this is an important impact of this proposed rule. As explained in the discussion of the financial responsibility formula, EPA has built such incentives into that aspect of the rule. Those incentives are reinforced by the effect that an owner or operator adopting sound practices can be expected to be able to purchase an instrument from a third party, for a reduced amount of coverage and at a reduced cost. Similarly, some third-party providers may encourage owners and operators to adopt safer practices as well. However, with a financial test, so long as the owner or operator can meet the test requirements and avoid the need to obtain third party coverage, the cost savings incentive to implement improved practices may be lost, along with the associated risk reductions they would afford. Therefore, the Agency believes that providing a financial test under this proposed rule could reduce salutary effects of the rule. Further, because financial tests are available to the owners or operators that are best able to bear the costs, this reduced incentive affects the owners or operators in the best position to invest in improved practices.

Third, the Agency is further concerned that because of the potentially high costs associated with Superfund liabilities, particularly from hardrock mining facilities, and the potential for such costs falling to the taxpayer should the financial test fail, it might not be an appropriate instrument for use under CERCLA § 108(b). Under the proposed rule, owners or operators would be required to establish and maintain financial responsibility to

cover all CERCLA § 107 liabilities at their facilities—response costs, natural resource damages, and health assessment costs.<sup>86</sup> In many Superfund cases, and particularly in the case of hardrock mining facilities, these costs can be quite high. Thus as noted in the introductory discussion, use of a financial test for such large amounts presents a larger risk to the public should cases arise where the financial test fails to be effective.

Finally, because the financial test proposed in this rule is by design only available to the owners or operators best able to bear the costs, the Agency recognizes that allowing the use of a financial test in this rule would provide an economic advantage (in the form of a cost savings) to the economically strongest owners or operators, and potentially create an economic and competitive disadvantage for others.

The Agency solicits comment on the concerns identified by EPA regarding the use of a financial test under CERCLA § 108(b).

#### (2) Concerns Regarding Use of a Financial Test by the Hardrock Mining Industry

Beyond concerns related to the use of a financial test under CERCLA § 108(b), EPA considered issues specific to the use of a financial test for the hardrock mining industry under 108(b). First, there are significant concerns that owners or operators that are no longer able to meet the requirements of a financial test may become less able than owners or operators in other industries to secure an alternative financial responsibility instrument. One reason is because frequent fluctuations in commodity prices within the hardrock mining industry may result in sharp declines in production and accelerated mine closures. This scenario is currently playing out in the case of the coal mining industry.<sup>87</sup>

<sup>86</sup> Facilities with obligations under other statutes will be separately responsible for meeting the financial assurance requirements, such as those under RCRA Subtitle C and Underground Injection Controls (UIC) programs.

<sup>87</sup> In recent years, the banking industry has been stepping back from providing loans to the coal industry:

- In 2015, Bank of America cut off its financing for coal extraction projects to reduce its exposure. (Kate Sheppard, *Bank of America Backs Away from Funding Coal Mining*, Huffington Post, May 6, 2015.)

- In 2015, Citi Group and Goldman Sachs Group sold its investments in mining and reduced its financing of coal mining operations faced with large environmental obligations. (Jeanne Dugan, Timothy Puko, *Goldman Sachs Sells Colombian Coal Mines to Murray Energy*, The Wall Street Journal, April 13, 2015; Kadhim Shubber, *Citi Promises to Cut*

Many mineral resource extraction firms are not able to absorb market fluctuations because they lack diversified lines of business. This may make it harder to ensure that owners or operators who do fail the test obtain a replacement instrument.<sup>88</sup> Furthermore, requiring a company to purchase a more expensive means of financial assurance once it begins to experience liquidity problems may only serve to aggravate its financial difficulties. This effect also makes it harder for EPA to oversee the use of the financial test. For example, rapid fluctuations in financial status may necessitate more frequent reporting to the Agency, resulting in increased oversight burden, as discussed earlier. Thus, it may be more important in the case of mining than in other industries to require an owner or operator to secure a third-party financial responsibility instrument or fund a trust fund when it is financially able to do so.

Second, numerous troublesome cases have occurred involving hardrock mining facilities that have gone through bankruptcy, while leaving extremely significant environmental impacts in their wake. Remedial work can be stopped or slowed in situations where the owner or operator's cash flow and revenue is reduced or they go bankrupt. Such impacts have occurred in the past when owners or operators of mines engaged in CERCLA cleanups have had to negotiate changes to the scope of work due to drops in metal prices. EPA experienced this problem when a major mining company slowed work at sites and then filed for bankruptcy in 2005. The company was using a financial test (which was a less sensitive financial test than the test proposed under Option 2) under a CERCLA Consent Decree with EPA at a smelter site in the northwest part of the U.S. EPA discovered that the company was having financial struggles, despite having recently submitted information that it met the necessary financial test requirements. In response, EPA requested that the company obtain a liquid financial responsibility instrument under the provisions of a consent decree, but the company was unable to do so, given its declining financial condition.

*Lending to Coal Miners*, Financial Times. October 5, 2015.)

• In 2016, JPMorgan announced it would be no longer finance new coal-fired plants in the U.S. (Michael Corkery, *As Coal's Future Grows Murkier, Banks Pull Financing*, New York Times. March 20, 2016.)

<sup>88</sup> These concerns were noted in the 2005 report from the Government Accountability Office, *EPA Should Do More to Ensure that Liable Parties Meet Their Cleanup Obligations*, at p. 42. Available at <http://www.gao.gov/products/GAO-05-658>.

Third, given the relative market volatility observed within the hardrock mining industry, some have argued that there are no circumstances under which owners or operators of hardrock mining companies should be allowed to self-insure through a financial test. Analysis has shown that mining companies can be more likely to default on their financial obligations than other types of companies.<sup>89</sup> For example, the recent downturn in metals prices has led to a default rate in the metals and mining sector which is nearly three times the economy-wide corporate default rate.<sup>90</sup> Moreover, financial analysts have predicted that mining sector default rates are likely to rise.<sup>91</sup> Mining companies also tend to default more quickly than other types of companies,<sup>92</sup> and may have multiple mining operations, meaning that a single failure could have broader impacts.

EPA is concerned that close linkage between the hardrock mining industry and global commodity prices means that companies that are invested in the same minerals are likely to fail or experience financial hardship at the same time, when the prices of these minerals decline.<sup>93</sup> If so, additional strain would

<sup>89</sup> See Standard & Poor's 2014 Global Corporate Default Study at p. 11. Available at: [https://www.nact.org/resources/2014\\_SP\\_Global\\_Corporate\\_Default\\_Study.pdf](https://www.nact.org/resources/2014_SP_Global_Corporate_Default_Study.pdf). (While the total number of defaults in 2014 declined from previous years, the default rate in the energy and natural resources industry rose to 25 percent. Eight of the 15 companies that defaulted were metals, mining, and steel companies.)

<sup>90</sup> See Energy, Mining Companies Lead Debt Default Rates Higher," 24/7 Wall St. (Aug. 14, 2015). Available at: <http://247wallst.com/banking-finance/2015/08/14/energy-mining-companies-lead-debt-default-rates-higher/> (Overall corporate default rate for the twelve months trailing July 2015 was 2.5 percent, while the trailing rate for exploration and production companies was 5 percent, and the rate for metals and mining companies was 7.1 percent).

<sup>91</sup> See *Why Bankruptcy Might be the Mining Industry's Last Best Hope*, Bloomberg Business (Dec. 2, 2015), <http://www.bloomberg.com/news/articles/2015-12-03/why-bankruptcy-might-be-the-mining-industry-s-last-best-hope> (warning that falling commodities prices and an oversupplied market will trigger more bankruptcies in the mining sector); *Warning of another string of mining bankruptcies in 2016*, (Mar. 1, 2016), <http://www.mining.com/warning-of-another-string-of-mining-bankruptcies-in-2016/> (noting dramatic credit deterioration in the oil & gas, and metals and mining sectors, "with no other sectors even in the same ballpark," and with credit conditions expected to worsen in 2016).

<sup>92</sup> See Standard & Poor's 2014 Global Corporate Default Study at p. 44. The time to default from original credit rating for energy and mining companies is 3.9 years versus 5.7 years for the economy overall. The time to default from "post-original rating" for the energy & resources sector is even shorter, at an average of just 2.1 years.

<sup>93</sup> See Moody's Investors Service, "Moody's places energy and metals & mining issuers on review for downgrade," (Jan. 22, 2016), [https://www.moody.com/research/Moodys-places-energy-and-metals-mining-issuers-on-review-for-PR\\_342773](https://www.moody.com/research/Moodys-places-energy-and-metals-mining-issuers-on-review-for-PR_342773) (announcing placement of 55 metals and mining companies on review for downgrade); Moody's Investors Service, *Moody's places 11 mining companies in the U.S. on review for downgrade* (Jan. 21, 2016), [https://www.moody.com/research/Moodys-places-11-mining-companies-rated-in-the-US-on-PR\\_342543](https://www.moody.com/research/Moodys-places-11-mining-companies-rated-in-the-US-on-PR_342543) (warning of an "unprecedented shift" in the mining industry and advising that "deteriorating industry fundamentals require a recalibration of the global mining portfolio rated by Moody's").

be placed on EPA's ability to administer the test and ensure compliance across multiple companies at multiple sites simultaneously.

Congress and the states have expressed concern over the volatility in the mining industry and the potential inability of a financial test to account for rapidly changing market conditions, asking the Comptroller General for a review of self-insurance practices.<sup>94</sup><sup>95</sup>

EPA has information that decisions in the mining industry to expand or open new facilities are generally made over a longer period of time than some other industries (on for example, a ten-year, twenty-year, or longer amortization and investment basis).<sup>96</sup> Such investment decisions often don't always correspond to the demand cycle for the commodity.<sup>97</sup> Moreover, mining assets generally are immobile, making it difficult to transfer equipment and facilities to other productive uses during periods of low demand.

Mining companies generally attempt to manage cyclical patterns by balancing new investment with projected sales of minerals.<sup>98</sup> Metal prices, however, can

[www.moody.com/research/Moodys-places-energy-and-metals-mining-issuers-on-review-for-PR\\_342773](https://www.moody.com/research/Moodys-places-energy-and-metals-mining-issuers-on-review-for-PR_342773) (announcing placement of 55 metals and mining companies on review for downgrade); Moody's Investors Service, *Moody's places 11 mining companies in the U.S. on review for downgrade* (Jan. 21, 2016), [https://www.moody.com/research/Moodys-places-11-mining-companies-rated-in-the-US-on-PR\\_342543](https://www.moody.com/research/Moodys-places-11-mining-companies-rated-in-the-US-on-PR_342543) (warning of an "unprecedented shift" in the mining industry and advising that "deteriorating industry fundamentals require a recalibration of the global mining portfolio rated by Moody's").

<sup>94</sup> Self-bonding may be otherwise understood to mean self-insurance.

<sup>95</sup> A recent letter from Senators Maria Cantwell of Washington and Richard Durbin of Illinois to the Comptroller General requested an investigation by GAO into the use of self-bonding across federal programs governing resource extraction, and a performance audit of self-bonding under the Surface Mining Control and Reclamation Act. The letter, dated Mar. 8, 2016, is available at [http://www.energy.senate.gov/public/index.cfm/files/serve?file\\_id=47C14E0B-8A9D-457F-A1DE-0B7135144E1B](http://www.energy.senate.gov/public/index.cfm/files/serve?file_id=47C14E0B-8A9D-457F-A1DE-0B7135144E1B).

<sup>96</sup> Investments within the hardrock mining sector tend to be longer term given the lifetime of typical mines and the extreme amount of capital that must be invested up-front. Such investments and assets must therefore be amortized or written-off over a longer period of use. Firms will utilize amortization for spreading out of capital expenses for intangible assets over a specific period of time (usually over the asset's useful life) for accounting and tax purposes. Amortization is similar to depreciation, which is used for tangible assets, and to depletion, which is used with natural resources.

<sup>97</sup> See J.T. Bradbury, *International Movements and Crises in Resource Oriented Companies: The Case of Inco in the Nickel Sector*, Economic Geography, Vol. 61, No. 2, 1985.

<sup>98</sup> See Philip Maxwell, *Was there a Nickel Shakeout?*, Minerals and Energy, Vol. 21, No. 3-4, 2006. J.T. Bradbury, *International Movements and Crises in Resource Oriented Companies: The Case of Inco in the Nickel Sector*, Economic Geography, Vol. 61, No. 2, 1985.

unfortunately experience substantial increases or decreases over a relatively short time period. The speed of these price changes results in swings in market volatility rendering it difficult for a capital-intensive industry like mining to adjust quickly. Analysis of price cycles from composite metals indices for certain metals, over the past thirty years, reveal that there have been between three and five price cycles lasting between five and eight years, depending on the metal. Typically, the peak price occurs during the first half of the cycle, often exactly halfway between the two trough prices. Price fluctuations tend to happen rapidly with prices increasing by more than 75 percent in one month, or decreasing by more than thirty percent over the course of a month.<sup>99</sup>

“Mining companies have volatile earnings, coming from macroeconomic factors that are not in their control. As the economy weakens and strengthens, mining companies see their earnings and cash flows track with the commodity price.”<sup>100</sup> And the stability of earnings and cash flow of mining companies is significantly less than the average of other industries.<sup>101</sup> Significant income fluctuations are also compounded by the fact that many mines use debt financing to support the large infrastructure investments needed to get a mine started and to expand operations.<sup>102</sup> This leads to high volatility in equity values and debt ratios for mining companies.<sup>103</sup>

Mining profits are also generally tied to revenue rather than operating costs because operating costs tend to be highly fixed in the industry.<sup>104</sup> “Commodity price is a principal determinant of revenue, but it is also the factor with which the greatest level of financial risk is associated.”<sup>105</sup> Today, many mines cannot survive these price fluctuations.<sup>106</sup> During low price

periods, the mining industry tends to contract since they are losing revenue with increased periods of bankruptcy and company consolidation. Over the past 25 years, the rate of mining bankruptcies has spiked during sharp price declines and sustained periods of low prices. Between 1981 and 2010, there were approximately 43 mining company bankruptcies, not counting smaller mining operations that may undergo personal, rather than corporate, bankruptcy.

During the recent economic recession (characterized by the stock market drop in September 2008) for example, copper, nickel, tin, and zinc prices fell more than twenty percent between September and October 2008.<sup>107</sup> Notwithstanding periods of market volatility, on average, metal prices also generally experience a three to seven percent increase or decrease on a monthly basis. This further substantiates that the mining industry must operate under a great deal of uncertainty, often facing greater and more frequent changes in expected market return than other sectors.

Such volatility impacts the effective use of a financial test by hardrock mining facilities. The cyclical nature of the industry and the rapid fluctuations in commodity prices may result in corresponding fluctuations in the financial health of hardrock mining companies. Whereas a mining company may accumulate substantial amounts of cash flow from operating activities during a period of peak prices, a price trough likely would result in decreased revenues, and corresponding decreased cash flow.

However, because of falling revenues and potentially compromised cash flow stemming from commodity price swings, EPA is concerned that companies may have insufficient tangible assets (financial reserves) to establish alternate financial instruments in years where they are unable to pass the financial test.<sup>108</sup>

In 2000, the BLM identified similar concerns when it decided to prohibit new corporate guarantees for future reclamation work to restore lands when hardrock mining operations cease.<sup>109</sup> Commenters at the time noted that because the value of the ore fluctuates over time and may lose value as it is mined, that the soundness of the guarantee might be most questionable at the time it is most needed.<sup>110</sup> In making the decision to eliminate self-insurance from its hardrock mining regulations, BLM cited both the Bureau’s lack of expertise to perform the periodic reviews of companies’ assets, liabilities, and net worth that would be necessary to oversee guarantees, as well as the fact that even with annual reviews by skilled staff, a default risk would remain. BLM therefore decided to shift the financial risk to the businesses they regulate who have to purchase financial assurances from independent third parties, such as banks. In a 2005 report, GAO identified examples of BLM’s inability to collect funds for reclamation when operators of hardrock mines using corporate guarantees filed for bankruptcy.<sup>111</sup> The inability of companies to be able to afford alternate financial assurance when failing the financial test could be exacerbated in the CERCLA § 108(b) context by the potentially high costs associated with Superfund liabilities, particularly from hardrock mining facilities. Owners or operators would need to secure a third-party financial responsibility instrument or fund a trust fund for a high dollar amount in a time when their financial health may be compromised, which may be difficult or impossible. The Agency solicits comment on these concerns.

As a fourth and distinct concern, when a mine is reaching the end of its life and is bringing in less revenue, the owner or operator may not be able to secure a financial responsibility instrument for CERCLA liabilities that may continue to be required after the

<sup>99</sup> See *Background Document for Financial Test Analyses*, Industrial Economics, Inc. (IEc). 2016.

<sup>100</sup> See *Valuation of Metals and Mining Companies*, Svetlana Baurens, p. 56 (July 11, 2010). Available at: [http://www.basinvest.ch/upload/pdf/Valuation\\_of\\_Metals\\_and\\_Mining\\_Companies.pdf](http://www.basinvest.ch/upload/pdf/Valuation_of_Metals_and_Mining_Companies.pdf).

<sup>101</sup> See *Rating Companies in the Mining Industry*, p.7 (June 2011). Available at: <http://www.dbrs.com/research/240365/rating-companies-in-the-mining-industry.pdf>.

<sup>102</sup> See *Valuation of Metals and Mining Companies*, Svetlana Baurens, p. 13 (July 11, 2010). Available at: [http://www.basinvest.ch/upload/pdf/Valuation\\_of\\_Metals\\_and\\_Mining\\_Companies.pdf](http://www.basinvest.ch/upload/pdf/Valuation_of_Metals_and_Mining_Companies.pdf).

<sup>103</sup> *Ibid.*

<sup>104</sup> *Ibid.*

<sup>105</sup> See *Valuation of Metals and Mining Companies*, Svetlana Baurens, p. 36, July 11, 2010. Available at: [http://www.basinvest.ch/upload/pdf/Valuation\\_of\\_Metals\\_and\\_Mining\\_Companies.pdf](http://www.basinvest.ch/upload/pdf/Valuation_of_Metals_and_Mining_Companies.pdf).

<sup>106</sup> See *Background Document for Financial Test Analyses*, Industrial Economics, Inc. (IEc). 2016.

<sup>107</sup> Gold responded differently. For ten years the price of gold rose quickly, aided especially by the stock market meltdown of 2009. After hitting its high in August 2011, gold saw a gradual decline, even as the stock market rose into record territory. Then gold plummeted 25 percent in mid-April 2013, seeing its biggest one-day decline in more than thirty years on April 15, 2013.

<sup>108</sup> As stated by the U.S. General Accountability Office, “If a company that passed the test later files for bankruptcy or becomes insolvent, the company in essence is no longer providing financial assurance because it may no longer have the financial capacity to meet its obligations. Such financial deterioration can occur quickly. While companies no longer meeting the financial test are to obtain other financial assurance, they may not be able to obtain or afford to purchase it.” GAO. *EPA Should Do More to Ensure That Liable Parties Meet their Cleanup Obligations* (2005). Available at: <http://www.gao.gov/products/GAO-05-658>.

<sup>109</sup> See 65 FR 69998, at 70074, November, 21, 2000, stating: “We agree that a corporate guarantee is less secure than other forms of financial guarantees, especially in light of fluctuating commodity prices. Recent bankruptcies added to the concern that corporate guarantees don’t provide adequate protection. We believe the number of new mines that might have wanted to rely on corporate guarantees is relatively small, and we also believe, given the economics of the industry, that companies that would have been eligible to hold a corporate guarantee should not have a significant problem finding a third-party surety, or posting the requisite assets.”

<sup>110</sup> *Id.*, at 70073.

<sup>111</sup> See GAO. *Hardrock Mining: BLM Needs to Better Manage Financial Assurances to Guarantee Coverage of Reclamation Costs*, GAO-05-377 (Washington, D.C.: June 20, 2005). Available at: <http://www.gao.gov/products/GAO-05-377>.



mine closes. If a company fails the financial test after its mining facility closes, it may thus not be able to obtain alternate financial responsibility that may be required after the facility closes. EPA solicits comment on the likelihood of this scenario.

As a fifth concern, allowing a financial test under this proposed rule for hardrock mining would be inconsistent with the approach taken by some other Federal regulators that have experience and expertise in the regulation of the hardrock mining facilities. After having formerly allowed a financial test, BLM modified its regulations at 43 CFR part 3809 and removed the financial test as an available financial responsibility instrument;<sup>112</sup> the U.S. Forest Service regulations governing financial responsibility requirements applicable to locatable minerals operations also do not allow the use of a financial test;<sup>113</sup> and the Nuclear Regulatory Commission, explicitly prohibits the use of self-insurance for uranium mills.<sup>114</sup> EPA is concerned that allowing the use of a financial test under this proposed rule would be inconsistent with the approach to hardrock mining financial responsibility that has developed through these other Federal programs. Further, not allowing a financial test would reflect the experience and expertise of these regulators, all of which have determined that a financial test is not appropriate for hardrock mining facilities. The Agency solicits comment on these concerns.

Finally, as noted earlier, the Agency is concerned that a financial test for the hardrock mining industry may not fully reflect the financial health of the owner or operator. Based on experience from requiring financial responsibility for CERCLA consent decrees, EPA has learned that mining companies often do not list “contingent” liabilities, such as the potential need for long-term operation and maintenance (“O&M”) on their corporate balance sheets, at least not during the early exploration and start-up phases of a mine. As such, a balance sheet can show that a given company has sufficient assets to meet the requirements of the financial test,

<sup>112</sup> See *Mining Claims under the General Mining Laws: Surface Management* 65 FR 69998 @70073–70074, November 21, 2000. BLM cited the necessity to review submissions annually as well as its limited capacity to do so, as contributing factors in its decision not to allow additional use of a financial test. Further justifying its decision, BLM stated that even if it had the expertise to perform reviews on a periodic basis, the risk of default remains.

<sup>113</sup> See 36 CFR 228.13 (allowing a bond, blanket bond, or cash).

<sup>114</sup> See 10 CFR 40 Appendix A criteria 9,

despite the fact that all or a portion the recorded assets may be zeroed out by unrecorded “contingent” liabilities. The Agency solicits comment on this concern. Specifically, EPA is concerned that the six times multiples for tangible net worth and U.S. assets that have worked well in the RCRA Subtitle C program would not be effective for a mining industry with the potential for large contingent liabilities.

For these reasons, the Agency is proposing, as its preferred option, not to allow the use of a financial test under this proposed rule. The Agency solicits comment on this proposal.

#### c. Option 2—Financial Test

Although the Agency’s preferred option is to not allow a financial test under the proposed rule (see Option 1), EPA is proposing a second option—that is, to make a financial test available for use by hardrock mining facilities subject to this proposed rule. The Agency is proposing this option because it recognizes that allowance of a financial test under this proposed rule could result in significant savings to those members of the regulated community that could use it and qualify to self-insure.

Under the option that would allow a financial test, EPA is proposing the use of a credit rating—based financial test, developed specifically for this proposed rule. In developing the proposed financial test, the Agency attempted to address as many of the concerns discussed in Option 1 as possible, though the Agency recognizes that it cannot eliminate all of the concerns identified. EPA analyzed several financial test options and selected one for proposal that carries with it a relatively low risk to the Government that firms will pass the financial test and still default on their obligations. EPA requests comments on the extent to which its proposed financial test addresses the concerns outlined in Option 1.

##### (1) Financial Test Overview

EPA is proposing the use of a financial test based on the long-term corporate credit rating of the owner or operator. Under the terms of the proposed financial test, an owner or operator could assure its entire financial responsibility obligation by submitting annual verification that it holds at least one long-term corporate credit rating equal to or higher than A- as issued by Standard & Poor’s (S&P) or its equivalent by another NRSRO. In addition, for some owners and operators with lower credit ratings, the proposed test would further allow an owner or

operator to alternatively assure one half of its obligation by submitting annual verification that it holds at least one long-term corporate credit rating of BBB+ or BBB from S&P or the equivalent from another NRSRO.

In addition, an owner or operator electing to use the financial test would be required to have: (1) a tangible net worth of at least six times the amount of environmental obligations, including guarantees, covered by a financial test or guarantee, including this financial test and the corporate guarantee proposed in this rule; and (2) U.S. assets equal to or greater than ninety percent of its total assets, or six times the amount of environmental obligations covered by a financial test or guarantee, including this financial test and the corporate guarantee proposed in this rule.<sup>115</sup> EPA discusses each of these components in the sections that follow.

#### (2) Financial Test Components

##### (a) Credit Rating Thresholds

The proposed test would allow the owner or operator to self-insure its entire obligation by submitting annual verification that the owner or operator holds at least one long-term corporate credit rating equal to or higher than A- as issued by S&P or its equivalent by another NRSRO. Credit rating-based thresholds are widely relied upon as a central feature of many financial tests. For example, this proposed rating threshold is the same as that used in the NRC’s financial test for self-insurance of the decommissioning costs associated with byproduct materials licensees (per 10 CFR 30 Appendix C). The Agency chose this long-term corporate credit rating threshold based on expected default rates over a three year horizon.<sup>116</sup> Based on the NRSROs’

<sup>115</sup> Tangible Net Worth and U.S. Asset thresholds have been developed and historically utilized in financial responsibility regulations for the purpose of controlling for the possibility of a company that may have multiple obligations (both within the U.S., and/or abroad). Such scenarios could further limit the company’s ability to self-insure the totality of its obligations. Cases where multiple obligations exist become very difficult for regulators to readily identify, and having tangible net worth and U.S. Asset thresholds already embedded within the financial test requirements helps to temper this concern.

<sup>116</sup> Bankruptcy data from S&P are available for one, three, and five-year periods, and it is the three-year horizon that is most widely accepted for use in the projection of default rates for purposes of financial assurance analyses. The three-year time horizon was for example used in the analyses that were conducted when the Agency’s RCRA C financial test were originally promulgated. The reason for this is that the one-year data would be unrepresentative since this wouldn’t allow sufficient time for the government to respond to such bankruptcies. Conversely, the five-year data results reflect an excessive period of time needed

extensive default data, EPA can expect three-year default rates below 0.4 percent for owners or operators meeting this ratings criteria.<sup>117</sup> Because the probability of default is projected to be well below one percent for hardrock mining companies thought to be capable of meeting the requirements of the proposed financial test, the probability that companies who pass the test will enter into bankruptcy is substantially reduced. This in turn reduces the risk of defaults and lowers potential costs for the public, when compared to less stringent tests.

The proposed test would further allow for coverage of up to one half of an owner's or operator's obligation by submitting annual verification that the owner or operator holds at least one long-term corporate credit rating of BBB+ or BBB from S&P or the equivalents from another NRSRO. This long-term corporate credit rating threshold was also chosen based on expected default rates over a three-year horizon. The Agency's analysis indicates that the risk of default roughly doubles for these rating tiers compared to A-rated long-term issuer credit ratings<sup>118</sup> and thus EPA proposes to proportionately scale back the coverage of the test for companies in these ratings tranches.

Finally, under the proposed test EPA would not allow those companies at the lowest tier of investment grade ratings (BBB- in S&P's notation and the equivalent rating from other NRSROs) from using a financial test. EPA determined that, based on the three-year horizon default history for firms with the lowest tier investment grade ratings, the risk of default was significantly higher than for firms with investment grade ratings one tier higher. For example, the risk of default for firms rated BBB- by S&P is roughly twice that

by the government to identify and respond to a bankruptcy, while also reflecting projected probabilities of default that are unnecessarily high.

<sup>117</sup> See: *Default, Transition, and Recovery: 2013 Annual Global Corporate Default Study and Rating Transitions*. Standard and Poor's. March 19, 2014 Table 26 p. 58; *Corporate Default and Recovery Rates, 1920–2013*. Moody's Investors Service. Special Comment. February 2014. Exhibit 35, p. 35; *Fitch Ratings Global Corporate Finance 2013 Transition and Default Study*. Fitch Ratings, March 17, 2014. Appendix 1, p. 13.

<sup>118</sup> See: *Default, Transition, and Recovery: 2013 Annual Global Corporate Default Study and Rating Transitions*. Standard and Poor's. March 19, 2014 Table 26 p. 58; *Corporate Default and Recovery Rates, 1920–2013*. Moody's Investors Service. Special Comment. February 2014. Exhibit 35, p. 35; *Fitch Ratings Global Corporate Finance 2013 Transition and Default Study*. Fitch Ratings, March 17, 2014. Appendix 1, p. 13.

of firms rated BBB by the same rating agency.<sup>119</sup>

EPA is aware that this demarcation differs from the normal split between investment grade and speculative grade ratings, and that often investors distinguish on the basis of whether a particular issuer carries an investment versus speculative grade rating. However, because of the significantly higher default rates for the very bottom of investment grade found in its analysis, the Agency proposes to eliminate the very bottom notch of investment grade from being allowed to self-insure under the proposed financial test.

EPA solicits comment on the credit-rating thresholds the Agency is proposing for use in the proposed financial test under Option 2.

#### (b) Tangible Net Worth Requirement

In this proposal, an owner or operator eligible to use this financial test for any portion of its CERCLA § 108(b) liabilities would also be subject to a coverage multiple requiring them to have a tangible net worth of at least six times the amount of environmental obligations, including guarantees, covered by a financial test or guarantee, including this financial test and the corporate guarantee proposed in this rule. This is an important additional component of the proposed financial test as it would provide for a common check across EPA financial responsibility programs that a firm is not assuming too great a level of future costs that they might unduly strain the firm's ability to pay for them.

EPA financial tests typically account for only cost estimates and obligations covered by an EPA financial test. However, because of the numerous regulatory agencies that regulate hardrock mines, EPA expects that an owner or operator subject to this rule may have many of its financial test demonstrations under other Federal or state programs. To assure that a company is not using the same assets to self-insure multiple obligations, EPA believes it is necessary to account for all environmental obligations covered by a financial test or guarantee, and not just EPA financial assurance obligations covered by a financial test or guarantee.

#### (c) U.S. Asset Requirement

Owners or operators would also be subject to an additional coverage multiple, requiring them to submit proof that the company either has assets

<sup>119</sup> See *Default, Transition, and Recovery: 2013 Annual Global Corporate Default Study and Rating Transitions*. Standard and Poor's. March 19, 2014 Table 26 p. 58.

located in the United States amounting to at least ninety percent of total assets or has U.S. assets totaling at least six times the amount of environmental obligations covered by a financial test or guarantee, including this financial test and the corporate guarantee proposed in this rule. This would serve as an additional precautionary measure to help ensure that U.S. assets would be available for claimants to proceed against, in the event of a bankruptcy or other default.

This proposed requirement would be very similar to that used for U.S. assets in past financial tests the Agency has created. For example, the RCRA Subtitle C closure and post-closure financial test requires assets located in the U.S. amounting to at least ninety percent of total assets or at least six times the sum of current closure and post-closure cost estimates and the current plugging and abandonment cost estimates.<sup>120</sup> Similar financial test components are also used in the Underground Injection Controls (UIC) financial responsibility programs and in the CERCLA model financial test instrument used to support financial responsibility under CERCLA orders and settlements. Using a similar ninety percent or six times multiplier allows for more effective financial responsibility across EPA programs.

For those firms without assets in the United States amounting to ninety percent or more of total assets, the firms would be required to demonstrate that they have U.S. assets greater than six times the sum of all financial responsibility obligations covered by a financial test. This six-times ratio is consistent with Alternative I of a recent RCRA consent decree that EPA entered into with several phosphoric acid mining companies, and is similar to other requirements in EPA's UIC Class VI well regulations and the RCRA Subtitle C regulations. The six times multiplier is intended to address the possibility that, in the event of a bankruptcy, funds required to meet other environmental obligations assured through other financial tests would reduce an owner or operator's ability to satisfy any CERCLA claims.

#### (d) Reporting Requirements for Passage of the Financial Test

The proposed option that would allow a financial test would also require reporting of information necessary to implement the financial test. To demonstrate passage of the financial test, owners or operators would be required to submit the following information annually:

<sup>120</sup> See 40 CFR 264.143(f)(1)(i)(D) and (ii)(D).

Chief Financial Officer Letter (CFO Letter): A letter to the Administrator signed by its chief financial officer (CFO) as worded in § 320.50. The CFO Letter confirms that the entity satisfies the financial criteria required under the financial test that makes the entity eligible to utilize the financial test as financial responsibility under this regulation.

The Agency is proposing to require standardized the language in the CFO Letter from the owner or operator. Such an approach is consistent with other Agency rules such as the RCRA Subtitle C or the Standardized Permit Rule and carries with it several benefits to the Agency. First, a standard CFO Letter will provide for relatively quick Agency review of financial test submissions and lowers the chances of administrative error in the review of submissions. Administrative burden, once again, is a key concern to the Agency as it wishes to preserve the resources for conducting cleanups. The Agency believes a standardized CFO Letter offers the additional potential advantage of improving the consistency and completeness of submissions, thereby limiting delays caused by human error and omissions.

(2) Annual Financial Statements: A copy of the owner's or operator's most recent independently audited annual financial statements prepared in accordance with U.S. Generally Accepted Accounting Principles (U.S. GAAP). At present, EPA expects that firms seeking to self-insure through the use of a financial test will do so based on financial statements that are audited in accordance with U.S. GAAP. The Agency recognizes that foreign firms might prepare audited financial statements in accordance with either GAAP or International Financial Reporting Standards (IFRS), and that IFRS and U.S. GAAP may converge into a global set of accounting standards at some point in the future. Until such time as a unified set of accounting standards is established, the Agency is proposing to accept only audited financial statements in accordance with U.S. GAAP for purposes of compliance with the financial test criteria. However, EPA accepts comment on an alternative whereby the acceptable accounting standards are linked to those accepted by the Securities Exchange Commission (SEC) in order to potentially lower the reporting burden for certain firms seeking to use the financial test. Presently, such an option would allow foreign firms that file with the SEC to be able to submit annual financial statements prepared in accordance with IFRS or GAAP while domestic firms

would submit statements prepared in accordance with GAAP. However, the underlying fundamentals of IFRS and GAAP differ with respect to the accounting of liabilities and assets. As such, to accept both IFRS and GAAP financial statements in support of the financial test would yield a potentially disproportionate playing field wherein some companies using IFRS may pass the test where they might otherwise fail under GAAP, and vice versa. EPA would thus be accepting potentially divergent levels of assurance.

(3) Special Audit Report: A special report of procedures and findings of an audit conducted by a licensed, third-party, independent certified public accountant (CPA) resulting from an agreed-upon procedures (AUP) engagement in accordance with applicable Federal laws governing independence and AUP engagements, or standards set by the American Institute of Certified Public Accountants, Inc. (AICPA), to supplement Federal laws or when Federal laws are not applicable. The report would be required to describe the procedures performed and related findings as to whether or not there were differences or discrepancies identified between the financial information in the owner's or operator's CFO Letter and the owner's or operator's most recent audited annual financial statements. Where differences or discrepancies were found in the comparison of the owner's or operator's CFO Letter and the owner's or operator's most recent audited annual financial statements, the report of procedures and findings would reconcile any differences or discrepancies.

There are advantages to third-party auditing requirements, particularly with strong auditor competence and independence criteria. According to the Center for Chemical Process Safety (CCPS), "Third-party auditors . . . potentially provide the highest degree of objectivity,"<sup>121</sup> A leading scholar on regulatory third-party programs also found that a well-designed and implemented "third-party verification [program] could furnish more and better data about regulatory compliance" while providing additional compliance and resources savings benefits.<sup>122</sup> Studies show that auditors are more likely to provide lenient or biased audit reports that can fail to accurately

identify problems or violations when there are insufficient safeguards to ensure auditor independence.<sup>123</sup>

In audit engagements, CPAs are required by professional standards and Federal and State laws to maintain independence (both in fact and in appearance) from the entity for which they are conducting an attestation (audit and review) engagement. However, the Public Certified Accounting Oversight Board (PCAOB) found evidence that many, if not most, of some types of financial audits are flawed due to insufficient auditor competence, independence and/or lack of public transparency. Third-party auditing is a cornerstone of financial reporting, but the PCAOB found audit deficiencies in portions of seventy of the ninety audits they reviewed in its third annual report on audits of broker-dealers registered with the SEC. Independence problems were found in 21 of the ninety audits where, contrary to SEC rules, firms helped with the bookkeeping or preparation of the financial statements they audited.<sup>124</sup>

Therefore, EPA is proposing to require that a CPA performing the audit required under this proposal be licensed. This requirement is designed to ensure the auditor has the requisite education and experience to perform the audit. Each state has its own licensing board. The proposal would also require that auditors be independent, follow the independence rules and standards established by the AICPA's Audit Standards Board (ASB), have passed the Uniform Certified Public Accountant Examination, be licensed as a CPA, and be current with all continuing professional education requirements.

The Agency also is proposing to require that the AUP engagement be conducted in accordance with the AICPA Statement on Standards for Attestation Engagement (SSAE) and related attestation interpretations, AT Section 201—*Agreed Upon Procedures Engagements*, or any future superseding standards set by AICPA or any superseding body. This provides further assurance that the CPA's review was done in accordance with accepted accounting industry standards. The Agency recognizes that the AICPA may update its standards, and thus the

<sup>121</sup> See CCPS. March 2007 Guidelines for Risk Based Process Safety. Available at: <http://www.aiche.org/ccps/resources/publications/books/guidelines-risk-based-process-safety>.

<sup>122</sup> See *Regulation by Third-Party Verification*, Lesley K. McAllister. January 2012. 53 B.C. L. Rev. 1, 21–26. Available at: <http://lawdigitalcommons.bc.edu/bclr/vol53/iss1/1/>.

<sup>123</sup> See, e.g., *Truth-Telling By Third-Party Auditors and the Response of Polluting Firms: Experimental Evidence From India*, Esther Duflo et al., 128 Q. J. of Econ. 4 at pp. 1499–1545, 2013.

<sup>124</sup> See *Third Progress Report on PCAOB Inspections of Broker and Dealer Auditors Shows Continued High Number of Findings*. PCAOB. Aug. 18, 2014. Available at: [http://pcaob.us/Inspections/Documents/BD\\_Interim\\_Inspection\\_Program\\_2014.pdf](http://pcaob.us/Inspections/Documents/BD_Interim_Inspection_Program_2014.pdf).

Agency is proposing a flexible standard for the CERCLA § 108(b) regulations that relies upon the method(s) currently accepted, instead of specifying a particular standard that may need to be updated in the future. EPA solicits comment on whether, in addition to those set by the AICPA, applying SEC and/or PCAOB rules and standards would provide appreciable additional assurances of independence. In this regard, EPA further believes that some owners and operators who seek to use the financial test, if available, may already be SEC registrants and issuers. As such cases, the application of more stringent SEC/PCAOB independency standards should result in little added burden for owners and operators already subject to such standards.

The audited annual financial statements, the CFO Letter, and an AUP engagement report signed and certified by an independent, licensed CPA would be submitted annually, within ninety days of the close of the owner's or operator's fiscal year. In so doing, the Agency receives up-to-date financial information to ensure the company still meets the standards of the test. In general, financial reports made directly to the SEC are completed within ninety days of the company's fiscal year end. Most small and medium-sized businesses, who are not filing with the SEC, track their fiscal year end to a calendar-year end. These companies tend to complete their annual financial reports in support of tax filings to the Internal Revenue Service, and generally do so within ninety days of the calendar year end. In either instance, most companies already prepare annual financial statements, and therefore the financial reporting requirements of the financial test should not present too significant of a reporting challenge. The annual reporting requirement is essential to ensure firms using the financial test maintain the requisite financial strength and do not pose an undue risk.

EPA believes, together, these reporting requirements will foster accountability, improve compliance, and ensure EPA is receiving an accurate portrayal of a company's financial ability to meet its environmental obligations. Thus, if the use of a financial test were to be allowed in the final rule, this would reduce the risk that the taxpayer would have to finance cleanup in the future. EPA believes that third-party reviews will help assist in rule compliance and oversight. Independence is important to preserve the integrity and objectivity of these

audits, thereby providing reliable compliance information to EPA.<sup>125</sup>

The Agency believes that requiring an AUP engagement would also further ease the implementation burden associated with reviewing financial test submissions, and reduce the prospect for errors. Third-party, independent audits will also promote cost-effective EPA prioritization of Superfund resources, and provide benefits to communities near facilities by assuring that secure financial responsibility is in place. The AUP would give EPA an independent third-party expert's opinion and attestation as to whether or not the financial information provided in the CFO Letter is consistent with that in the most recent audited financial statements and thus with U.S. generally accepted accounting practices. EPA believes independent, licensed CPAs are better suited to review such data and make such determinations, as EPA is not primarily a financial regulator.

EPA is asking for comment on these reporting requirements. Specifically, the public should comment on what other requirements, if any, should be required to ensure the completeness, reliability, and accuracy of the information submitted to determine that facilities have the funds necessary to meet their environmental obligations, thereby preserving taxpayer money. EPA is also accepting comments on the application of these laws and standards, whether or not these requirements are sufficient to ensure compliance with the financial test, provide EPA with the necessary information to implement the financial test, or preserve independence in performing under an AUP engagement, and the ability of the requirements to help EPA respond to deficiencies in financial test submissions or changes in financial situations.

**(e) Self-Reporting Requirements for Owners or Operators No Longer Able To Pass the Financial Test**

Additionally, owners or operators would be required to notify the Administrator in the event of a change in their long-term issuer credit rating or financial position that would disqualify them from using the financial test. This requirement also exists in other EPA financial tests including the RCRA Subtitle C test for hazardous waste facilities. Such notification is designed to be independent from the annual reporting requirements associated with the financial test. Owners or operators

would be required to notify the Administrator upon verifying that a change in their financial status has resulted in their becoming disqualified from using the financial test. In such circumstances, owners or operators will be required to send notice to the Administrator within thirty days, documenting their intent to establish an alternate financial responsibility instrument to cover the portion of their obligations for which they can no longer use the financial test. As such, owners and operators that currently qualify for self-insurance under the financial test will be responsible for continually self-monitoring their qualification status whenever they experience a change in their long-term issuer credit rating, tangible net worth, or value of U.S. assets. The Agency is proposing this reporting requirement to allow EPA to respond as quickly as possible to negative changes in a company's financial position. In the event the owner or operator no longer passes the financial test, the owner or operator would have 120 days from the date the owner or operator no longer qualifies to obtain a replacement instrument for that portion of its CERCLA § 108(b) financial responsibility requirement previously covered by the test.

**(f) Provisions for Administrator's Discretion**

The proposed regulations would allow the Administrator to request reports of financial condition at any time from the owner or operator in addition to those specified in § 320.43(b) in the event that the Administrator has reason to believe the owner or operator may no longer meet the financial test requirements. This is similar to a provision in the RCRA Subtitle C financial test found at 40 CFR 264.143(f)(7), for example. The Agency has found this provision very helpful in evaluating compliance with the regulations and proposes to include a similar provision in these regulations.

The Administrator would also have the discretion to disallow use of this test on the basis of qualifications of opinion given in the independent certified public accountant's report in the AUP engagement or the audited financial statements. An adverse opinion or disclaimer of opinion in either report will result in disallowance of the test. The Administrator will evaluate other qualifications on an individual basis. An adverse opinion suggests that the financial statements do not present fairly the financial condition of the firm. A disclaimer of opinion states that the auditor does not express an opinion on the financial statements. In both cases,

<sup>125</sup> See *The Integrity of Private Third-party Compliance Monitoring*. Short, Jodi L., and Michael W. Toffel. Harvard Kennedy School Regulatory Policy Program Working Paper, No. RPP-2015-20, November 2015. (Revised December 2015.)

the Agency believes there is inadequate assurance that the information presented in the financial statements can be relied upon to evaluate the credit risk of the firm.

The owner or operator would be released from the proposed requirements of demonstrating financial responsibility with the financial test when: (1) An owner or operator substitutes alternate financial responsibility as specified in this section; or (2) The Administrator releases the owner or operator from the requirements of this section in accordance with § 320.27.

### (3) Discussion

The Option 2 proposed financial test was developed by EPA for use by hardrock mining facilities under CERCLA § 108(b). The Agency believes that it is more suited for use by hardrock mining facilities to demonstrate financial responsibility under CERCLA § 108(b) than are other financial tests currently implemented by EPA. As discussed earlier, EPA has also attempted to address to the extent possible, many of the concerns raised about the use of a financial test for hardrock mining facilities under proposed Option 1.

The proposed financial test utilizes long-term corporate credit ratings, rather than a series of ratios derived from a company's financial statements, as other tests do. The Agency took this approach, in part, to ease potential implementation challenges. A test based on long-term corporate credit ratings is relatively easy to verify and carries with it the lowest administrative burden of the financial test options considered. Moreover, the use of long-term corporate credit ratings is further substantiated by the robust data underpinning the measures of risk associated with each rating level. For example, default rate studies are often backed by large samples spanning many years. The ratings agencies themselves have done extensive studies demonstrating the efficacy of credit ratings as an indicator of credit risk.<sup>126</sup>

The Agency's decision to propose a credit rating-based test also reflects the EFAB's statements, made in its reporting on the financial test and corporate guarantee under the RCRA programs, that independent credit

analysis, *i.e.* credit ratings, can be a cost effective mechanism for demonstrating financial responsibility.<sup>127</sup> The use of long-term corporate credit ratings leverages the expertise of a third party, relieving the Agency of the primary burden of performing credit analysis.

EPA has used different systems of ratings in other financial tests. This includes using the rating on the most recent bond issuance in the RCRA Subtitle C financial test, for example, found in 40 CFR 264.143(f). The use of long-term issuer credit ratings is included in this proposal as the Agency believes they most accurately reflect a firm's ability to meet the entirety of its financial obligations over the long term as opposed to the obligations related to a single debt issuance (*e.g.* a bond rating), which is narrower in scope. This view is based on EPA's review of the credit rating agencies' literature performed for this proposal.<sup>128</sup> An additional benefit of using a credit rating is that a firm does not need to issue bonds or any other debt instrument to be issued a credit rating, which may increase the availability on instruments. While this approach allows the Agency to rely on the evaluation of an outside party, rather than on in-house financial expertise, this approach is not without concerns. For example, there is continued criticism that the credit-rating agencies themselves may not truly be independent from the entities they rate.<sup>129</sup> The Agency solicits comment on the use of a credit-rating-based financial test.

The proposed financial test includes a high credit rating threshold so an owner or operator with declining financial health will still have a relatively high credit status when it initially becomes ineligible to use the financial test. EPA expects that this will help to assure that owners or operators that no longer qualify for the test will still be sufficiently viable to obtain an alternate instrument. This is so, because evidence from agency analyses of past bankruptcies in this sector suggest that it usually takes many years for a

company to enter bankruptcy after its credit rating drops below BBB.<sup>130</sup> In addition, this is also the case given that the proposed financial test has two tiers of credit rating thresholds. As such, should an owner's or operator's credit rating drop below A-, the amount that they may self-insure for drops from 100 percent to 50 percent of the obligations, provided that they still retain an investment grade credit rating. The impact on a company may be more gradual when the owner or operator experiences a decline in their credit rating. The Agency solicits comment on the validity of this approach.

The financial responsibility instruments proposed in this rule are new and unique and the market's appetite for providing these instruments is yet to be determined. The Agency expects that allowing a financial test could potentially help to address market capacity issues, should they arise.<sup>131</sup> If there is limited capacity when this rule becomes final, the availability of a financial test could help to address that issue. The Agency solicits comment on whether the financial test could help to address market capacity issues.

Making a financial test available to owners or operators of hardrock mining facilities under this proposed rule would be consistent with EPA's approach in other programs. It would not, however, be consistent with approaches taken by some other Federal agencies.

According to the CERCLA § 108(b) Regulatory Impact Analysis (RIA), the estimated annualized compliance cost to industry without a financial test is \$171 million. However, by allowing financial test, the cost to industry goes down to \$111 million, which represents a 35 percent in cost saving to industry.

With respect to the impacts on government, without the financial test, the industry would internalize in approximately \$527 million in potential CERCLA liabilities that would otherwise assumed by the Government (in instances of owner or operator failure) in the baseline (without the rule). However, by allowing the financial test, the cost internalized by the industry goes down to approximately \$511 million. Therefore, the increased risks to the Government from unforeseen

<sup>127</sup> See *EFAB Initial Findings Concerning use of the Financial Test and Corporate Guarantees to Meet Financial Assurance Requirements under the RCRA programs*. Environmental Financial Advisory Board. January 11, 2006, p. 5.

<sup>128</sup> See *Guide to Credit Rating Essentials: What are Credit Ratings and How Do They Work?* Standard and Poor's (2010), pp. 11–12; *Moody's Rating Symbols & Definitions*. Moody's Investors Service. New York, NY (2009), p. 11; and *Definitions of Ratings and Other Forms of Opinion*. Fitch Ratings (2011) pg 9.

<sup>129</sup> See for example, CFR.org Staff, *The Credit Rating Controversy*, Council on Foreign Relations, updated February 19, 2015. Available at: <http://www.cfr.org/financial-crises/credit-rating-controversy/p22328>.

<sup>130</sup> See *Draft Background Document for Financial Test Analyses*, Industrial Economics, Inc. (IEC), November 2016.

<sup>131</sup> Under a no financial test option, limited market capacity may be burdened by a need for all hardrock mining companies to obtain third-party financial responsibility instruments. However, under a financial test option, some companies would be able to self-insure, possibly freeing up market capacity for companies unable to do so.

<sup>126</sup> See for example: *Default, Transition, and Recovery: 2013 Annual Global Corporate Default Study and Rating Transitions*. Standard and Poor's. March 19, 2014; *Corporate Default and Recovery Rates, 1920–2013*. Moody's Investors Service. Special Comment. February 2014; *Fitch Ratings Global Corporate Finance 2013 Transition and Default Study*. Fitch Ratings, March 17, 2014.

defaults of owners and operator allowed to self-insure is \$16 million, which is about three percent of the total potential liability, relative to the baseline.

Finally, EPA solicits comment on the potential impacts on small businesses of allowing a financial test under the proposed CERCLA § 108(b) rule. As noted earlier, concerns exist regarding the potential inequity of offering a test due to the advantages that it may create for larger versus smaller owners and operators. This is in part because the proposed financial test was designed to be highly stringent. As proposed, only those owners and operators with strong long-term credit ratings, plus substantial tangible net worth and U.S. assets would pass the test. Designing the test in this manner greatly lowers the risk of default by owners and operators that pass the test. Analyses conducted by EPA of the financial test options considered offers evidence, however, that fewer small businesses are likely to possess the credit ratings and net worth necessary to qualify for self-insurance. EPA, therefore, solicits comment on whether the availability of a financial test would thus create a competitive disadvantage for small businesses.

EPA also solicits comment on how allowance of a financial test under the CERCLA § 108(b) rule could affect the potential availability of third-party instruments to small businesses. EPA anticipates that the impact would depend in part on the willingness of instrument providers to provide instruments to small businesses. If instrument providers are willing to provide instruments to small businesses, allowing a financial test could make instruments more available to small businesses by freeing up overall capacity of such instruments in the open market. On the other hand, if instrument providers prove less willing to provide instruments to small businesses, the capacity freed by allowing the financial test may not increase the availability of the instruments to those entities. EPA therefore solicits comment on the likely impact on small businesses of making a financial test available in the rule, both in terms of potential disadvantages, and in terms of the availability of the instruments themselves.

(4) EPA's Data Analysis: In this section, EPA discusses the data analysis it performed in connection with developing financial test options generally for the CERCLA § 108(b) proposed rule, and in connection with the particular test selected for proposal. Specifically, EPA conducted several basic analyses to understand the impacts of the rule and tradeoffs

associated both with and without a financial test. This is discussed in the following section (a). In section (b), EPA discusses its data analysis of the expected cost savings and potential costs to the public of alternative financial tests considered for proposal under Option 2. In section (c), EPA discusses its analysis of the ability of the alternative tests to screen out bankruptcies.

#### (a) Analysis of Rule With and Without a Financial Test Option

For this proposal, EPA sought to estimate the overall cost to the public from potential industry defaults that could occur absent the rule, versus the potential cost to industry under a rule without any financial test provisions (Option 1). All quantitative analyses conducted in relation to financial tests are more thoroughly described within the "Background Information Document for Financial Test Options Analysis for Hardrock Mining Industry under CERCLA § 108(b)."

For purposes of analysis EPA adopted several assumptions. At the time of these analyses, estimates were not yet available regarding the amounts of the financial responsibility that individual companies would be obligated to cover under this rule. Therefore, in order to facilitate necessary analyses of options for a financial test, EPA assumed an across-the-board obligation amount for all companies (both at \$50 million, as well as \$200 million respectively).<sup>132</sup> EPA also assumed there would essentially be full recovery of instruments under the rule, plus negligible recovery from bankruptcy proceedings.

The Agency's analyses puts the annualized response costs for public taxpayers from bankruptcies and defaults at \$1.22 billion in the absence of any CERCLA § 108(b) rule for the hardrock mining industry. EPA also calculated that in order to eliminate such costs borne by the public to the maximum extent possible, requiring financial responsibility (absent a financial test) would result in additional annualized costs to industry of approximately \$488 million.

<sup>132</sup> While this assumption allows for comparison of a company's cost accrual relative to other financial tests, it does not correctly scale the obligation amount to the size of the company's operations. To the extent that this amount overstates actual obligations, specifically for smaller companies, the \$50 million coverage requirement may affect cost effectiveness determinations if there is a systematic relationship between company size and financial test passing rates.

#### (b) Analytical Basis for the Proposed Financial Test

EPA evaluated the No Test and a range of alternative Financial Test options, incorporating a variety of financial metrics, to assess the ability of these tests and metrics to predict the likelihood of bankruptcy and ensure that sufficient funds are available to meet a company's ongoing environmental commitments. The Agency evaluated all candidate hardrock mining firms for which financial information was available against a variety of financial test options, including tests promulgated under other Federal statutes such as RCRA, and two ratings-based options designed by EPA (referred to as the Investment Grade and Higher-than-Investment-Grade Rating Tests).

The least sensitive of the options considered looked at using a test based solely on Investment Grade credit ratings. Under this test option, all companies with a rating of BBB- or better qualify to self-insure 100 percent of their financial responsibility obligations under the rule.<sup>133</sup> Similar, but somewhat more sensitive, is the option of using the same test as that which is used under RCRA Subtitle C. The RCRA Subtitle C Financial Test contains two alternative avenues by which a company may successfully qualify for self-insurance (one with, and one without a ratings-based threshold). To pass the test under RCRA Subtitle C a company must either possess an investment grade rating on its most recent bond issuance from Standard and Poor's or Moody's, or must otherwise demonstrate that their financial status (including that of total liabilities, net worth, net income, total assets, current assets, and current liabilities) all meet certain minimum standards. In order for companies to self-insure under either of these alternatives, their tangible net worth must exceed their financial responsibility obligations by a factor of six at a minimum (and not be less than \$10 million), while their U.S. Assets must equal at least ninety percent of their total assets (or be at least six times that of the financial responsibility obligations).

EPA also developed a more sensitive ratings-based financial test (the Higher-than-Investment-Grade Rating Test), which further limits qualification for self-insurance to only those companies with a BBB or better rating. Unlike the

<sup>133</sup> While this section refers to ratings according to the notation used by S&P, the financial test option considers ratings from S&P or an equivalent NRSRO for the purposes of assessing a company's ability to meet the financial test requirements.

other tests considered, companies with ratings of BBB- would not qualify for any self-insurance under this test. Furthermore, this test establishes a hybrid hierarchy whereby only companies with ratings of A- or higher qualify at 100 percent, while those with ratings of BBB or BBB+ qualify to self-insure no more than fifty percent of their financial responsibility obligation. Lastly, because tangible net worth and U.S. Asset requirements are frequently included as an important feature of financial responsibility regulations, tangible net worth and U.S. Asset limitations (similar to those stipulated under RCRA Subtitle C) were added as a further component of the Higher-than-Investment-Grade Rating Test.

#### (c) Analysis of Financial Test Options Considered

EPA first assessed the relative costs borne by industry to maintain a financial test, or in lieu of doing so, to obtain a third-party instrument (industry's expected cost). EPA also assessed the costs that may be borne by the public in the event a company defaults on its obligations (public's expected default cost).

Results of these analyses indicated that the estimated costs to industry consistently increase, as the conditions of the alternative financial tests become more sensitive and fewer companies qualify to self-insure. As fewer companies are able to pass the test, they are required to pay for third party financial responsibility instruments on the open market, which comes at a cost. Conversely, as alternative financial tests become more sensitive and fewer companies qualify to self-insure, the potential for defaults decreases along with the potential costs to the public associated with such potential defaults.

Under the Investment Grade Ratings Test, EPA's analysis estimates the annualized cost savings to industry at approximately \$112.5 million. As a result of allowing the test, the public would in turn experience potential costs in annualized dollars of approximately \$19.6 million due to the possibility of a company defaulting in spite of having passed the test. Similarly, estimates for the RCRA Subtitle C Test, reveal marginally lower annualized cost savings to industry of roughly \$110.2 million, with the public bearing potential costs from defaults valued at an annualized cost of \$16.4 million.

Under a Higher-than-Investment-Grade Rating Test (with and without tangible net worth and U.S. Asset requirements), annualized cost savings to industry range from \$75.2 to \$90.8 million, respectively. Annualized costs

to the public from potential defaults is further diminished to between \$10.4 and \$12.0 million respectively. By creating a stricter set of requirements, the Higher-than-Investment-Grade Rating Test (with tangible net worth and U.S. Asset provisions) makes it more difficult for companies with border-line investment grade ratings or insufficient assets to qualify for self-insurance. In so doing, this test further reduces the chance of defaults and potential costs to the public precipitated by such defaults, as compared to the other financial tests considered.

The Higher-than-Investment-Grade Rating Test is also the only option designed to carry with it a provision allowing a company to cover only a portion of its obligations depending on its current rating. Companies with lower relative ratings (BBB and BBB+) may only self-insure for up to 50 percent of their financial responsibility obligation. Such lower rated companies are not only at greater risk of default, but may also enter into default at a faster pace than companies rated at A or better, based on probability of default estimates for companies in different ratings tranches as seen in historical default studies done by NRSROs. Consequently, this tailored feature of the Higher-than-Investment-Grade Rating Test helps to further diminish the potential costs to the public relative to other financial tests, while still allowing some level of self-insurance in recognition of the creditworthiness of companies with investment grade ratings of BBB or higher.

#### (d) Analysis of Bankruptcy and Predictiveness of Alternative Tests

The Agency endeavored to craft a test that would be able to predict bankruptcy in the hardrock mining industry. To assess both the no test proposal and that of the financial test options in this respect, the Agency collected as much financial information as possible for each of 3 years preceding identified bankruptcies that had historically occurred among hardrock mining companies. This data was matched with bankruptcies in the industry identified over a 35-year period spanning 1980 to 2015, resulting in a sample of 25 unique occurrences of bankruptcies in this industry for which data is available. The financial data for each of these bankruptcies were then used to assess whether any of these companies would have been capable of passing any of the alternative tests, in each of the 3 years before entering bankruptcy. Of the tests considered, it was the Higher-than-Investment-Grade Rating Test (with Tangible Net Worth

and U.S. Asset thresholds) that performed best in disqualifying companies from passing the test during the three-year period before they ultimately went bankrupt.

Indeed, the Agency's analysis shows that of the 25 hardrock mining bankruptcies for which data were available, the proposed test would have completely screened out 24 of the 25 companies at least three years in advance of bankruptcy. However, even in the case of the one company that the test did not screen out, the Higher-than-Investment-Grade Rating Test succeeded in restricting the level of self-insurance for which they qualified to just fifty percent of its financial responsibility obligations (instead of 100 percent). This resulted from the hybrid feature of the proposed Higher-than-Investment-Grade Rating Test. This offers evidence of the effectiveness of the hybrid approach included in the proposed test in meeting its objective of reducing the exposure to unfunded costs (by fifty percent) for the subset of companies with higher expected bankruptcy rates and ratings below that of an A rating.

Further, since a BBB rating forms the minimum basis for whether a company can qualify for any self-insurance of their financial responsibility obligation, EPA conducted further analyses to evaluate this ratings threshold more specifically. In particular, the Agency sought to assess fluctuations in BBB ratings in relation to previous bankruptcies in the hardrock mining industry. By looking at the historical record of rating shifts below the BBB threshold, the Agency sought to obtain perspective on how often BBB-rated companies experienced ratings downgrades, how susceptible companies were to receiving speculative-grade ratings after previously having been rated BBB, and how quickly they may have entered bankruptcy subsequent to their ratings having dropped to below BBB.

To assess these questions, EPA collected data on 102 hardrock mining companies that were rated by S&P at least once between 1984 and 2010. These companies reflected both hardrock mining companies (targets), and parents of hardrock mining companies (parents) who might ultimately be in a position to provide a corporate guarantee for their subsidiaries' obligations. The inclusion of parent companies within the scope of these analyses furthermore supplemented the Agency's analysis where hardrock mining target company data were unavailable.

Based on the data available from the 26-year sample period, the Agency's

analyses identified only four bankruptcies of companies (out of 36) that had ever historically been rated at the BBB level.<sup>134</sup> In the case of these bankruptcies, only one of these mining companies entered bankruptcy within one year following a drop in its BBB rating. While the company had retained BBB or better ratings presumably due to their strength and longevity, they ultimately succumbed to multimillion-dollar asbestos claims over a very short period. Of the other three companies entering bankruptcy within the sample period, two did so within three years of a downgrade, and the other entered bankruptcy 17 years later.

What these results suggest are that relatively few bankruptcies were shown to have occurred for companies rated at BBB. The results also suggest that while ratings fluctuations do occur, such fluctuations generally do not signal an unflinching decline towards bankruptcy. Thirdly, they suggest that when a company that has been rated at investment grade does experience a ratings decline and ultimately defaults, this process is likely to take one or more years for such relatively solid enterprises to enter into bankruptcy. In such instances, the proposed annual Higher-than-Investment Grade Rating Test (combined with RA notification requirements when a company's qualification for the financial test ceases) will alert regulators as to the company's inability to pass the Higher-than-Investment-Grade Rating Test. Therefore, it appears that establishing the cutoff for passing the proposed test at a rating of BBB or above is well justified. Setting the ratings threshold at BBB, prevents companies with ratings of BBB- or below from passing the Higher-than-Investment-Grade Rating Test. This is designed to help ensure that there is sufficient time for the Agency to intercede and enforce the test requirements should a company's rating begin to decline.

#### Summary

EPA is proposing two options—to not allow a financial test (Option 1—preferred option), and to allow a “Higher-than-Investment-Grade Rating Test” (Option 2). EPA believes that not allowing a financial test would best avoid undue costs to the Government and to the public from unsecured environmental obligations that companies may be unable to cover when they go into default or bankruptcy, and that it would eliminate administrative

burden upon the Agency associated with the review and verification of financial statements and attestations from financial test submissions.

Alternatively, the “Higher-than-Investment-Grade Rating Test” is being proposed, as it was the best financial test, from among those considered, at providing cost savings to industry while limiting the risks to the Government and the public. The Higher-than-Investment-Grade Rating Test was selected as the least risky option for the co-proposal, relative to the other tests considered, because it results in the lowest expected potential costs that may be borne by the Government, while offering significant cost savings to industry. In addition, the Higher-than-Investment-Grade Rating Test performed better than the other tests at predicting which owners or operators may have a higher potential for defaulting on their obligations. Finally, the Higher-than-Investment-Grade Rating Test also takes advantage of publically available credit analyses conducted by independent ratings agencies as a way to help lower administrative burdens on both industry and the Government.

EPA solicits comment on both proposed options.

#### 5. Corporate Guarantee (§ 320.44) (Option 2 Only)

Under proposed Option 2, which would allow a financial test, EPA also is proposing to allow owners and operators to demonstrate financial responsibility by obtaining a written corporate guarantee from another firm that meets the financial test requirements. The corporate guarantee serves as a contract through which a related firm guarantees to third-party CERCLA claimants that it will make payment for CERCLA response costs, health assessment costs, and/or natural resource damages as provided in the guarantee.

##### a. Issuer Eligibility (§ 320.44(b) and (c))

The Agency would allow guarantees from the direct or higher-tier parent corporation of the owner or operator, a firm owned by the same parent corporation as the owner or operator, or a firm with a substantial business relationship with the owner or operator. These potential guarantors are the same as those allowed to provide guarantees under the RCRA Subtitle C Closure and Post-closure financial assurance and third-party liability regulations.

Initially, under the RCRA Subtitle C financial assurance requirements for closure and post-closure care, EPA allowed for guarantees provided only by immediate corporate parents believing

that that relationship between the owner operator and the guarantor would aid in the enforceability of the guarantee and its strength. Further, EPA adopted a definition of “parent corporation” to ensure the relationship was close and direct.<sup>135</sup> EPA is proposing the same definition of parent corporation as employed in the RCRA Subtitle C financial assurance program. EPA believes that the definition will be familiar to the regulated community and EPA implementers which should ease implementation efforts. Furthermore, because the definition ensures that the connection between the parent and the subsidiary is close and direct, the parent will likely have a strong interest in the financial and environmental performance of the subsidiary and the facility which the Agency believes strengthens the guarantee. The proposed definition of parent corporation is “a corporation that which directly owns at least fifty percent of the voting stock of the corporation which is the facility owner or operator; the latter corporation is deemed a ‘subsidiary’ of the parent corporation.”

However, EPA received several comments on the July 11, 1986 interim final rule that urged EPA to allow non-parent firms to provide guarantees. EPA analyzed the validity and enforceability of guarantee contracts by non-parent firms and decided to authorize the guarantees provided by “sibling” firms (firm whose parent corporation is also the parent corporation of the owner or operator) and firms with a substantial business relationship with the owner or operator in the third party liability regulations provided they were able to provide certain additional information.<sup>136</sup> EPA later authorized non-parent guarantors in the closure and post-closure regulations as well.<sup>137</sup> EPA has determined that guarantees issued by non-parent corporations can be valid and enforceable when they are issued in accordance with the regulations and thus EPA proposes this same suite of potential guarantors in this proposal provided they supply the same necessary information to make the guarantee enforceable as required under the RCRA Subtitle C regulations. Specifically, if the guarantor's parent corporation is also the parent

<sup>135</sup> See *Standards Applicable to Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities; Financial Assurance Requirements*, 47 FR 15037 April 7, 1982; and *See Standards Applicable to Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities; Financial Assurance Requirements; Liability Coverage*, 51 FR 25350 @253511 July 11, 1986.

<sup>136</sup> See 53 FR 33941, September 1, 1988.

<sup>137</sup> See 57 FR 42833, September 16, 1992.

<sup>134</sup> One additional bankruptcy occurred by a company who had never been rated BBB, but had been previously downgraded from BBB+ to BB-



corporation of the owner or operator, the letter from the guarantor's CFO would have to describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" with the owner or operator, this letter would be required to describe this "substantial business relationship" and the value received in consideration of the guarantee. These proposed descriptions were determined by EPA to be important in ensuring the ultimate validity and enforceability of the guarantee contract in past Agency financial responsibility rulemakings. Under fundamental principles of contract law, contracts must be supported by "consideration." Consideration is generally defined as a legal detriment that has been bargained for and exchanged for the promise. The general principle underlying the concept of consideration is that the law will not enforce gratuitous promises.

For the demonstration of sufficient consideration for the contract if the guarantor has a substantial business relationship with the owner or operator, the guarantor must describe the substantial business relationship in a way that would meet the proposed definition. EPA is proposing the same definition of substantial business relationship as used in the RCRA Subtitle C financial assurance program which recognizes that no single legal definition exists of what constitutes a business relationship between two firms that would justify upholding a guarantee between them and that such a determination would depend upon the application of the laws of the States of the involved parties. The proposed definition of substantial business relationship is "the extent of a business relationship necessary under applicable State law to make a guarantee contract issued incident to that relationship valid and enforceable. A "substantial business relationship" must arise from a pattern of recent or ongoing business transactions, in addition to the guarantee itself, such that a currently existing business relationship between the guarantor and the owner or operator is demonstrated to the satisfaction of the Administrator."

In addition, if the guarantor's parent corporation is also the parent corporation of the owner or operator or if the guarantor is a firm with a "substantial business relationship" with the owner or operator the letter from the guarantor's CFO would have to describe the value received in consideration of the guarantee. In some cases, preexisting business relationships, no matter how substantial, will be insufficient by

themselves to demonstrate consideration because they will not have been bargained for to induce the promise in the guarantee contract. For this reason, these guarantors must also describe the consideration for the contract in the letter from their chief financial officer. As mentioned earlier, these requirements are the same as under the RCRA Subtitle C financial assurance closure post-closure and third-party liability financial assurance programs. These requirements would be familiar to the regulated community and the regulators familiar with RCRA financial assurance and were based on analysis to ensure the enforceability of the contract.

Furthermore, EPA would allow a guarantee from a non-U.S. guarantor that meets the financial test requirements outlined in the proposed regulations provided the guarantor also has identified a registered agent for service of process in the state in which the facility covered by the guarantee is located and in the state in which it has its principal place of business. This requirement is identical to that required in the RCRA third party liability regulations and was required to ensure a non-US guarantor be subject to enforcement proceedings in the U.S. The function of the agents is to accept service of process for the guarantor corporation for legal actions in a given state.<sup>138</sup> In addition, and as described earlier, all guarantors would have to pass the financial test requirements including a U.S. assets requirement. The Agency has included U.S. Assets requirements to ensure assets are available in the United States to be levied against if a judgment is entered against the guarantor.<sup>139</sup> EPA believes this situation is similar and wants similar assurance that there are assets available in the U.S. should claimants need to recover funds from the guarantor.

The guarantor would be required to provide the same evidence and supporting documentation that the guarantor passes the financial test. In addition, the guarantor would be required to submit a signed copy of the guarantee and comply with the terms in the guarantee. The wording in the guarantee would have to be identical to that specified in § 320.50(f).

#### b. Wording of the Corporate Guarantee (§ 320.50(f))

In developing the proposed corporate guarantee language EPA looked to the guarantee language used in the RCRA

Subtitle C program. Those guarantees were the product of iterative proposals, responses to comment and EPA analysis.

In the proposed CERCLA § 108(b) guarantee, the guarantor would guarantee payment up to the most current CERCLA § 108(b) financial responsibility amount required at each facility covered by the guarantee exclusive of any legal defense costs incurred by the guarantor in the same three scenarios for which the other instruments intend to provide financial responsibility (discussed later in this preamble). The value of the guarantee thus is designed to adjust with the value of the CERCLA § 108(b) financial responsibility amount. As evidence that the guarantor passes the financial test, the guarantor would be required to submit the letter from its CFO that identifies, for all the facilities for which it is providing a corporate guarantee, the amount of CERCLA § 108(b) financial responsibility covered by the guarantee. This would occur annually or as required by a change in the CERCLA § 108(b) financial responsibility amount. The CERCLA § 108(b) financial responsibility amounts covered by the guarantee identified in the CFO letter at each facility would serve as the basis for the value of the guarantee under the proposed guarantee language.

A similar arrangement is used in the RCRA Subtitle C closure post-closure guarantee whereby the value of the guarantee is linked to the current closure and post-closure cost estimates. The RCRA Subtitle C closure and post closure guarantee provides that, if the owner or operator fails to perform closure or post closure care of the facilities covered by the guarantee in accordance with the closure or post-closure plans and other permit or interim status requirements whenever required to do so, "the guarantor shall do so or establish a trust fund as specified in subpart H of 40 CFR part 264 or 265, as applicable, in the name of [owner or operator] in the amount of the current closure or post-closure cost estimates as specified in subpart H of 40 CFR parts 264 and 265. In this way the value of the guarantee adjusts without required amendments or modifications to the guarantee. EPA is proposing that the value of the guarantee similarly adjust to the current CERCLA § 108(b) financial responsibility amount.

To help effectuate this intent, the proposed language of the corporate guarantee would require the guarantor to agree to comply with the reporting requirements for guarantors and to report the full amount of CERCLA § 108(b) financial responsibility for

<sup>138</sup> See 52 FR 44317, November 18, 1987.

<sup>139</sup> See 52 FR 44317, November 18, 1987.

which it is eligible to cover as determined by the financial test criteria for each facility covered by the guarantor in the letter from its CFO. EPA believes it is necessary for the guarantor to report the full amount of CERCLA § 108(b) financial responsibility for which it is eligible to cover as determined by the financial test criteria for each facility covered by the guarantee in the letter from its CFO as those amounts would form the basis of the guarantor's potential liability under the guarantee. If the guarantor was able to report an amount lower than the maximum amount for which the guarantor is allowed to cover under the financial test criteria, the guarantor could unilaterally adjust the "value" of the guarantee downwards by reporting some percentage of the maximum amount. Such a provision is not necessary in the RCRA Subtitle C closure post-closure guarantee as the owner operator is responsible for preparing the cost estimates and thus the guarantor could not unilaterally change the "value" of the guarantee.

An alternative approach would be to include specific dollar values for each facility in the guarantee itself as the basis of the guarantor's liability. Under this option, the guarantee would have to be amended or modified regularly as the amounts of CERCLA § 108(b) financial responsibility changed and create additional reporting burdens. Further, EPA anticipates that potential guarantors will typically seek to provide a guarantee for the maximum amount allowable under the regulations to realize the maximum cost savings. Nevertheless, EPA requests comment on the proposed arrangement whereby the guarantor's liability is linked to the current CERCLA § 108(b) financial responsibility amount and does not require regular amendment of the guarantee as well as the alternative whereby the guarantee would specify specific dollar amount and would require routine amendment.

#### c. Payment for CERCLA Response Costs, Health Assessment Costs, and/or Natural Resource Damages From the Guarantee

The proposed language of the corporate guarantee would allow claimants to make claims against the guarantor under three scenarios in addition to the direct action scenario. First, in the event that payment was not made for CERCLA response costs, health assessment costs, and/or natural resource damages associated with the facility as required in a final court judgment from a Federal court against one of the current owners or operators

within thirty days, the guarantor would do so. Secondly, in the event that payment is not made as required in a CERCLA settlement associated with the facility between a current owner or operator and EPA or another Federal government agency, the guarantor would do so. Third, in the event that performance does not occur as required at the facility under a CERCLA unilateral administrative order issued to a current owner or operator by EPA or another Federal agency and for which the owner or operator provided a written statement allowing the guarantor to serve as financial responsibility assuring the work in the order, the guarantor would make payment into a trust fund established pursuant to the order.

The payment scenarios in the proposed guarantee are analogous to those in the other instruments proposed today. Similar documentary requirements are also required for a claimant to receive payment under these three scenarios in the proposed guarantee. Specifically, under the terms of the proposed guarantee, the guarantor would satisfy a third-party CERCLA claim on receipt of specific documents. Claimants seeking satisfaction of a valid final court judgment from a Federal court awarding payment for CERCLA response costs, health assessment costs, and/or natural resource damages associated with the facility against any of the current owners or operators at the facility that had not been satisfied within thirty days would need to submit the final court judgment itself. In addition, the claimant would need to submit a signed statement from the claimant certifying that the amounts had not been recovered or paid from any other source, including, but not limited to, the owner operator, insurance, judgments, agreements, and other financial responsibility instruments. These documentary payment requirements were selected as it removes EPA from the claims administration process but ensures that a court has determined that payment is due to the party making the claim under CERCLA and that the party has not already recovered or been paid the funds from another source. EPA believes that guarantors will be able to review such objective documentary submissions and determine whether payment should occur under the terms of the guarantee. A similar provision requiring the submission of a valid final court order is required in the RCRA third party liability guarantee (*see* 40 CFR 264.151(h)(2)).

In the payment scenario where payment was not made as required in a

CERCLA settlement associated with the facility between a current owner or operator and EPA or another Federal government agency, Administrator or another Federal agency may make a claim by presenting two documents to the guarantor for payment. The first document would be a written signed statement from the Administrator or another Federal government agency requesting payment from the guarantor on the grounds that payment had not been made as required by a CERCLA settlement associated with the facility and with any of the current owners or operators. The second document is the signed statement from the claimant certifying that these amounts have not been recovered or paid from any other source, including, but not limited to, the owner operator, insurance, judgments, agreements, and other financial responsibility instruments.

In the payment scenario where performance at the facility does not occur as required under a CERCLA unilateral administrative order issued to a current owner or operator, the Administrator or another Federal agency may make a claim by presenting a similar set of two documents as described earlier in the settlement scenario to the guarantor for payment. Specifically, the first document required to make a claim in this scenario under the terms of the proposed guarantee would be a written signed statement from the Administrator or other Federal government agency requesting payment from the Guarantor into a trust fund established pursuant to a CERCLA unilateral administrative order on the grounds that performance at the facility had not occurred as required by a CERCLA administrative order issued to a current owner or operator. The second document that would be required to make a claim under this scenario would be a signed statement from the claimant certifying that these amounts have not been recovered or paid from any other source, including, but not limited to, the owner operator, insurance, judgments, agreements, and other financial responsibility instruments.

EPA believes, similar to the case of the letter of credit issued in favor of any and all third-party CERCLA claimants, the trust fund and the surety bond, that in instances where the claimant is a Federal government agency acting pursuant to delegated CERCLA authority a simpler set of documentary requirements are appropriate. EPA believes the relatively simple requirements of signed statements from EPA or another Federal agency acting pursuant to delegated CERCLA authority will streamline the claims

process and reduce uncertainty as to whether or not payment should be made under the terms of the guarantee. EPA requests comment on the proposed documentary requirements for payment from the guarantee.

In addition to the three defined payment scenarios, the guarantor could also be subject to direct action under CERCLA § 108(c)(2). Specifically, the proposed terms of the guarantee include an explicit acknowledgement that in the case of a release or threatened release of (a) hazardous substance(s) from a facility covered by the guarantee, any claim authorized by § 107 or § 111 of CERCLA may be asserted directly against the guarantor as provided by CERCLA § 108(c). Further, the proposed terms of the guarantee require that the guarantor consents to suit with respect to these claims subject to the limitations in CERCLA § 108(d) and acknowledge that the guarantor would be entitled to the rights and defenses provided to guarantors by the statute in § 108(c). Finally, under the proposed language of the guarantee, the guarantor would agree to provide notice of any claims and payments resulting from a direct action to the Administrator. EPA believes this notification requirement is valuable as the owner operator may not be around to provide such a notice of claims and payments in a direct action scenario yet EPA wishes to remain informed of claims against the instrument and of the value of the financial responsibility.

The proposed language of the guarantee would also explicitly specify that the limit of the guarantor's liability under the guarantee would be exclusive of legal defense costs incurred by the guarantor. A similar provision is being proposed for insurer and surety liability today. To the maximum extent possible, EPA would like the value of the financial responsibility be preserved for the payment of valid third-party CERCLA claims. EPA requests comment on this proposed provision.

#### d. Notification Requirements in the Guarantee

The proposed language of the CERCLA § 108(b) corporate guarantee also includes several other notification requirements. First, under the proposed language, the guarantor would agree that if, at any time before the termination of the guarantee, the guarantor fails to meet the financial test criteria, guarantor shall send within ninety days, by certified mail, notice to the Administrator and to the owner or operator that he intends to provide alternate financial responsibility as specified in Subpart C of 40 CFR part

320 in the name of the owner or operator. A similar provision is also employed in the RCRA Subtitle C closure post closure and third-party liability guarantee. The provision would provide EPA notice that the guarantee no longer passes the financial test and an acknowledgment from the guarantor that he intends to provide alternate financial responsibility as required under the terms of the guarantee should the owner or operator fail to do so. EPA believes it is important for the Agency to receive prompt notice of the guarantor's inability to continue to pass the financial test as the guarantor's financial strength is foundational to the efficacy of the guarantee. Further, EPA believes that it is not just consistent with past precedent but important that the guarantor be responsible for obtaining alternate financial responsibility in these instances. The proposed provision helps limit the risk that, in instances when a guarantor no longer passes the financial test, the facility will be left without alternate financial responsibility.

Likewise, the proposed terms of the guarantee would require the guarantor to agree that within thirty days after being notified by the Administrator of a determination that the guarantor no longer meets the financial test criteria or that he is disallowed from continuing as a guarantor, the owner or operator would be required to establish alternate financial responsibility as specified in Subpart C of 40 CFR part 320, as applicable, in the name of the owner or operator unless the owner or operator had done so. This provision serves the same intent as the provision described earlier—that the guarantor be responsible for obtaining alternate financial responsibility in an instance where the guarantor notifies EPA that it no longer passes the financial test. The provision helps limit the risk that, in instances when a guarantor no longer passes the financial test, the facility will be left without alternate financial responsibility. This would be a very similar requirement to those used in the RCRA Subtitle C corporate guarantees so the regulated community should be familiar with the provision.

Under the proposed terms of the guarantee the guarantor would also be required to notify the Administrator by certified mail, of a voluntary or involuntary proceeding under Title 11 U.S.C. (Bankruptcy), naming the guarantor as debtor, within ten days after commencement of the proceeding. This provision is also required in both the RCRA Subtitle C closure post closure and third-party liability guarantees. EPA recognizes the value of

this notification provision and proposes its inclusion to the CERCLA § 108(b) guarantee in order for EPA to be promptly notified of such indicators of the guarantor's financial distress.

Finally, under the proposed terms of the guarantee, the guarantor would need to send a notice by certified mail to the Administrator and to the owner operator of its intent to terminate the guarantee. The intent of this provision is to provide notice to the Administrator and the owner operator that the guarantor wishes to cease providing a guarantee on behalf of the owner operator. Such a provision helps ensure continuity of financial responsibility coverage.

#### e. Provisions in the Guarantee Ensuring Continuity of Coverage

As described earlier, under the proposed terms of the guarantee, the guarantor would need to send a notice by certified mail to the Administrator and to the owner operator of its intent to terminate the guarantee. The corporate guarantee would remain in force and may not be terminated unless and until the owner or operator obtains, and the Administrator approves alternate financial responsibility. If the owner or operator failed to provide alternate financial responsibility as specified in the regulations and obtain the written approval of such alternate financial responsibility from the Administrator within ninety days after receipt by both the owner or operator and the Administrator of a notice of termination of the corporate guarantee from the guarantor, the guarantor would be required, under the terms of the guarantee, to provide such alternative financial responsibility in the name of the owner or operator. This provision would ensure the continuity of financial responsibility and is similar to that required for the other instruments. However, in the case of the guarantee, unlike the other instruments, the guarantor would not necessarily need to fund a trust fund. The guarantor could choose from the range of acceptable financial responsibility instruments when obtaining a financial responsibility mechanism on behalf of the owner or operator. This provision, and the similar provisions for other proposed instruments, as well as alternatives are discussed in more depth in the preamble section headed 'issuer cancellation provisions.'

#### f. Requirements for Attorneys General or Insurance Commissioners written statements (§§ 320.44(f) and (g))

In the case of corporations incorporated in the United States, a guarantee would only be able to be used

to satisfy the CERCLA § 108(b) financial responsibility requirements if the Attorneys General or Insurance Commissioners of the State in which the guarantor is incorporated, and each State in which a facility covered by the guarantee is located have submitted a written statement to EPA that a guarantee executed as described in the regulations at §§ 320.44 and 320.50(f) is a legally valid and enforceable obligation in that State.

For non-US corporate guarantors a guarantee would be able to be used to satisfy the CERCLA § 108(b) financial responsibility requirements only if the Attorney General or Insurance commissioner of each state in which a facility covered by this guarantee is located and the state in which the guarantor corporation has its principal place of business has submitted a written statement to EPA that a guarantee executed as described in the regulations and §§ 320.44 and 320.50(f) is a legally valid and enforceable obligation in that State.

These requirements for written statements from state Attorneys General and Insurance Commissioners are similarly used in the RCRA Subtitle I Underground Storage Tank financial responsibility regulations and the RCRA Subtitle C third-party liability regulations. The reason for the requirements is that EPA is concerned that guarantors may be subject to states insurance laws.<sup>140</sup> State insurance regulation and law are by and large the purview of the states and thus the Agency does not believe it can state with certainty whether any particular guarantee would subject the guarantor to state insurance law, and whether it would be valid with respect to such law. Therefore, the Agency is today proposing that the responsibility would rest with the owner or operator to obtain the written statement from the relevant state Attorneys General and Insurance Commissioners stating that a guarantee as described and worded in the regulations would be valid and enforceable. EPA invites comments as to whether or not this requirement would be necessary or on alternative means by which the owner or operator could provide assurances to the Agency that the guarantee would be valid and enforceable.

<sup>140</sup> See, for example, *Liability Requirements for Hazardous Waste Facilities; Corporate Guarantee*, 52 FR 44314 @ 44316–44317; and *Standards Applicable to Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities; Liability Coverage* 53 FR 33938 @ 33942, September 1, 1988.

#### 6. Trust Fund (§ 320.45)

An owner or operator would be able to satisfy the proposed CERCLA § 108(b) financial responsibility requirements by establishing a trust fund in accordance with the proposed requirements including the proposed required wording. Funds transferred to the trust fund by the owners and operators or any letters of credit held by the trust would be held in the trust for the purpose of paying valid third-party CERCLA claims in certain circumstances identified in the trust agreement. In this way, the trust fund acts as a means of self-insurance whereby the owner and operator set aside funds to pay future claims which otherwise may not be satisfied at such a future date.

##### a. Submission of Trust Agreement and Trustee Eligibility (§ 320.45(a))

The owner or operator would be required to submit an originally signed duplicate of the trust agreement to the Administrator. This is a similar reporting requirement to those under EPA's RCRA Subtitle C financial assurance regulations and aids in the evaluation of compliance. The Agency does not anticipate this to be a significant burden to owners and operators. The trustee would be required to be an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or state agency. This requirement is the same as that under the RCRA Subtitle C financial assurance program, which EPA required in order to establish a minimal level of reliability and security for trustee institutions managing trust funds under the Agency's financial assurance regulations (see 46 FR 2824, January 12, 1981). EPA considered alternative qualifications for trust providers but is proposing to utilize those that EPA has found to work well under the RCRA Subtitle C program. In making this decision, EPA considered the impact on the potential number of trustees and the administrative burden on EPA of reviewing additional qualifications. For more information on the consideration of alternative provider qualifications, please see the background document on instrument provider qualifications.

##### b. Required Wording and Updates to Schedule A of Trust Agreement (§ 320.45(b))

The wording of the trust agreement would be required to be identical to the wording specified in § 320.50(a)(1), and the trust agreement would be required to be accompanied by a formal certification of acknowledgment (for

example, see § 320.50(a)(2)). As discussed in the introduction to Subpart C of the preamble "Available Financial Responsibility Instruments" EPA believes there are significant benefits to standardized wording. Namely, a standardized trust agreement reduces the administrative burden of reviewing the wide range of possible trust agreement wording that may otherwise be employed and ensures uniform integration with the Superfund program and enforcement of the CERCLA § 108(b) instruments nationwide. The trust agreement would be required to be accompanied by a formal certificate of acknowledgment. The language of the acknowledgment would be expected to vary by state to accommodate individual state requirements but the intent would be to ensure the validity and authenticity of the signatures on the trust agreement. This requirement exists for trust agreements in other EPA financial responsibility programs,<sup>141</sup> and adds to the legal standing and enforceability of the instrument.

Under the proposed regulations, Schedule A of the trust agreement, which would identify the facilities covered by the trust agreement and their EPA Identification Numbers, names, addresses, current owners and operators, and the current financial responsibility amount, or portions thereof, for which financial responsibility is being demonstrated by the trust agreement, would have to be updated within sixty days of a change in the amount of CERCLA § 108(b) financial responsibility at a facility covered by the agreement. Maintaining the accuracy of the information in Schedule A, including the current amount of CERCLA § 108(b) financial responsibility the trust fund is covering at each facility, would be important to ensure the trustee would have an accurate accounting of the value of CERCLA § 108(b) financial responsibility for each facility covered. This amount would serve as an upper bound for the value of payments made for valid third-party CERCLA claims associated with any given facility.

##### c. Payments Into the Trust (§ 320.45(c))

Payments by the owner or operator into the trust fund would be required so that the value of the trust fund would be at least as great as the required CERCLA § 108(b) financial responsibility amount. For existing facilities subject to this proposed rule, these payments would be made by the owner or operator in accordance with

<sup>141</sup> See, for example, 40 CFR 264.151(a)(2) and 280.103(b)(2).

the compliance schedule for the CERCLA § 108(b) financial responsibility regulations in proposed § 320.1. The trust fund would thus need to be fully funded within four years of the owner operator being subject to the regulations. In addition to payments, this requirement would also be able to be met by obtaining a letter of credit that conforms to the requirements of the proposal and is held by the trust. The four-year implementation window established by the statute and discussed earlier would thus serve as the trust fund's pay-in period.

EPA is aware that four years is shorter than the pay-in period provided by some EPA financial assurance programs. However, under the proposed regulations owners and operators would be allowed to use a combination of instruments to demonstrate the required CERCLA § 108(b) financial responsibility amount. Owners and operators would thus be able to simulate a longer trust fund pay-in period by combining the trust fund with another appropriate instrument. The trust fund could be funded over a longer period of time with the unfunded portion of the trust provided by a separate instrument. EPA believes this would help relieve any burdens that may be encountered because of the relatively short pay-in period required by the statute.

For new facilities, owners and operators would also be required to make payments into the trust fund so that the value of the trust fund is at least as great as the required CERCLA § 108(b) financial responsibility amount. However, in these cases there would not be a pay-in period as is provided for existing facilities by the four-year implementation period in the statute. For this first CERCLA § 108(b) rule, EPA expects that new hardrock mining facilities would likely have lower financial responsibility amounts as their footprint would be smaller initially and then grow over time, obviating the need for a pay-in period. EPA requests comment on the need for a pay in period for new facilities. EPA is specifically interested in comments as to the appropriate length of a pay-in period that could be provided for new facilities.

#### d. Language of the Trust Agreement (§ 320.50(a))

In developing required trust agreement language for this proposed rule, EPA first looked to the trust agreement language used in the RCRA Subtitle C financial assurance program. The basic terms and conditions of the RCRA Subtitle C trust agreement were defined by EPA in close consultation

with trust experts at the American Banking Association and legal practitioners in the late 1970s and early 1980s. Additionally, the trust agreement was published for public comment multiple times. The required wordings of the RCRA trust agreements have served as templates adopted by other financial responsibility programs, both within EPA and across many States. This proposal includes proposed trust agreement language primarily modified to suit the needs of the proposed CERCLA § 108(b) financial responsibility program. The most significant aspects of the proposed trust agreement are discussed in following sections. Please also see the background document "Potential Requirements for Insurance, Surety Bonds, Letters of Credit and Trust Agreements and Standby Trust Agreements under CERCLA § 108(b)" that discusses potential instrument specifications and alternatives considered for more information on the proposed trust agreement specifications.

#### e. Specification of Beneficiary of the Trust Agreement

The proposed trust agreement language specifies that the trust fund is established for the benefit of any and all parties with valid third-party CERCLA claims against the grantor or other current owners and operators arising from the operation of the facilities covered by the agreement. EPA elected to propose such a beneficiary specification as the Agency believes it provides adequate flexibility to accommodate the various payment scenarios envisioned by the trust agreement and the CERCLA § 108(b) regulations. The RCRA Subtitle C closure post-closure trust agreement specifies EPA as beneficiary. However, due to the potential for multiple claimants including, but not limited to, EPA, the Agency considered such an arrangement sub-optimal. In such an arrangement, EPA would need to review all claims and assess the merits of the claims and direct payment from the trust fund accordingly. As discussed earlier in the letter of credit section, there are several draw backs to EPA administering the claims process. These draw backs include the redirection of Superfund resources to claims administration activities and away from cleanups or other programmatic priorities, frustrating the intent of the direct action provision and the potential for EPA to be in the awkward position of administering a claims process in which it is a potential claimant.

As a result, EPA elected a variation of the beneficiary specification employed

in the RCRA Subtitle C third-party liability program that identifies "any and all third parties injured or damaged by [sudden and/or non-sudden] accidental occurrences arising from operation of the facility(ies) covered by" the trust agreement as beneficiaries. EPA believes that the proposed beneficiary specification provides adequate flexibility in that parties that obtain final court judgments or have other valid third-party CERCLA claims against one of the current owners or operators for CERCLA response costs, health assessment costs, or natural resource damages associated with the facility could make a claim without having to be specifically named in the trust agreement (see discussion of claims against the trust fund in following sections). At the same time, EPA intends that the beneficiary language combined with the payment instructions in the trust agreement will provide adequate clarity to trustees as to when to make payment from the trust fund. The EPA requests comments on the proposed specification of the beneficiary of the CERCLA § 108(b) trust agreement.

#### f. Claims Against the Trust Fund

Claims against the trust fund could be made by parties with valid third-party claims for CERCLA response costs, health assessment costs, and/or natural resource damages against one of the current owners or operators at the facility.

Under the proposed regulations, the trust would be available to claimants that obtain a final court judgment from a Federal court against any of the current owners or operators at the facility awarding CERCLA response costs, health assessment costs, and/or natural resource damages associated with the facility should payment not occur as required by the judgment within thirty days. Under the proposed terms of the trust, the claimant would need to present the valid final court judgment to the trustee. The judgment would have to be dated at least thirty days earlier and be accompanied by an additional signed statement from the claimant certifying that the amounts had not been recovered or paid from any other source, including, but not limited to, the owner operator, insurance, judgments, agreements, and other financial responsibility instruments. The two proposed documentary requirements are being proposed with the intent of ensuring that a court has awarded such payment of CERCLA response costs, health assessment costs, and/or natural resource damages, the owner operator had thirty days to make

payment himself and that the claimant is not attempting to be paid twice for the same claim. Based on discussions with representatives of trust institutions, EPA believes that a final court judgment would be a documentary payment condition acceptable to potential trustees. The representatives expressed comfort in the concept of a court having ordered payment and a desire for minimal due diligence to be required on the part of the trustee.

Under the proposed regulations, the trust would also provide for payment as required in a CERCLA settlement associated with the facility between a current owner operator and the EPA or another Federal agency if payment had not been made. In this scenario, to make a claim, the Administrator or other Federal agency would have to present two documents: (1) A written signed statement requesting payment from the trust fund on the grounds that payment had not been made as required by a CERCLA settlement associated with the facility and with any of the current owners or operators; and (2) a signed statement certifying that the amounts had not been recovered or paid from any other source, including, but not limited to, the owner operator, insurance, judgments, agreements, and other financial responsibility instruments.

Finally, under the proposed regulations, the trust fund would also be available to pay into a trust fund established pursuant to a CERCLA unilateral administrative order issued to a current owner or operator by EPA or another Federal agency in the event performance at the facility did not occur as required by the order. The Administrator or other Federal agency would only make such a claim if the owner or operator had provided written consent for the financial responsibility instrument to assure the obligations under the administrative order.

In this scenario, to make a claim, the Administrator or other Federal agency would have to present two documents: (1) A written signed statement requesting payment from the trust fund into a trust fund established pursuant to a CERCLA unilateral administrative order on the grounds that performance at the facility had not occurred as required by a CERCLA administrative order issued to a current owner or operator; and (2) A signed statement certifying that the amounts had not been recovered or paid from any other source, including, but not limited to, the owners or operators, insurance, judgments, agreements, and other financial responsibility instruments.

EPA selected these straightforward certifications as documentary payment

conditions because EPA believes that in the instances when the potential claimants are limited to Federal government agencies a more streamlined payment condition is optimal to limit the administrative burden on the trustee. This is a similar documentary payment condition to that proposed for the letter of credit issued in favor of any and all third-party CERCLA claimants and the surety bond. EPA considered alternative documentary requirements for the claims scenarios limited to Federal claimants but did not believe they added additional benefit and may burden the trustee with additional administrative expenses. For example, the proposed trust agreement could specify the presentation of the CERCLA settlement itself as a requirement for making a claim but the benefits of such a requirement were unclear to EPA. EPA believes that the requirement of signed statements from the Administrator or another Federal agency acting pursuant to delegated CERCLA authority is a clear documentary condition and will require minimal due diligence on the part of trustees. EPA requests comment on the proposed documentary requirements for making a claim against a CERCLA § 108(b) trust fund.

#### g. Direct Action Claims Against the Trust Fund

In addition to the three payment scenarios, like all CERCLA § 108(b) financial responsibility instruments, the direct action provision in CERCLA § 108(c)(2) could come into play at facilities where a trust fund is the financial responsibility instrument. EPA is proposing trust agreement language that acknowledges that cause of action in the trust agreement itself.

In discussions with representatives of the trust industry, representatives expressed some concern about the direct action provision. Specifically, representatives suggested that interpreting “guarantor” as defined in CERCLA §§ 101(13) and 108(c)(2) to include a trustee of a CERCLA § 108(b) trust fund would greatly reduce the willingness of trust institutions to offer such services. EPA believes that in the CERCLA § 108(b) context, whereby a trust fund is funded by the owner or operator for the purposes of satisfying future valid third-party CERCLA claims, such an interpretation would be inappropriate. The trustee is simply providing administrative and fiduciary services over the funds set aside by the owner or operator and is not providing the instrument itself. EPA believes a more appropriate reading is that the trust fund itself is the guarantor as it

provides for the funds set aside by the owner or operator to be available to third-parties with valid CERCLA claims.

As a result, the proposed trust agreement language expressly provides that in the case of a release or threatened release of (a) hazardous substance(s) from a facility covered by the agreement, any claim authorized by §§ 107 or 111 of CERCLA could be asserted directly against the trust fund as provided by CERCLA § 108(c)(2) subject to the limitations in CERCLA § 108(d). The proposed language of the agreement goes on to state that the trust fund shall be entitled to all rights and defenses provided to guarantors by CERCLA § 108(c) and that the trust fund itself is available for paying and defending claims in those instances.

Further, the proposed trust agreement language further clarifies the intent of the trust agreement with respect to direct action under section 3 of the agreement that deals with establishment of the fund. The relevant proposed wording in section 3 states that “The Grantor and Trustee do not intend for the Trustee to qualify as a “guarantor” as that term is used in CERCLA §§ 101(13) and 108(c)(2), and therefore intend that the Trustee will not be subject to a direct action by Trustee’s agreement to act as Trustee for the Fund. The Grantor and Trustee intend for the Fund to qualify as a “guarantor” as that term is used in CERCLA §§ 101(13) and 108(c)(2), and therefore intend that only the Fund will be subject to any direct action brought pursuant to CERCLA § 108(c)(2).”

EPA believes that clearly specifying the Agency’s intent that the trust fund itself, not the trustee, be the subject of any direct actions is optimal. Such an approach is more consistent with the role the two entities serve and does not suggest that trust institutions would be put in the unfamiliar and potentially unwelcome position of being sued under CERCLA. The downside to this arrangement is that the trust fund could incur significant legal expenses under a direct action scenario that may reduce the value of the trust fund available to make payment for valid third-party CERCLA claims. EPA has proposed to specify that trust expenses generally be paid by the owner operator that established the trust fund (the grantor) to reduce the impact of trustee expenses on the value of the financial responsibility. However, by its very nature, in a direct action scenario, the owner operator is unlikely to be available or able to pay such expenses and thus such expenses may be paid from the trust fund itself. This is a limitation of the proposed arrangement

that EPA requests comment on. Specifically, EPA is interested in provisions that could help effectuate the direct action provision in CERCLA § 108(c)(2) that may ameliorate the concern of trustee expenses significantly reducing the value of the trust fund.

#### h. Payment of CERCLA Claims

The proposed trust agreement language also provides additional direction to the trustee with respect to when and how claims should be satisfied from the trust fund. Specifically, the proposed trust agreement specifies that claims be paid on a first come first serve basis. Additionally, the proposed trust agreement language also clarifies that in the event of simultaneous valid claims that exceed the value of the fund, the trustee would pay the claimants a pro rata share of their claim determined by the size of each valid claim. This language was included to reduce the potential uncertainty and ambiguity a trustee may face in the event multiple claims against the trust fund occur that exceed the value of the fund. Finally, the proposed language of the trust agreement specifies that payments for a claim should not exceed the value of the CERCLA § 108(b) financial responsibility for that facility provided by the trust fund which would be identified and updated in schedule A. The language is intended to provide added clarity that, if the trust agreement covers multiple facilities, claims against the fund associated with one facility should not exceed the value of the CERCLA § 108(b) financial responsibility for that facility provided by the trust fund. EPA believes that such facility-specific sub-limits are important to the extent multiple facilities are covered by one trust agreement as other current owners and operators at the facilities, in addition to the grantor, may have all contributed funds but may not be owner operators at all the facilities covered by the agreement.

Ambiguity in instances where a trustee may have to decide how much and if to make payment was a concern EPA heard from representatives of the banking community. EPA intends the proposed trust agreement language to reduce such uncertainty, but requests comment as to other language or specifications that might provide added clarity and provide trustees greater certainty.

#### i. Provisions Authorizing Trustee To Hold and Draw on Letter of Credit

As discussed in the letter of credit section of the preamble, this proposed

trust agreement expressly authorizes and anticipates that a trustee may hold a CERCLA § 108(b) letter of credit for the purposes of drawing on the letter of credit to make payments to third-parties with valid CERCLA claims as provided by the trust agreement. EPA has included language in whereas clauses, section 4 of the trust dealing with payment from the fund, section 5 dealing with payments comprising the fund, section 6 dealing with trustee management, section 8 dealing with the express powers of the trustee, and section 10 dealing with annual valuations providing for and accounting for this possible role of the trustee. The intent of the language is to ensure that a trustee will be able to hold, account for, and draw upon, as necessary, a CERCLA § 108(b) letter of credit issued in favor of the trustee. As discussed in the letter of credit section, EPA believes this a worthwhile feature to propose based on input from members of the banking community that suggested a trustee may be better suited to manage the CERCLA § 108(b) claims process than an institution issuing a letter of credit. EPA requests comments on other provisions that could be included in the trust agreement that may provide further clarity of the trustee's ability to hold and draw on the letter of credit as provided for in the terms of the trust agreement.

In addition to the trust providing the trustee the authority to draw on the letter of credit to satisfy valid third-party CERCLA claims brought to the trust fund, under the proposed trust agreement, the trustee would also have the responsibility to draw on the letter of credit in order to maintain continuity of coverage. Specifically, the proposed trust agreement language provides that in the event of receipt of a notice of a decision not to extend the letter of credit from an institution issuing a letter of credit held by the trust fund, the trustee shall draw on the letter of credit and deposit any unused portion of the credit into the trust fund if the Administrator informs the Trustee that the owner operator did not establish alternate financial responsibility and obtain written approval of such alternate financial responsibility from the Administrator within the time frame provided by the regulations. The trust agreement would specify that this draw must occur prior to the expiration of the letter of credit. EPA believes this a necessary provision as in the case of a letter of credit issued in favor of a CERCLA § 108(b) trust fund trustee, EPA would not be authorized to draw on the letter of credit. EPA requests comment

on this proposed trust agreement language.

#### j. Trustee Management

In specifying the trustee's responsibilities with respect to trust management, EPA looked to the "prudent investor" standard which has become prevalent in trust law and practice. Specifically, the proposed language of the trust agreement reads as follows: "In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge its duties with respect to the trust fund with undivided loyalty and solely in the interest of the beneficiaries and with the reasonable care, skill, and caution of a prudent investor, in light of the purposes, terms, distribution requirements, and other circumstances of the trust." However, while EPA is proposing the prudent investor rule form the basis of the instruction to the trustee, the Agency is proposing a modified prudent investor standard. Specifically, the proposed trust agreement language would prohibit the trustee from acquiring or holding securities or other obligations of the grantor, or any other current owner or operator of the facilities, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, Title 15 U.S.C. 80a-2(a) unless they are securities or other obligations of the Federal or a state government. This provision is similar to language used in other EPA financial assurance programs including the RCRA Subtitle C Closure Post-closure and third-party liability programs. The intent of the modification to the prudent investor rule is to restrict investments in assets whose performance may be correlated with the financial performance of the owners and operators at the facility. A further proposed modification to the prudent investor standard employed in the proposed trust agreement is an explicit authorization that the trustee may hold and draw upon standby letters of credit as specified in 40 CFR 320.40. EPA intends for the trustee management instructions in the trust agreement be consistent with current trust practice and requests comment on the proposed trustee management language in the trust agreement.

#### k. Refunds to the Grantor

The proposed language of the trust agreement also includes a provision that if notified by the Administrator that the trust fund contains amounts in excess of the required CERCLA 108(b) financial responsibility amount, the trustee shall refund to the grantor such amounts in excess of the CERCLA § 108(b) financial

responsibility amount covered by the trust fund. A similar provision was used in the RCRA Subtitle C Closure and Post-Closure trust agreement. EPA believes this provision is necessary to allow for excess funds in the trust agreement to be released back to the owner operator. EPA envisions that such a scenario could arise either due to growth of the value of the trust fund, the owner operator substituting alternate financial responsibility for some portion of the trust fund, or as a result of a downward adjustment in the required amount of CERCLA § 108(b) financial responsibility. EPA believes that providing for the possibility of a release of funds from the trust fund that did not necessitate the termination of the trust agreement was advantageous.

#### 1. Termination of the Trust (§ 320.45(i))

The Administrator would agree to the termination of the trust when the owner or operator substituted alternate financial assurance as specified in the regulations or the Administrator released the owner or operator from the requirements of these regulations in accordance with the proposed release provisions. As the proposed trust is irrevocable,<sup>142</sup> termination of the trust would necessarily require the approval of the Administrator. The trust agreement itself specifies that the trust shall be irrevocable and shall continue until terminated at the written agreement of the trustee, the grantor, and the Administrator or by the Trustee and the Administrator, if the Grantor ceases to exist. The irrevocability of trust agreements is a common requirement in financial responsibility programs and ensures that the trust fund will not unilaterally be terminated and will be available to satisfy third-party CERCLA claims when necessary.

#### 7. Issuer Cancellation Provisions

One similar feature across many of the instruments (surety bond, insurance, letter of credit and corporate guarantee, if allowed) in this proposal are cancellation provisions that include the potential requirement for the instrument provider to fund a standby trust (or in the case of a corporate guarantor, if a corporate guarantee is ultimately provided for, obtain alternate financial responsibility in the name of the owner operator). For the specifics related to cancellation for each instrument please see the instrument specific preamble discussions earlier in this preamble.

In each of the scenarios governing insurance, surety bond, letter of credit and guarantee cancellation, the proposal specifies that the issuer would be liable for the value of the instrument in the event the owner or operator failed to obtain alternate financial responsibility and obtain the Administrator's written approval of the financial responsibility provided within ninety days after receipt of a notice of cancellation from the issuer by the relevant parties. In the case of insurance, letter of credit or surety bond, the issuer would be liable to fund the accompanying standby trust to the value of the instrument. In the instance of a guarantee, if allowed, the guarantor would be required to provide alternate financial responsibility, in accordance with the regulatory requirements, in the name of the owner or operator.

Such cancellation provisions are very similar to provisions in other EPA financial assurance programs for letters of credit, surety bonds and corporate guarantees. EPA is proposing such cancellation provisions to ensure continuity of financial responsibility coverage and provide assurance that funds will be available to EPA and other third party claimants when necessary to pay for CERCLA response costs, health assessment costs, and natural resource damages incurred by claimants while limiting the implementation burden on EPA.

EPA acknowledges that such a provision may impact providers' appetite to issue instruments in particular for insurance, where there is not past precedent in EPA financial assurance programs of a requirement for the insurer to fund a standby trust. EPA did consider alternatives that may reduce the likelihood the instrument provider would need to make payment and thus may provide greater flexibility but, for the reasons provided in subsequent preamble discussion, believes this proposed approach is the best option available.

One possible alternative would be to specify issuer liability to fund a standby trust only after notice of cancellation by the provider if the owner or operator does not obtain alternate financial responsibility and obtain written approval of such alternate financial responsibility from the Administrator within ninety days after receipt by both the owner or operator and the Administrator of the notice and some additional triggering event had occurred. For example, additional conditions necessary to trigger issuer payment into a trust fund could include bankruptcy of the owner or operator, abandonment of the facility, and/or the

issuance of a CERCLA notice letter. These are all indications of potential higher risk at the facility and a potential more imminent need for the financial responsibility. However, EPA is concerned that such criteria alone may not provide adequate assurance funds will be available when necessary to pay valid third-party CERCLA claims. Facilities owned or operated by non-bankrupt companies and non-abandoned facilities can present risks and require Superfund actions or create natural resource damages for which the owner operator may not be able to pay. Further, EPA was told by potential providers of CERCLA § 108(b) instruments that the credit profile of the owner or operator is an important consideration of theirs. If cancellation occurred when the owner operator was in marked financial decline, the facility may end up abandoned and the company bankrupt before alternate financial responsibility could be obtained, highlighting the risk of allowing cancellation of the financial responsibility instrument in a wide range of scenarios without a requirement to fund a standby trust. The inclusion of a CERCLA notice letter as another condition that would trigger issuer responsibility to fund a standby trust would provide some added assurance. However, this would potentially require EPA to perform a preliminary assessment/site investigation to assess the site which in many cases would not be possible in the 120-day notice of cancellation period. As EPA is not necessarily the primary regulator or permitting authority at these facilities, EPA may not have the same level of understanding of the conditions and risks at the facilities as it does in other EPA financial assurance programs. Beyond just practical timing and feasibility concerns, such an approach would raise serious resource concerns for the Superfund program. Such a provision may require the Superfund program to shift its resources from its priority sites to facilities where financial responsibility maintenance was in question. If EPA did not or could not take action to investigate the facility's condition to determine whether a notice letter should be issued, financial responsibility coverage could lapse in a broader range of circumstances that may ultimately be optimal and financial responsibility may not be available if a CERCLA action was necessary.

EPA also considered a notification of a release of a hazardous substance at the facility to the National Response Center as required under CERCLA § 103(a) as a

<sup>142</sup> An irrevocable trust agreement may not be revoked or amended without the agreement of key parties to the instrument.



possible additional condition that could be proposed as a trigger for issuer liability to fund a standby trust in the instances of an issuer sending notice of cancellation and the owner operator's failure to obtain replacement financial responsibility. However, such a notice would be limited to only releases. The proposed CERCLA § 108(b) financial responsibility program intends to cover CERCLA liabilities as defined in CERCLA § 107 which is much broader than just costs associated with responding to releases. For example, response costs may also be incurred by reacting to a threat of a release which would not be accounted for in the notice of a release and may almost universally exist at facilities regulated under CERCLA § 108(b). Further, such a provision may create a perverse incentive to not report releases in order to avoid triggering issuer liability and any costs to the owner operator that may result from payment from the instrument. In light of these considerations, and with the desire not to skew Superfund priorities while also providing strong assurance that funds would be available when necessary to pay valid third-party CERCLA claims, EPA is not proposing such a nuanced payment requirement into a standby trust. By proposing that the issuer be liable for the owner operator's obtaining alternate financial responsibility in all instances, EPA recognizes that it is erring on the side of caution with the intent of not creating additional administrative burden on EPA while providing a high level of assurance that funds would be available when necessary to pay valid third-party CERCLA claims.

EPA requests comment, however, on any additional criteria (e.g. bankruptcy, abandonment of the facility), for requiring the issuer to fund the standby trust beyond the requirements previously discussed—the owner operator does not obtain alternate financial responsibility; and obtain written approval of such alternate financial responsibility from the Administrator within ninety days after receipt by both the owner or operator and the Administrator of the notice. EPA is interested in whether such additional criteria may be optimal for certain instruments, despite reducing the level of assurance provided that financial responsibility will be available to pay valid third-party CERCLA claims. Further, EPA is interested in other objective, readily identifiable supplemental criteria that EPA could include if such an option was ultimately pursued.

Another option EPA considered to address the potential lapse in coverage that may result from the issuer of a financial responsibility instrument cancelling the instrument is to specify non-cancellation triggering events. Under such an option, cancellation of the instrument could not occur after notice of cancellation by the provider if: (1) The owner operator does not obtain alternate financial responsibility and obtain written approval of such alternate financial responsibility from the Administrator within ninety days after receipt by both the owner or operator and the Administrator of the notice of cancellation, and (2) some additional triggering event had occurred. A further refinement to such an option would be to also restrict the scenarios in which cancellation can occur. EPA's RCRA Subtitle C closure and post-closure insurance regulations offer an example. Those regulations do not require the establishment of a standby trust alongside insurance. Rather, the provider is only permitted to cancel the policy in instances where the owner and operator failed to pay the premium and the provider gave at least 120 days advance notice. Further, cancellation, termination or failure to renew the policy may not occur in the event of one of several "triggering events." Specifically, the RCRA Subtitle C closure insurance regulations state that cancellation, termination, or failure to renew may not occur and the policy will remain in full force and effect in the event that on or before the date of expiration: (1) The Administrator deems the facility abandoned; (2) the permit is terminated or revoked or a new permit is denied; (3) closure is ordered by the Administrator or a U.S. district court or other Federal court; (4) the owner or operator is named as debtor in a voluntary or involuntary proceeding under Title 11 U.S.C (Bankruptcy); or (5) the premium due is paid.<sup>143</sup>

Such a series of non-cancellation provision was one alternative to a requirement to fund a standby trust that EPA considered. Such an option could potentially be used for all instruments. However, the non-cancellation triggering events used in the RCRA Subtitle C closure post-closure would not all be applicable in the instance of the proposed CERCLA § 108(b) financial responsibility program which does not compliment a broader permitting program. For example, two of the triggering events (the termination, revocation or denial of a permit and the Administrator ordering closure) are not applicable here as EPA does not have

permitting authority over these facilities.

Additional triggering events similar to those identified (e.g. issuance of a CERCLA notice letter, notification of a release at the facility) could bolster such a provision to lower the likelihood that financial responsibility was not available when needed to pay valid third-party CERCLA claims. However, these supplemental criteria would present the same limitations, implementation challenges and resource issues as they would in the option where they would be additional triggers for issuer liability to fund a trust fund. Moreover, EPA was also concerned that such an arrangement may lead to scenarios whereby instruments may need to remain in effect and non-cancellable for many years. For example, it could take several years before a claimant could obtain a judgment for CERCLA response costs, health assessment costs, and/or natural resource damages that may prompt a claim against the instrument. Based on conversations with instrument providers, EPA believes multi-year non-cancellation periods would likely be unpalatable to instrument providers. This concern is substantiated by past EPA experience. In the development of the RCRA Subtitle C closure and post-closure financial assurance programs EPA proposed that instruments would not be able to be terminated when a compliance procedure was pending. Specifically, after notice of intent to cancel or terminate an instrument was sent by the issuer, EPA would issue a compliance order requiring the owner operator to obtain alternate financial assurance. EPA would have been able to draw on the instrument to fund a standby trust had the owner operator not complied with the order. In the interim, the instrument would be non-cancellable as a result of the pending compliance proceeding and thus a lapse in financial assurance coverage would have been avoided.<sup>144</sup> However, such proposal was met with dissatisfaction from issuers of letters of credit and surety bonds. Institutions that issue letters of credit commented that non-cancellation provisions would preclude a defined date on which the letter of credit could expire—an important feature of letters of credit. Sureties noted that such an arrangement did not provide them adequate opportunity to limit their risk. As a result, the RCRA Subtitle C closure post-closure financial assurance regulations include a 120 days' notice period of the intent to cancel or fail to extend a surety bond or

<sup>143</sup> See 40 CFR 264.143(e)(8).

<sup>144</sup> See 46 FR 2822–2823 January 12, 1981.

letter of credit during the last thirty days of which the instrument provider would be liable if the owner operator did not obtain alternate financial assurance. Such a provision is what is being proposed today for surety bonds, letters of credit and insurance.

Nevertheless, EPA requests comments on the option to specify non-cancellation triggering events and provisions that could eliminate the need for providers to fund a standby trust after a notice of intent to cancel the instrument. Specifically, commenters are asked to identify appropriate non-cancellation triggers, how instrument providers may react to the prospect of protracted periods of non-cancellation and whether such an arrangement may be appropriate for some mechanisms but not others.

EPA also considered an option whereby after the 120-day notice of cancellation period, issuers would face no potential liability and the instrument would be terminated regardless of whether the owner or operator provided alternate financial responsibility and obtained the Administrator's approval of the financial responsibility. This option has the advantage of possibly being the most palatable to instrument providers; however, it was not proposed for a variety of reasons. In particular, it provides the least assurance that funds would be available when necessary to pay CERCLA claimants. EPA believes the incentive to cancel, terminate, fail to renew or extend the coverage may be greatest in times when the facilities may present the greatest need for the instrument (e.g. the owner operator is experiencing financial decline, after a release of hazardous substances) and thus coverage may be lost precisely when it is most needed. Moreover, this concern is elevated in the case of CERCLA § 108(b) which may require the cost recovery process to run its course before a claim could be made against an instrument.

With all of these considerations in mind, EPA has decided to propose that the instruments would require a 120 day notice of cancellation, termination, failure to extend or failure to renew and that the issuer would become liable for the value of the instrument if the owner operator does not obtain alternate financial responsibility and obtain written approval of such alternate financial responsibility from the Administrator within ninety days after receipt by both the owner or operator and the Administrator of the notice. The proposed approach provides strong assurance that funds will be available when necessary to pay CERCLA claims and limits the extent to which

Superfund resources are shifted from conducting cleanups to administering the proposed financial responsibility program. This approach also has the virtue of ensuring a trust fund is available to hold financial responsibility funds at each facility if necessary after facility closure or the owner operator no longer exists. EPA recognizes that a trust fund is unique when compared to third-party mechanisms such as surety bonds, letters of credit or insurance in that ongoing payments from the owner or operator are not necessary if funded adequately upfront. Depending on the duration of risk at a given facility, financial responsibility may need to remain in place long after the owner or operator ceases to exist. The proposed arrangement whereby if the owner or operator does not provide alternate financial responsibility in instances of cancellation of the instrument a trust is funded, ensures financial responsibility can remain in place for the long term.

However, EPA acknowledges that under this construction there would be instances where issuers would be required to make payment into a standby trust at facilities where a CERCLA claim may never arise. EPA requests comments on these provisions of the proposal. Furthermore, EPA requests comment on whether a hybrid of the options may be most appropriate whereby for one instrument one option be employed, and for another instrument a different option might be employed.

#### 8. Use of Multiple Financial Responsibility Instruments (§ 320.46)

An owner or operator would be able to satisfy the requirements of this section by establishing more than one financial instrument per facility. The instruments would be required to meet the regulatory specifications applicable to each instrument except that it would be the combination of instruments, rather than the single instrument, which would have to demonstrate financial responsibility for an amount at least equal to the required amount of CERCLA § 108(b) financial responsibility. If an owner or operator were to use a trust fund in combination with a surety bond, letter of credit or insurance policy, including a trust fund holding a letter of credit, the owner or operator would be able to use the trust fund as the standby trust fund for the other instruments. Should the owner or operator obtain a letter of credit issued in the favor of a trust fund trustee in combination with a surety bond or insurance policy, the owner or operator would be able to use the trust fund holding the letter of credit as the

standby trust fund for the other mechanisms. A single standby trust fund could be established for two or more instruments. A claimant would be able to elect against which instrument used to provide evidence of financial responsibility to make a claim for CERCLA response costs, health assessment costs, and/or natural resource damages. In this way, there would not be 'primary' or 'excess' instruments where the ability to draw on one instrument may be predicated on the exhaustion of another. EPA is electing to provide for multiple instruments in this fashion as the Agency believes it will be significantly less administratively cumbersome and will make implementation of the claims process easier.

#### 9. Use of a Financial Instrument for Multiple Facilities (§ 320.47)

An owner or operator would be able to use a financial responsibility instrument specified in this section to meet the requirements of this section for more than one facility. Evidence of financial responsibility submitted to the Administrator must include, for each facility, the EPA Identification Number, name, address, and the amount of funds for CERCLA § 108(b) financial responsibility assured by the instrument. If the facilities covered by the instrument are in more than one Region, identical evidence of financial assurance would be required to be submitted to and maintained with the regional delegees of the Administrator, as applicable, of all such Regions. The amount of funds available through the instrument would be required to be no less than the sum of funds that would be available if a separate instrument had been established and maintained for each facility. EPA is proposing this as it may provide for some administrative ease in the compliance and implementation process.

This is also provided for in RCRA Subtitle C closure and post-closure financial assurance program. However, in the proposed CERCLA § 108(b) financial responsibility program there is a much wider range of potential parties that may make a claim against an instrument than in the Subtitle C program. Therefore, the instruments proposed today are intended to have clear facility-specific sub-limits. Maintaining the accuracy of the facility-specific sub-limits is important as the consolidated form provision in CERCLA § 108(b)(4) provides that multiple owners and operators may obtain an instrument together while only one may be a common owner or operator at each facility covered by the instrument.

Ensuring the accuracy of the amount of coverage an instrument provides at each facility may occasion additional burden on the regulated community and on EPA. For example, EPA is proposing that schedule A of the trust agreement that identifies the facilities and amounts covered by the trust agreement, be updated within sixty days of a change in the information, even if the trust is not currently funded. EPA believes such a provision is necessary as the trust may ultimately be funded when the grantor of the trust is not around and such information should be as current as possible. However, EPA believes that such additional burden will likely be offset by the burden reduction provided by using one mechanism across facilities.

One final consideration is whether the inclusion of facility specific sub-limits might affect instrument providers' willingness to provide instruments. EPA believes that the added clarity and clear delineation of a provider's potential liability at any given facility combined with the lower administrative burden of preparing only one instrument would be a welcome specification. However, EPA could envision a scenario where a provider found issuing multiple instruments cleaner and easier than maintaining an accounting of the sub-limits within an instrument. For example, the proposed wording of the letter of credit would require the identification of the amount of financial responsibility at each facility covered by the credit. EPA, in past Agency rulemakings had proposed including such information in the letter of credit but was informed by commenters that such information typically would not be included in a letter of credit. As, in that case, the information could be included in a separate letter from the owner operator, EPA decided not to require the inclusion of facility specific amount in the letter of credit itself (See 47 FR 15042 April 7, 1982). However, as the Administrator will not be directing payments from CERCLA § 108(b) instruments such information would need to be included in the instrument were a letter of credit to cover multiple facilities.

The proposed instruments do not require that multiple facilities be covered and thus EPA believes and intended that they provide flexibility for regulated entities and instrument providers to identify the most efficient arrangement. EPA requests comment on the proposed allowance for mechanisms to cover multiple facilities. Specifically, EPA is interested in hearing if there are alternative means of specifying facility-

specific sub-limits that may have certain advantages.

#### 10. Consolidated Form and Multiple Owners and/or Operators (§ 320.48)

EPA had to consider how best to implement the provision for multiple owners or operators at a facility in CERCLA § 108(b)(4). The provision provides guidance on how a financial responsibility instrument could provide financial responsibility for the CERCLA response costs, health assessment costs, and/or natural resource damages of all the current owners and operators of the facility in instances where there is not one single owner and operator. Under the proposal, where a facility is owned and/or operated by more than one person, evidence of financial responsibility covering the facility may be established and maintained by one of the owners or operators, or, in consolidated form, by or on behalf of two or more owners or operators. In practice, the instruments would follow the same form regardless of whether one of the owners or operators establishes a single instrument at the facility, whether multiple owners or operators establish a single instrument at the facility, or whether multiple owners or operators establish one or more instruments at the facility. EPA believes the flexibility in establishing financial responsibility at a facility when there are multiple owner operators is important as each arrangement may lend itself best to certain instruments. For example, EPA understands that sureties and banks issuing letters of credit have strong preference for one party obtaining the instrument. In discussions with the surety community, EPA learned that the surety typically interacts and has a surety relationship with one party at a facility and thus prefer one principal on the bond. While the bond would cover the valid CERCLA claims associated with all current owners and operators at the facility, only one principal need be listed. Representatives from the banking community also expressed a preference for one applicant per letter of credit on whom the lending institution would perform its credit assessment. Similar to the bond, the credit will cover the CERCLA response costs, health assessment costs, and/or natural resource damages associated with all current owners and operators at the facility. On the other hand, EPA understands that with insurance a multiple insured arrangement is more common and may be required for the policy to cover claims against all the parties at the facility. In that case, EPA anticipates additional insureds may be

listed on the policy. In this way, EPA proposes to implement the rule in a way that is consistent with both CERCLA's liability scheme and with commercial practice.

When evidence of financial responsibility is established in a consolidated form, the proportional share of the cost of demonstrating the financial responsibility for each participant would have to be shown in a separate letter submitted to the Administrator. This provision will require the owners and operators to plan out and apportion the responsibility of obtaining and maintaining the instrument up front which EPA believes may help reduce the likelihood of an instrument obtained by multiple parties lapsing due to failure to pay any premiums or fees required by the instrument provider.

In either scenario, the evidence of financial responsibility would have to be accompanied by a statement authorizing the owner or operator submitting the evidence of financial responsibility to act for and on behalf of each participant in submitting and maintaining the evidence of financial responsibility. It is worth noting that all of the current owners and operators at the facility would still be responsible for ensuring financial responsibility at the facility is obtained and maintained in accordance with the regulations. EPA would thus retain enforcement authority for the regulations against all of the current owners and operators.

#### *E. Subpart H—Requirements Applicable to Hardrock Mining Facilities*

##### 1. Universe of Hardrock Mining Facilities Covered by the Rule (§ 320.60)

###### a. Applicability of the Rule

The Agency is proposing that the classes of facilities within the hardrock mining industry that are identified in § 320.60 be subject to this rule. The classes of facilities that EPA is proposing for regulation are the classes of facilities that were identified in the 2009 *Priority Notice* with the exception of four classes determined by the Agency to present a lower level of risk of injury than the remainder of the classes identified in the notice, if they meet certain conditions. The classes EPA is proposing not to include in the rule are: (1) Mines conducting only placer mining activities as defined in § 320.62, (2) mines conducting only exploration activities as defined in § 320.62, (3) surface mines with a disturbance as defined in § 320.62 of less than five acres not located within a mile of mine disturbance that occurred in the prior ten-year period that do not

employ hazardous substances in their processes; and (4) mineral processors as defined in § 320.62 with less than five acres of surface impoundment and waste pile disturbance. Owners or operators of facilities that conduct only these limited activities would not be required to comply with the requirements of Part 320.

#### b. Universe Development

##### (1) Identification of Classes of Facilities Within the Hardrock Mining Universe for Rule Development

In the 2009 *Priority Notice*, EPA identified classes of facilities within the hardrock mining industry as those for which the Agency would first develop CERCLA § 108(b) regulations. EPA stated, for purposes of the notice, that hardrock mining facilities include those which extract, beneficiate and process metals (e.g., copper, gold, iron, lead, magnesium, molybdenum, silver, uranium, zinc) and non-metallic, non-fuel minerals (e.g., asbestos, phosphate rock, sulfur). The Agency also noted that it was not identifying non-hardrock mineral mines, such as sand, gravel, limestone, and stone; oil, oil shale or gas operations; or the mining and preparation of coal as priority classes of facilities.<sup>145</sup> In the 2009 *Priority Notice*, EPA stated it would inform its selection of classes based on indicators of risk and the related effects, and reviewed information contained in a number of studies, reports, and analyses. This review identified numerous factors EPA could consider. For example, typical elements in evaluating risk to human health and the environment include the probability of release, type and duration of exposure, and toxicity.<sup>146 147</sup>

Based on the information available at the time, EPA concluded that hardrock mining facilities present such risk that warranted giving those classes of facilities priority in the development of financial responsibility requirements under CERCLA § 108(b).

Throughout the discussion of its data analysis, EPA addresses several topics that were raised in public comments that EPA received on its data analysis for the 2009 *Priority Notice* and in response to EPA's 2010 ANPR relating to other facility classes, where those topics are relevant to the data analysis for this proposal. It is important to note,

however, that the 2009 *Priority Notice* was a one-time event, under which EPA identified the classes for which EPA would first develop CERCLA § 108(b) requirements. Consistent with this approach, EPA did not seek public comment on the notice, and nothing in CERCLA required EPA to issue its 2009 *Priority Notice* in proposed form, or required EPA to provide responses to comments received. The 2009 *Priority Notice*'s sole purpose was to identify a set of facilities for which EPA would begin the process of developing CERCLA § 108(b) regulations, as provided for in CERCLA § 108(b)(1) (second sentence), and EPA provided a significant amount of factual information in support of its conclusions. EPA is not reopening its identification in the 2009 *Priority Notice* of hardrock mining as the classes for which it would first develop CERCLA § 108(b) regulations by this proposal. EPA requests public comment on its data analysis. However, EPA is not seeking comment on the 2009 *Priority Notice*.

As previously discussed, CERCLA § 108(b) states that “[p]riority in the development of such requirements shall be accorded to those classes of facilities, owners, and operators which the President determines present the highest level of risk of injury.” Though the 2009 *Priority Notice* identified the classes of facilities within the hardrock mining industry as those for which the Agency will first develop financial responsibility requirements, it did not provide criteria to define classes of facilities, or to identify which classes of facilities within that universe present the highest level of risk of injury. In developing this proposed rule, EPA thus considered these issues to determine which facilities within the universe described in the 2009 *Priority Notice* would be included in this proposed rule.

The Agency considered how to define classes of mining facilities. EPA considered two options. EPA first considered identifying classes of mines based on the commodity mined. This approach had two advantages—it was consistent with the approach taken in the 2009 *Priority Notice* to identify the universe to be considered, and it was consistent with general industry practice to identify mines (e.g. gold

mine, silver mine, phosphate mine, etc.) so would have been readily understandable to the regulated community. However, that approach had several drawbacks. First, the commodity mined is not necessarily the source of risk of injury at a mine. Numerous hardrock mining facilities mine multiple ores. Thus, it alone served as a poor basis to compare level of risk of injury. Second, similar sources of releases exist at facilities within a range of commodities. Third, minerals are not located in consistent geologic settings, so the risks associated with a specific commodity could vary on that basis alone from case to case. Under the second option considered by EPA, processes that are known to affect the level of risk of injury at a mine would be identified and facilities would be grouped based on the presence of those characteristics and the risk they present. EPA believes this approach created a more logical link to risk of injury, and the Agency adopted it in developing this proposed rule. As previously noted, EPA had identified hardrock mining facilities as those involved in the extraction, beneficiation or processing of metals (e.g., copper, gold, iron, lead, magnesium, molybdenum, silver, uranium, and zinc) and non-metallic, non-fuel minerals (e.g., asbestos, phosphate rock, and sulfur) but not the specific classes of mining listed in a memorandum to the record for the 2009 *Priority Notice*.<sup>148</sup> Based on the Agency's analysis of the current universe of hardrock mining and mineral processing facilities, for illustration purposes the following table provides examples of commodities that the Agency expects are subject to the regulations being proposed today. However, it is important to note that this list is not intended to be an all-inclusive list of the universe of commodities potentially subject to this rulemaking. This includes commodities with no currently active or abandoned facilities that might in the future commence/resume operation, e.g., asbestos, arsenic, bismuth. Any facility that meets the definition of a hardrock mining or mineral processing facility (see section VI.D.3. of this preamble), would also be subject to the requirements in this proposed rulemaking.

<sup>145</sup> EPA excluded several classes of facilities (identified by commodity sector), that otherwise fell within the broad definition of “hardrock mining.” See memorandum to Jim Berlow, from Stephen Hoffman and Shahid Mahmud, entitled: *Mining Classes Not Included in Identified Classes of Hardrock Mining*, June 2009.

<sup>146</sup> See *Risk Assessment in the Federal Government: Managing the Process*. National Research Council. National Academy Press, Washington, DC. 1983.

<sup>147</sup> See U.S. EPA 2004. *Nationwide Identification of Hardrock Mining Sites*. Office of Inspector General. Report No. 2004-P-00005. Available at:

<http://epa.gov/oig/reports/2004/20040331-2004-p-00005.pdf>.

<sup>148</sup> See *supra* note 130.

COMMODITY

Alumina .....	Germanium .....	Osmium .....	Sulfur
Antimony .....	Gold .....	Palladium .....	Talc
Arsenic .....	Hafnium .....	Phosphate .....	Tantalite
Asbestos .....	Huebnerite .....	Phosphorus .....	Tantalum
Bastnaesite .....	Ilmenite .....	Platinum .....	Tellurium
Barite .....	Iridium .....	Potash .....	Thallium
Bauxite .....	Iron (including hematite, magnetite, siderite, taconite) ...	Potassium .....	Thorite
Beryl .....	Lead .....	Psilomelane .....	Thorium
Beryllium .....	Limonite .....	Pyrolusite .....	Tin
Bismuth .....	Lithium .....	Quicksilver .....	Titanium
Boron .....	Magnesium .....	Radium .....	Trona
Cadmium .....	Manganese .....	Rare earth metals .....	Tungsten
Cerium .....	Manganite .....	Rhenium .....	Uranium
Chromite .....	Mercury .....	Rhodium .....	Vanadium
Chromium .....	Microlite .....	Rhodochrosite .....	Vermiculite
Cinnabar .....	Molybdenite .....	Ruthenium .....	Wolframite
Cobalt .....	Molybdenum .....	Rutile .....	Wulfenite
Columbite .....	Molybdite .....	Scheelite .....	Zinc
Columbium .....	Monazite .....	Selenium .....	Zinc
Copper .....	Nickel .....	Silver .....	Zirconium
Fluorspar .....	Niobium .....	Strontium .....	

EPA has described in the following sections the basis for determining that exploration mines, placer mines, small surface mines of less than five acres, and mineral processors with less than five acres of surface impoundment and waste pile disturbance present a lower level of risk of injury. These classes, it should be noted, were identified based on facility characteristics and operations, rather than on the commodity mined.

EPA solicits comment on whether it would be feasible and appropriate to identify additional classes of hardrock mining facilities as presenting a lower level of risk of injury, particularly classes of mines that differ in their operations and associated risk from more tradition hardrock mining operations. For consistency with the approach taken by EPA to identify the lower level of risk of injury classes proposed in this rule, information to support additional lower level of risk of injury classes should address facility characteristics and operations, and should not rely on the commodity mined as a classification factor. However, EPA further solicits comment on whether classes of mines identified by commenters as presenting a lower level of risk of injury based on facility characteristics and operations could potentially encompass iron ore, phosphate, and uranium mines.

(2) Basis for Determination of Lower Level of Risk of Injury for Classes Not Included in Proposal

(a) Exploration Mines

EPA has determined that exploration mines present a lower level of risk of injury and thus propose that owners and operators of facilities that conduct only

exploration activities as defined in § 320.62 would not be required to comply with the CERCLA § 108(b) financial responsibility requirements. Mineral exploration is a precursor to the production of ores and associated wastes at hardrock mining and mineral processing facilities. The primary purpose of mineral exploration is to locate ore deposits and/or find significant extension of previously located deposits associated with operating or abandoned mines.<sup>149 150</sup> However, exploration activities do not typically result in the generation of significant amounts of hazardous substances or mineral waste.

Many exploration projects have only minimal surface disturbances or impacts. Mineral exploration efforts begin with surface explorations for signs of potential mineral deposits, commonly utilizing initial field surveys generally involving low-impact techniques, such as aerial photography and remote sensing.<sup>151 152</sup> Additional geochemical and geophysical survey techniques use

<sup>149</sup> See Lee-Moreno, J.L. 2011. In *SME Mining Engineering Handbook*. Third Edition. Volume 1. Chapter 3.2: Minerals Prospecting and Exploration. United States: Society for Mining, Metallurgy, and Exploration, Inc.

<sup>150</sup> See BLM defines exploration as the creation of non-negligible surface disturbance to evaluate the type, extent, quantity, or quality of mineral values present, including sampling, drilling, or developing surface or underground workings. 43 CFR Subpart 3809.5

<sup>151</sup> See International Council on Mining & Metals (ICMM). *Good Practice Guidance for Mining and Biodiversity*. Accessed February 25, 2015 at: <http://www.icmm.com/document/13>.

<sup>152</sup> See A. Erickson and J. Padgett. 2011. Chapter 4.1 Geological Data Collection. In *SME Mining Engineering Handbook*. Ed. P. Darling. Third Edition. Volume 1.

either low-volume surface sampling<sup>153</sup> or no sampling, relying on sophisticated tools to determine geologic properties of sites, such as chemical composition and magnetism. For most commodities, these result in only limited surface sampling as only a few minerals, such as gold and platinum-group metals, economically justify deep subsurface exploration.<sup>154</sup> In many cases, exploration activities thus present a negligible level of risk.

Potential impacts of mineral exploration can arise when sub-surface exploration does occur and include clearing land and potential contamination from boreholes (narrow shafts penetrating below the surface). Poor planning and management of drilled holes may cause aquifer contamination by infiltration of polluted surface water or by migration of materials in other layers of the earth that previously did not come in contact with the aquifer. However, due to nature of these operations where large-scale extraction of resources has not occurred, the disturbance and impact would be expected to be significantly smaller. For example, tailings facilities, large open pits, heap and dump leach operations, and large waste rock deposits, leading sources of releases of hazardous

<sup>153</sup> For example, a survey conducted over gold-silver vein mineralization in Canada described the optimal sample depth of 18–24 inches. For most stream sediment surveys, about 1.1 to 2.2 lbs of material are collected from the near-surface sediment layer. See: Jaacks, J.A., Closs, L.G., and J. A. Coope. 2011. Chapter 3.4. Geochemical Prospecting. In *SME Mining Engineering Handbook*, Ed. P. Darling. Third Edition. Volume 1.

<sup>154</sup> See Lee-Moreno, J.L. 2011. Chapter 3.2: Minerals Prospecting and Exploration. In *SME Mining Engineering Handbook*. Third Edition. Volume 1. United States: Society for Mining, Metallurgy, and Exploration, Inc.

substances at hardrock mining sites historically, would not be expected to exist at exploration projects. Moreover, hazardous substances would typically not be employed in the exploration activities further lowering the risk posed by exploration activities compared to commercial or larger-scale mining operations. The limitation that exploration excludes activities where material from the site is extracted for commercial use or sale limits the construction of large facilities such as those named earlier.

EPA found no evidence directly linking exploration activities to releases leading to CERCLA listing. Although CERCLA documents noted the presence of mineral exploration activities at eight sites, exploration activities appear to have played little to no direct role in releases of hazardous contaminants.

For the reasons stated, EPA believes that mineral exploration presents a lower level of risk. As such, these mineral exploration activities are not included in today's proposed rule. EPA requests public comment regarding our determination to not include exploration mines in today's proposal.

#### (b) Placer Mines

EPA has determined that placer mines, as defined by EPA in this proposal (See proposed definition in section 320.62) present a lower level of risk of injury. EPA recognizes that placer mining would not typically be considered hardrock mining; however such mining practices would fall within the definition of hardrock mining used by EPA in identifying the priority class for regulation in the 2009 *Priority Notice*. As a result, and due to the lower level of risk of injury presented by placer operations, EPA is proposing that placer mines not be included in the CERCLA 108(b) hardrock mining financial responsibility regulations.

Placer mining is a method of mining in which the unconsolidated overburden is removed to expose valuable mineral-bearing gravel deposits beneath. Placer mines, commonly in alluvial deposits, typically seek to recover gold, titanium, and rare earths minerals. Alluvial deposits are commonly non-lithified (non-cemented) sands and gravels that rarely contain minerals that are more commonly the sources of contamination in other deposits (e.g. lode deposits). Placer mining can involve open pit, underground, or dredging operations using backhoes, bulldozers, or other excavating equipment to extract sand and gravel; at frozen placer mines, drilling and blasting techniques can be used to tunnel into the ground. Most

commonly, dredges are used to break apart sand and gravel and remove valuable minerals. Dredge types vary widely, but generally use either mechanical methods to transport material on moving buckets or belts, or hydraulic methods to bring raw materials to the surface using pumps and pipes. Most placer recovery involves only sizing and separation by physical properties such as specific gravity, color, or magnetism.<sup>155</sup> For example, vibrating screens can separate the ore into particles of different sizes. This stands in contrast to non-placer mines that may employ chemicals in their heap leaching processes, a significant source of releases or threatened releases at hardrock mining facilities. Placer mines may have tailings, open pits and other features common at other mines. However, due to the environmentally benign nature of typical alluvial deposits, such features would not be expected to result in releases of hazardous substances as such features would not typically contain minerals (e.g. pyrite) that are more commonly the sources of contamination in non-placer deposits at other mines.

Placer mining sediment discharges may diminish the quality of surrounding environmental resources such as surface water, ground water, soil, wetlands, and wildlife. Historically, the primary environmental impact from placer mining has been increases in sedimentation and heavy metals concentrations downstream from mining operations. Most current placer mining does not utilize added chemicals, nor would a placer operation using hazardous substances meet EPA's definition of placer mine, minimizing the potential for release of hazardous substances.

Placer mining practices were directly linked to releases leading to a CERCLA listing at two mining sites stemming from methods not typically recently employed domestically as a result of enhanced environmental regulation and law. Evidence revealed that at one of the sites sediment discharges resulted from hydraulic mining techniques which disturbed large volumes of sediment. Hydraulic mining, which was common in California and Alaska through the 1980s, used high-pressure jets of water to break apart gravel beds, washing mixtures of water, sand and minerals

<sup>155</sup> Chemicals are rarely used for processing. Flotation may be used in phosphate operations, and hot acid leaching using sulfuric or hydrochloric acid is sometimes used for zircon sand. In these operations, effluent treatment involves the addition of neutralizers and the removal of solids, with effluent water being recycled back to avoid off-site discharges.

into a collection area. However, regulatory regimes that have since emerged greatly restrict hydraulic placer mining<sup>156</sup> and EPA thus does not expect it to be a common practice at placer mines in the US going forward. At the other site where placer mining practices were directly linked to releases leading to a CERCLA listing, contamination stemmed from mercury amalgamation, which was historically used for processing gold in placer mining operations. By following this process, mercury and gold would form an amalgamated substance from which pure gold could be extracted. The use of amalgamation processes, however, has fallen precipitously in the US since the 1970s due to its high cost, inefficiency for larger-scale mines, growing scarcity of ores for which the technique can be used, and the introduction of various environmental regulations.<sup>157</sup> Furthermore, a placer mine that did employ mercury amalgamation would need to comply with the Part 320 financial responsibility regulations as they would fail to meet the proposed definition of placer mine which specifies that a placer mine does not use CERCLA hazardous substances in the concentration or processing of materials (see definitions at § 320.62).

In light of the benign nature of alluvial deposits and the absence of hazardous substances in the processing operations at placer mines meeting EPA's proposed definition, EPA believes such placer mines are unlikely to result in contamination. EPA requests public comment regarding our determination to not include placer mines in today's proposal. EPA requests comment on whether the class of placer mines as defined that is proposed as a lower level of risk of injury classes is appropriate, or whether that class should be further defined to limit the placer mines not included under this proposal.

#### (c) Small Surface Mines of Less Than Five Acres

EPA has determined that small surface mines with a disturbance of less than five acres not located within a mile of mine disturbance that occurred in the prior ten-year period that do not employ hazardous substances in their processes, and are not underground, present a lower level of risk of injury. While individual small mines may cause

<sup>156</sup> See Bullock, Richard L et al., *Placer Mining and Dredging. SME Mining Engineering Handbook*, 3rd ed. Vol. 2. Society for Mining, Metallurgy, and Exploration, (SME), 2011. 1062.

<sup>157</sup> See U.S. Environmental Protection Agency. *Gold Placers. Technical Resource Document: Extraction and Beneficiation of Ores and Minerals*, Volume 6. October 1994.

releases or contamination as a result of certain hazardous substances or mining practices used, such contamination tends to be more limited due to their lower volumes of mining. Superfund sites are therefore not generally associated with small individual surface mining facilities, except in circumstances where there are major clusters that increase the potential for cumulative impacts.

Small surface mines tend to extract near-surface higher grade ores and previously unmined placer deposits. Larger mines are more able to take advantage of new ultra-mechanized mining; metallurgical techniques allow them to use lower-grade, large-volume extraction and processing. Small surface mines likely do not engage in these more modern practices due to financial factors. As a result, small surface mines will have much lower volumes of waste and the features from which releases have historically occurred (e.g. waste rock piles, open pits) will be much smaller. Furthermore, lower level of risk is further ensured by the requirement that the small mine also not employ hazardous substances in their mining practices. As a result, cyanide leaching, one source of releases or threatened releases, would not be practiced at small mines; nor would hazardous process chemicals be stored at the facility lowering the possibility of spills or other mishandling of hazardous substances. Additionally, it is worth noting that because this determination of lower risk is being made for small surface mines, processing operations would not be included in this lower risk class. As such, practices such as electrowinning, hydrometallurgy, or pyrometallurgy would not occur at these facilities; nor would tailings facilities exist. Underground mines are excluded because an underground mine can expose significant reactive material (e.g. pyrite) in underground workings, thereby causing contaminated mine drainage, and still be in an area covering less than 5 acres if the mined material is hauled off site for processing. Please see a discussion of low risk mineral processing facilities later in this preamble for more information on what class of mineral processing facilities EPA has determined present lower levels of risk of injury.

In current Federal and state regulations, "small" mines are also typically defined by acreage or volume of ore processed. Small mines are regulated by the BLM, Forest Service and most states based on their potential impacts and in most cases face reduced permitting and operation

requirements.<sup>158</sup> In the case of both BLM and the Forest Service, small mine projects causing a surface disturbance of less than five acres are eligible for exemptions from certain financial responsibility requirements. Alaska, Montana, Nevada, and other states also have reduced requirements for facilities and projects no greater than five acres in size. BLM, USFS, and most states do not extend non-major mining exemptions to operations that use toxic process chemicals or that have the potential to discharge hazardous substances to water resources.

The reduced risk presented by small mines is evident by the lack of small mines individually becoming Superfund sites. Historically, Superfund sites with smaller-scale mines reflect the combined environmental impacts of non-major mines in close proximity. One example consists of numerous abandoned and inactive hardrock mine sites that produced gold, lead, zinc and copper.<sup>159</sup> <sup>160</sup> Mining waste problems impacting the 53-square mile watershed from abandoned and inactive mine sites led to CERCLA listing. EPA identified 150 individual mine sites within the watershed boundary, of which 70 have been prioritized for cleanup. Concern over the potential issues that may arise from the cumulative impact of numerous small mines in close proximity is the rationale for the proposed additional qualification for small mines determined to present a lower level of risk as those not located within a mile of mine disturbance that occurred in the prior 10-year period.

EPA believes that small surface mines of less than five acres present a lower level of risk when such mines are not in close proximity to another mine and do not use hazardous substances. EPA requests public comment on the proposal that owners and operators of such small mines would not be required to comply with the CERCLA § 108(b) hardrock mining financial responsibility regulations.

<sup>158</sup> See Kuipers, J., 2000, *Hardrock Reclamation Bonding Practices in the Western United States*, National Wildlife Federation.

<sup>159</sup> See <http://www2.epa.gov/region8/upper-tenmile-creek-mining-area>.

<sup>160</sup> Additional Superfund sites representing mining districts with multiple smaller-scale operations include: Copper Basin Mining District (CERCLIS ID TN0001890839), Oronogo-Duenweg Mining Belt (CERCLIS ID MOD980686281), Cherokee County (CERCLIS ID KSD980741862), Washington County Lead District (CERCLIS ID MON000705027), Basin-Cataract Mining District (CERCLIS ID MTD982572562), California Gulch (CERCLIS ID COD980717938), and Carpenter Snow Creek Mining District (CERCLIS ID MT0001096353).

(d) Mineral Processors With Less Than Five Acres of Surface Impoundment and Waste Pile Disturbance

EPA is proposing that owners and operators of mineral processing facilities with less than five acres of surface impoundment and waste pile disturbance not be required to comply with the financial responsibility requirements in Part 320. EPA is proposing this because the Agency believes that releases from surface impoundments and waste piles present elevated risk at mineral processing facilities. These features were identified as contamination sources at many superfund sites historically. For example, surface impoundments which contained tailings and wastewater were the source of contamination for more than 160 different response actions; slag and heap leach waste piles were sources of contamination for more than 54 and 17 responses respectively. Further waste piles and surface impoundments at mineral processing and combined mining and mineral processing sites have caused natural resource damages.<sup>161</sup> Additionally, releases from surface impoundments have resulted in EPA needing to issue imminent and substantial endangerment orders and other orders requiring injunctive relief.<sup>162</sup> Moreover, in a 1998 EPA study of mineral processing damage cases, EPA found that many of the cases involved releases from waste piles and surface impoundments. Additionally, the report noted at least one additional NPL site (not included in the damage cases reviewed) where contamination appeared to be from land-based mineral processing units. The report also noted that land placement of products, byproducts, in-process materials, and intermediates can result in environmental problems.<sup>163</sup> Since 2004, EPA's National Enforcement Initiative on Mining and Mineral Processing has performed over 100 inspections of mineral processing facilities. These facilities ranged from small to very large operations and had a wide variety of waste management practices. However, EPA found that facilities that managed wastes in large surface impoundments or piles posed higher environmental risk to human health and the environment

<sup>161</sup> For examples, see *Select NRD Cases at Mineral Processing Facilities*, PDF portfolio available in the docket for this proposed rule.

<sup>162</sup> For examples, see *Select Enforcement Cases at Mineral Processing Facilities*, PDF portfolio available in the docket for this proposed rule.

<sup>163</sup> See U.S. EPA, *Damage Cases and Environmental Releases from Mines and Mineral Processing Wastes*. April 1998.

than facilities with smaller waste management units.<sup>164</sup>

Some of the risk of surface impoundments and waste piles stems from poor environmental practice (e.g. failure to use liners, overtopping, instability of berms). For example, in 2004, an EPA inspection of a mineral processing facility in Florida found that storage and disposal of hazardous waste into unlined ditches and surface impoundments released hazardous substances off-site. Nearby groundwater and private drinking water wells were contaminated as a result of these releases.<sup>165</sup>

As the volume of wastes disposed of in a surface impoundment or pile increase, the units become larger and hydraulic pressure increases. This results in higher incidents of leaks and structural failures.<sup>166</sup> Larger units also have increased pressure due to larger surface areas exposed to rainfall. Sometimes a surface impoundment may be located on top of or adjacent to a waste pile. For example, releases from a large waste pile/surface impoundment (referred to as a “phosphogypsum stacks”) in Florida, Texas, and Mississippi released millions of gallons of highly acidic wastewater resulting in fish kills and impacting other aquatic life and natural resources.<sup>167</sup>

Mineral processing facilities with less than five acres of surface impoundment and waste pile disturbance generally pose lower risk due to the lower quantities of hazardous substances present, and less likelihood of spills and structural instability and the smaller expected impact of any releases. As such, EPA proposes that owners and operators of mineral processing facilities with less than five acres of surface impoundment and waste pile disturbance not be required to comply with the financial responsibility requirements in Part 320. EPA requests comment on this proposal. Specifically, EPA is interested in damage cases that have arisen at mineral processing facilities with less than five acres of waste pile or surface impoundment disturbance.

<sup>164</sup> See U.S. EPA. *National Enforcement Initiative for Mining and Mineral Processing Summary of Activities 2005 to 2016*. November 15, 2016.

<sup>165</sup> For examples see 2004 Coronet compliance evaluation inspection report file in *Select Enforcement Cases at Mineral Processing Facilities*, PDF portfolio available in the docket for this rulemaking.

<sup>166</sup> See *Select Surface Impoundment Technical Reports* PDF portfolio in the docket.

<sup>167</sup> See Mosaic, Agrifos, and Piney Mulberry examples in *Select NRD Cases at Mineral Processing Facilities*, and *Select Enforcement Cases at Mineral Processing Facilities*, PDF portfolios, available in the docket for this rulemaking.

## 2. Timeframes for Compliance (§ 320.61)

CERCLA § 108(b)(3) requires a phased-in approach to implementation of the financial responsibility requirements of this proposal. That section requires that financial responsibility requirements be imposed as quickly as can reasonably be achieved but in no event more than four years after the date of promulgation of the final rule. The statute further requires that, where possible, the amount of financial responsibility shall be achieved through incremental, annual increases. This phased approach provides time for the financial markets to develop and make available instrument capacity while, at the same time, has financial responsibility put into place at facilities subject to the rule quickly.

Under the proposed schedule for implementation of financial responsibility requirements, owner or operator’s would be required to demonstrate financial responsibility for: (1) Health assessment costs by twenty four months after promulgation of the final rule, i.e., after publication of the final rule in the **Federal Register**; (2) for fifty percent of the response and natural resource damages amount of financial responsibility by thirty six months after promulgation of the final rule; and (3) for full response and natural resource damages amount by forty eight months after promulgation of the rule.

In developing this proposed schedule for implementation of financial responsibility requirements, EPA considered the requirement in the statute that financial responsibility implemented in incremental annual increases, as well as the need for the financial markets do develop and make available capacity. EPA also sought to provide the maximum amount of time for owners or operators to establish a financial responsibility level for their facilities.

EPA proposed that owners or operators provide the amount of financial responsibility for the health assessment component of the formula first as that amount does not require a calculation, and thus requires no input of information by the facility. This approach provides three years before the first amount of financial responsibility that must be calculated is due to EPA. EPA believes that this is a reasonable approach, and that it balances the needs of the owner or operator as well as the financial market. Delaying further significant levels of financial responsibility would have resulted in a surge in demand on the financial market in year four. Requiring calculated

financial responsibility earlier would have provided less time for owners or operators to become familiar with the formula, gather any necessary information, and perform necessary calculations.

EPA believes that this schedule would meet the statutory requirement for phased implementation, and would provide owners and operators an adequate time period to identify the necessary financial responsibility amount for their sites. Further, these phased-in requirements would help to assure the availability of instruments by providing extended time for market capacity to build. EPA solicits comment on this approach to implementation of the financial responsibility requirements, on the schedule for compliance, and on whether this approach would help assure availability of instruments. EPA solicits comment on this approach.

For owners and operators of hardrock mining facilities that come into operation after the effective date of this rule, the Agency is proposing a different approach.

Facilities that become subject to the rule after the effective date of the final rule and on or before the date four years after the effective date would be comply with the requirements for demonstrating financial responsibility that are applicable to facilities that were authorized to operate, or should have been authorized to operate on the effective date of the final rule. For example, if a facility were to become subject to the requirements of this rule two years after the effective date, the owner or operator would be required to demonstrate financial responsibility for the health assessment amount prior to beginning operations, and then follow the schedule provided in § 320.61(a).

Finally, facilities that become subject to the rule more than four years after the effective date of the final rule would be required to demonstrate financial responsibility for the full amount required under this rule before beginning operations.

The Agency believes this approach is reasonable in that the capacity concerns that arise when a newly promulgated rule becomes effective are not relevant as the Agency does not expect a large number of newly regulated facilities to enter the market seeking financial responsibility instruments after the rule initially becomes effective. The Agency solicits comment on this approach.

## 3. Definitions (§ 320.62)

The Agency is proposing definitions in § 320.62 that are applicable to this



Subpart. The Agency solicits comment on these definitions.

#### 4. Determining the Financial Responsibility Amount (§ 320.63)

EPA considered options for how to calculate financial responsibility amounts for classes of facilities under CERCLA § 108(b). The statute provides only very general direction on this question, and thus confers upon EPA significant discretion in both methodology and in the ultimate selection of the appropriate amount. CERCLA § 108(b) establishes a general end-point for the Agency's financial responsibility requirements, which must be "consistent with" the "degree and duration of risk associated with the production, transportation, treatment, storage, or disposal of hazardous substances" at the facility. EPA does not interpret this to require any precise association with a risk calculation. Standard dictionary definitions of the term "consistent" include merely "being in agreement" or "compatible."<sup>168</sup> Moreover, as discussed earlier, CERCLA § 108(b) amounts are necessarily established in the absence of any response action, although it is through such response actions that the precise level of risk associated with a particular site is ascertained. Thus, EPA believes that Congress intended for the Agency to set a level of risk that is generally reflective of risk for each facility class.

The statute also does not specify any particular methodology to reach that general end-point, specifying simply that the amount of financial responsibility be established at the level that the EPA "determines is appropriate." The statute does provide a non-exclusive list of information sources in CERCLA § 108(b)(2) on which it is to base its decision—the payment experience of the Superfund; courts settlements and judgments; and voluntary claims satisfaction. Notably, it does not specify how the information from these sources is to be used—for example, how the data from each source should be weighted relative to the other sources. Similarly, the list of sources does not specify whether EPA is to derive particular values from each category to be aggregated into one amount that is "consistent with the degree and duration of risk," or whether EPA is to identify from each category, particular practices (that is, for example, the types of activities for which the Fund has paid) the cost of which can form the basis for an amount. Therefore,

EPA has concluded that these provisions of the statute confer a significant amount of discretion upon the Agency in how it uses the data it has, to determine the appropriate amount for which owners and operators must provide evidence of financial responsibility.

EPA considered four approaches to identify a financial responsibility amount for a facility—fixed amount, site-specific amount, parametric approach, and formulaic approach. A description of each approach follows. This proposed rule uses a combination of these approaches—specifically, a fixed cost approach for certain costs (health assessments) and a formulaic approach to identify an amount for potential response costs consistent with the risks to human health and the environment based on facility features.

Under a fixed amount approach, the Agency would identify a standard cost for the class. This method does not rely on site-specific factors but rather on historical costs associated with similar facilities to calculate an expected future amount. This approach is best applied where the costs at issue are fairly uniform, as the wider the variation, the lower the accuracy of the financial responsibility amount for that cost. If there is wide variation in the costs associated with the facilities within the class to which the fixed amount is applied, the result can be significant over-regulation at those facilities with lower levels of liabilities, and significant under-regulation of facilities with higher levels of liabilities. At the same time, this approach has advantages in that it requires a lower level of effort on the part of the regulated community and the Agency to implement because the rule does not require a site-specific calculation to be developed, submitted, or evaluated. Thus, EPA believes that in certain circumstances the fixed amount approach may be the best choice to implement CERCLA § 108(b) requirements.

For example, as discussed in section VI.D.4. of this preamble, the Agency was able to determine a fixed level for health assessment costs under this proposed rule, but applied a formulaic approach to determine financial responsibility amounts for response costs and natural resource damage costs.

The second method considered by EPA is a site-specific approach. Under this approach, the owner or operator would calculate the cost of conducting known activities to address identified problems. This approach is the most precise of the three approaches considered by EPA. However, it is also the most resource intensive to

implement. It requires gathering detailed information about the site, including an assessment of the site conditions, and is most easily implemented where a release has occurred, a response is necessary, and a remedy determination has been made. As described earlier, CERCLA § 108(b) financial responsibility is not based on a remedy determination; therefore, EPA determined that a site-specific approach was not appropriate or practical for use under this rule. EPA solicits comment on how a site-specific approach might be developed for future CERCLA § 108(b) rulemakings in situations where there has been no remedy decision.

Having identified reasons that a site-specific approach may not be appropriate or practical to determine financial responsibility amounts for response costs and for natural resource damages, EPA sought to develop an approach that was more accurate than the fixed amount, yet could be implemented without conducting a full site investigation at the facility. The Agency's efforts resulted in development of a formula designed for facilities within the hardrock mining industry.

#### (a) Information Used To Determine Financial Responsibility Amounts Under CERCLA § 108(b)

As discussed earlier, CERCLA § 108(b)(2) requires that the level of financial responsibility must be "based on the payment experience of the Fund, commercial insurers, courts settlements and judgments, and voluntary claims satisfaction." Thus, in developing this proposed rule, EPA considered how to consider those factors. EPA considered two approaches to basing financial responsibility levels on the "payment experience of the Fund." Under one approach, the Agency would consider the cost of past cleanups at similar facilities, and use those costs as a basis for financial responsibility. For example, EPA would look to historical cost data and, if a Superfund remedy at similar facilities averaged \$X dollars, EPA would consider that the appropriate amount of financial responsibility for that class of facilities and promulgate a regulation requiring that amount at facilities in the class.

This interpretation would best be applied to the fixed amount methodology. Thus, if past Superfund actions at a class of facilities averaged \$X dollars, the Agency would identify by rule that amount as the financial responsibility amount required for that class of facilities. EPA recognized limitations associated with this approach. For example, because it looks

<sup>168</sup> 301 Webster's II New Riverside University Dictionary (1988).

to historical data, it assumes that operations at historical facilities are similar to current operations, and that costs will be similar. The Agency recognizes, however, that past operating procedures, before the advent of environmental laws, were likely in many cases to give rise to environmental problems that current regulations and modern operating practices can prevent or minimize. In addition, Superfund cost data represents only a portion of the expenditures at historical facilities, especially those with ongoing cleanups or maintenance, and a uniform set of data that includes all expenditures at facilities is not available. However, EPA believes this approach is appropriate in some circumstances—for example, where current costs are available for an activity that is fairly consistent in cost from facility to facility. Thus, EPA has proposed adopting this approach to determine the financial responsibility amount for health assessment costs as discussed in section VI.D.4. of this preamble.

Under a second approach, EPA would look at components of response actions taken by Superfund in the past—that is, distinct activities Superfund paid for—at facilities within the to-be-regulated class, and determine the cost of those activities today. For example, if a Superfund remedy involved installing an impermeable cap at a surface impoundment, the Agency would calculate the cost of installing such a cap today at the regulated facility with a similar unit to determine the financial responsibility amount. This second approach to considering the “payment experience of the Fund” was used by EPA in developing the formula for determining financial responsibility amounts for response costs and natural resource damages under this proposal. The Agency solicits comment on these two approaches to basing financial responsibility under this proposal on the criteria in CERCLA § 108(b)(2).

It should be noted that the Agency’s decision to not propose requirements in this rule based on a site-specific approach to determining financial responsibility amounts does not mean that the Agency has concluded that methodology is not appropriate under CERCLA § 108(b). In fact, following initial implementation of financial responsibility at facilities subject to this proposed rule, EPA may identify site-specific conditions that indicate a response action is needed at the facility, and that the current amount of financial responsibility implemented under CERCLA § 108(b) is not adequate to cover the costs associated with the response. In those cases, the Agency

believes it could apply a site-specific methodology at the facility to determine a more precise amount of financial responsibility more consistent with the degree and duration of risk at the facility. EPA would increase the amount of financial responsibility required at the facility under CERCLA § 108(b) rather than apply CERCLA § 106 authority to require a separate financial responsibility instrument. The Agency solicits comment on this approach.

#### (b) Development of the Hardrock Mining Financial Responsibility Formula

EPA developed a financial responsibility formula for owners and operators of hardrock mining facilities to use to calculate the amount of financial responsibility that would be required under this proposed rule. EPA considered how to develop an amount of financial responsibility that reflected an estimate of funds that might be required in the event of a release from a regulated facility.

As described in section IV.B of this preamble, EPA is proposing to make the financial responsibility instruments available for all types of CERCLA liabilities enumerated in CERCLA § 107. Thus, in developing the financial responsibility formula, EPA sought to take into account the same three categories of costs (response costs (including both removals and remedial actions), natural resource damages, and health assessment costs) that may be incurred by owners and operators of facilities subject to the rule. To do so, EPA separately developed three formula components to estimate financial responsibility for each of those three categories. These three components—response costs, natural resource damages, and health assessment costs—make up the final formula.

EPA collected and analyzed data on both the total funds expended at CERCLA sites and the types of goods and services on which those funds were spent. Total funds expended were used to estimate both the health assessment component and the natural resource damage component, while the types of goods and services were used to estimate the response component. For each, this preamble discusses EPA’s data collection efforts, how the Agency developed estimates of costs from that data, and how it developed the resulting formula.<sup>169</sup> EPA has followed the

<sup>169</sup> For a detailed discussion of the development of the formula, see the *CERCLA 108(b) Financial Responsibility for Hardrock Mining Facilities Background Document—Peer Review Draft* (Background Document), located in the docket for this proposal (Docket No. EPA–HQ–SFUND–2015–0781).

Agency’s Peer Review Policy with respect to the underlying formula supporting this action. Specifically, EPA has conducted a peer review of the Background Document. Peer review materials, including charge questions, are available in docket for this proposed rule (Docket No. EPA–HQ–SFUND–2015–0781).

#### (i) Response Component

EPA collected information on response costs from national priorities list (NPL) and non-NPL CERCLA response activities. This data consisted of records of decision (RODs), settlements, actual expenditures to date by EPA, and estimated expenditures for present and future work by potentially responsible parties. EPA used these data to generate a best estimate of total response costs at these hardrock mining facilities. EPA was able to collect this information for 319 sites.

In addition to the total response cost data, EPA also collected data on specific activities conducted at 438 operable units at 88 NPL or Superfund alternative hardrock mining sites. From this data on activities themselves, EPA could link specific site features to releases or threatened releases of hazardous substances, and to remedies that incurred response costs. EPA found that thirteen site features<sup>170 171</sup> served as the source of release that resulted in remedies within the following twelve categories: (1) On-site disposal (excavation, capping, covering, revegetation); (2) off-site disposal; (3) engineering and/or containment (other); (4) surface water diversion; (5) water treatment (other); (6) water treatment (lime addition); (7) no action; (8) alternative drinking water; (9) sediment dredging/disposal; (10) monitoring (all media and as separate remedy); (11) monitored natural attenuation/recovery; and (12) deconstruction/decontamination of buildings. EPA solicits comments on additional remedies or categories of CERCLA

<sup>170</sup> The 13 site features include (in order of frequency): (1) Contaminated soils, (2) tailings (pond, pile), (3) waste rock or overburden, (4) contaminated sediments, (5) acid mine/rock drainage, (6) slag, (7) smelter emissions, (8) underground workings, (9) process areas and buildings, (10) leachate (from failed cap/cover or similar system), (11) demolition debris, (12) heap leach piles/leaching waste, and (13) open pits/pit lakes.

<sup>171</sup> The 13 site features include (in order of frequency): (1) Contaminated soils, (2) tailing (pond, pile), (3) waste rock or overburden, (4) contaminated sediments, (5) acid mine/rock drainage, (6) slag, (7) smelter emissions (8) underground workings, (9) process areas and buildings, (10) leachate failed cap/cover or similar system), (11) demolition debris, (12) heap leach piles/leaching waste, and (13) open pits/pit lakes.

response costs that do not appear in this list, as well as the data supporting the inclusion of those remedies.

(aa) Linking Response Categories to Current Cost Estimates

EPA's prior experience with CERCLA cleanups leads it to expect that similar types of remedies will continue to be selected for mining sites in the future. EPA also expects that for eleven of the twelve remedy categories described earlier (the exception being "no action"), the magnitude of that cost will differ with changing site characteristics. For example, the expected costs of constructing a cap over a unit to prevent water infiltration can be expected to increase with the acreage of that cap. Thus, in order to produce more accurate estimations of costs at a particular facility, it is necessary to consider both specific response costs and specific response activities. However, EPA generally found that the response cost data discussed earlier were available in the form of payments or total expenditures. Since these payments or expenditures were aggregated across various activities, they could not be separated into more specific cost amounts (e.g., the cost to construct a particular cap on a particular tailings impoundment).

Given this difficulty, EPA considered how to estimate the expected costs associated with these particular activities. EPA searched for existing, publicly available engineering cost estimates that contained costs specific to these activities. EPA found that such engineering cost data was readily available from cost estimates developed for state and Federal mining reclamation and closure plans, and associated documents. These engineering cost data were available for currently operating facilities potentially regulated under the proposed rule, and represented similar site features (e.g., tailings facilities, open pits) as facilities for which prior response actions were taken. Thus, these data reflect recent engineering cost values appropriate for EPA's statistical analysis.

In order to monetize the expected costs for eight of the twelve types of remedies listed earlier, EPA linked these remedy types to similar tasks identified in the current engineering cost data. The remaining three CERCLA remedy types, "No action," "Alternative drinking water," and "Monitored natural attenuation" are excluded from the initial list of twelve remedy types. Since these three remedy types do not involve engineered controls, EPA was concerned that including them as part of a nationally-applicable rule could have

the effect of producing an inadequate amount of financial responsibility for those sites where engineered controls were necessary. Therefore, as a conservative assumption to help ensure the adequacy of the amount of financial responsibility should engineering controls prove necessary, EPA excluded these three remedy types from further consideration.

Also excluded was "Sediment dredging/disposal." Although this element has appeared historically as a response category, EPA notes that it was already incorporated in the natural resource damages component. For example, the final restoration plan for the Upper Arkansas River/California Gulch Superfund site (one of the data points used in developing the natural resource damages multiplier) includes dredging of contaminated soils as a restoration alternative.<sup>172</sup> Thus, EPA believes that since this cost is already represented in the natural resource damages multiplier, it is inappropriate to duplicate that cost in the response component of the formula. EPA solicits comment on whether this activity is more appropriately included in the response component or the natural resource damages component of the formula.

"On-site disposal (excavation, capping, covering, revegetation)" and "Engineering/containment (other)" were linked to engineering cost estimates categorized as backfill, portal closure, earthwork, revegetation, feature-specific stormwater controls, and source controls. These first two remaining categories were further linked to the specific site feature being addressed: Open pit, underground mine, waste rock, tailings facility, heap/dump leach, process ponds and reservoirs, and slag piles. Since not all currently operating facilities have all of these site features, this site-feature linkage allowed EPA to identify costs for only the features present at a given mine.

"Off-site disposal" and "Deconstruction/decontamination of buildings" were linked to engineering cost estimates categorized as solid waste disposal, hazardous waste disposal, organic solution removal, building decontamination, contaminated soils disposal, and haulage and disposal. "Surface water drainage" was linked to drainage controls. "Water treatment (lime)" and "Water treatment (other)" were linked to engineering cost estimates categorized as site and water

management, process fluid stabilization, neutralization, solution disposal, reclamation of well-field and disposal wells, seepage capture, and water treatment. Finally, "Monitoring (all media and as separate remedy)" was linked to engineering cost estimates categorized as groundwater and surface water monitoring, geotechnical stability monitoring, erosion and vegetation monitoring, fish and wildlife monitoring, and other short- and long-term monitoring.

While not specific to any remedy category, multiple remedies' operations and maintenance activities were linked to the reclamation and closure plan tasks of road maintenance, stormwater repairs, revegetation repairs, reclamation of monitoring and pumpback wells, well maintenance, evaporation pond maintenance, and stormwater, erosion, and vegetation maintenance. Additionally, all remedies were linked to reclamation and closure plan tasks necessary to conduct direct engineering work including mobilization/demobilization, engineering design/redesign, contingency, contractor profit and overhead, contractor liability insurance, payment and performance bonds, agency direct costs, and agency indirect costs. EPA solicits comment on the accuracy of these linkages, and specific data or examples that would indicate an alternative linkage should be made.

(bb) Response Component Data Collection

EPA sought through its engineering cost estimate data collection effort to accumulate as much recent, high quality cost information for currently-operating hardrock mining facilities as possible and represent the range of states and commodities produced. EPA obtained and sorted data from the Mining Safety and Health Administration (MSHA) and the U.S. Geological Survey (USGS) to generate a combined list of 354 facilities. To derive this group of 354, EPA identified facilities that would correspond to the scope of the proposed rule. Thus, EPA excluded from the combined MSHA/USGS data set, those facilities that were not identified in the 2009 *Priority Notice*,<sup>173</sup> as well as closed or abandoned facilities. Therefore, the data set consisted of active, intermittent, or temporarily idled mining or mineral processing facilities. Comprehensive lists of all data sources

<sup>172</sup> See Stratus Consulting Inc. (2010). *Restoration Plan and Environmental Assessment for the Upper Arkansas River Watershed*. Available at: <http://www.fws.gov/mountain-prairie/nrda/leadvillecolor/californiagulch.htm>.

<sup>173</sup> See *Identification of Priority Classes of Facilities for Development of CERCLA Section 108(b) Financial Responsibility Requirements*, 74 FR 37213, July 28, 2009.

are available in Appendices A through M of the Background Document.

EPA obtained a sample of 63 facilities' reclamation and closure plan engineering cost data. This 63 facility subset was representative of the frequency of states and commodities identified in the full universe of 354 potentially regulated mines. Thus, EPA expected it would be representative of the larger group of facilities. This dataset included costs as well as related inputs that drive these cost components. For example, acreage is an input of the Standardized Reclamation Cost Estimator model used to conduct several of the collected engineering cost estimates. One of the highest-dollar response categories, water treatment, also presented one of the smallest cost sample sizes with only 15 facilities represented. As a result, EPA supplemented the closure plan cost data on water treatment costs with data from the three CERCLA sites contained in EPA's CERCLA site data set, for which water treatment cost data were readily available, and could be disaggregated from the sites' full costs. EPA solicits comment on additional cost estimates, whether historical or current, that would appropriately represent active hardrock mining facilities. EPA solicits comment on data generally, and specifically regarding industrial minerals, slag pile, in-situ leach, and water flows. EPA solicits comment on expanding the water treatment variable to capture additional facilities that would necessarily need more advanced water treatment due to the nature of their leachate.

EPA subject-matter experts believed that other variables could explain the differences between higher and lower costs at sites based on their professional experience. First, these experts believed that water-related factors such as distance to groundwater or surface water, as well as net precipitation could influence the costs estimated for a site. Second, these experts believed that the process methods used could influence costs necessary for a site. These data are not included in the reclamation plan data collected. Therefore, EPA located and collected them from Environmental Impact Statements or other publicly available documents.

Water-balance-related data that were available in these public documents included precipitation, evaporation, distance to surface water, and depth to groundwater. EPA solicits comment on the collection of these water balance data. In particular, six of the hardrock mining facilities in EPA's data set did not contain depth to groundwater data. EPA solicits comments on depth to

groundwater data for the six hardrock mining facilities for which data were not collected. These facilities are: Silver Bell (Arizona), Clear Creek (Colorado), Hibbing Taconite (Minnesota), SCRAM (Minnesota), Standard (Nevada), and Trenton Canyon (Nevada).

In addition to water-balance-related data, EPA collected data related to process methods for the four leaching processes identified at the 63 sites in EPA's data set. These process method data included the use of floatation, cyanide, acid, and in-situ leaching processes. EPA solicits comments on data characterizing the process methods for these 63 sites as well as how EPA might analyze such data.

For more details about the data collected, see Section 4 of the Background Document. EPA solicits comment on alternative uses of its actual cost data from Section 2.2 of the background document. EPA solicits comment on additional data points that may be more appropriately apportioned to other site features. EPA solicits comments on the use of a 62 percent upward adjustment based on Ernst & Young (2015). The Agency also solicits comment on the proposal to use the 2013 Reclamation and Closure Plan document for Pinto Valley.

#### (cc) Response Component Regression Analysis

EPA performed statistical analysis on the engineering cost data collected, for each response category. The purpose of this statistical analysis was to establish a numerical relationship between a limited number of a facility's site-specific characteristics and the resulting associated reclamation and closure plan costs. Once this relationship was established, it could be used to generate a sub-formula that results in an expected financial responsibility amount for each response category, on a nation-wide basis. To ensure the accuracy of the regressions, EPA solicits comment on whether the reclamation and closure plan data is accurately described in Appendix G of the Formula Background Document. Specifically, EPA solicits comment on the accuracy of the estimated cost figures, acres, and source control tags for the thirteen response categories, as described in Appendix G.

A number of site-specific engineering-based models generated the detailed engineering cost estimates collected by EPA. However, certain parameters appeared to be central to the workings of those calculations. For instance, capital costs appeared to be affected by the relevant acreage that these costs were applied. While EPA did not know

the exact suite of variables that might be relevant for any particular response category, some variables were much more likely to be statistically significant based on the use of these variables in reclamation and closure plan cost estimates. As a result, EPA chose to conduct a bidirectional elimination stepwise regression that started with variables believed to be most significant and test the addition or deletion of individual variables. Further details on the regression methodology, as well as the results of the regressions are available in Section 5 of the Background Document.

These results generally confirmed the significance of the variables EPA expected to be predictive. EPA performed an additional 88 robustness tests to demonstrate that the regressions selected by the stepwise regression process were the best fit possible for the data. EPA solicits comment on the appropriateness of the bidirectional elimination stepwise regression used here as well as alternative methods that may be appropriate and justifications for using those methods. EPA also solicits comments generally on the steps and criteria used in the stepwise regression process as applied. In particular, EPA solicits comment on the retention of the source control variable in the heap/dump leach regression (including additional data points that would supplement the two source controls in the dataset) and on the addition or removal of variables from the starting suite of variables when such additions or removals were made. EPA solicits comment on influence points Continental and Chino Mines for the Interim O&M regression, and Phoenix Copper for Water Treatment regression.

Further, because the formula is trying to monetize potential future CERCLA liability response costs, in the absence of an actual release/response to monetize, a potential drawback of this approach of predicting levels of financial responsibility could be that future major incidents will not have sufficient assurance to cover the necessary response costs, and that there could be an associated risk that the rule will potentially require financial responsibility that may never be required. EPA solicits comments on this potential drawback to the chosen approach.

EPA also calculated overhead and oversight costs (OCs) as a percent of direct engineering costs rather than through regressions on site-specific characteristics. However, not every facility calculated or reported every category of oversight costs. Thus, to avoid biasing any of the oversight cost

estimates low, EPA calculated each oversight cost separately, and used only data from facilities which had calculated that oversight cost. EPA estimated each oversight cost category at each facility as a percent of engineering costs. This was done by dividing the oversight cost in question at a facility by that facility's total direct engineering costs. Once all facility-specific oversight cost percentages were calculated, EPA averaged these oversight cost percentages for each category. EPA solicits comment on the approach of a fixed percentage of direct engineering costs for estimating oversight costs.

(dd) Converting O&M Costs into a Net Present Value

Four of the response cost categories—interim O&M, water treatment, short-term O&M, and long-term O&M—represent the expected costs for activities over time. Thus, the regression equations for represent annualized amounts. These annualized amounts must further be converted into a single net present value, so that they can be included as part of the final formula, which represents a facility's total financial responsibility amount. EPA converted to net present value using the same equation as that presented in U.S. EPA (2001).<sup>174</sup>

EPA used an O&M period of ten years for converting both the short-term O&M and interim O&M costs into a net present value. This period has been discussed and used in guidance documents such as U.S. EPA and USACE (2000).<sup>175</sup> O&M after ten years could prove to be unnecessary, or continue indefinitely. The cost estimation formula uses a perpetual period of O&M for both water treatment and long-term O&M. EPA considered using a period of thirty years similar to the default long-term O&M period of thirty years historically used by EPA for purposes of cost estimation in the absence of detailed estimates of project duration (U.S. EPA, 1988).<sup>176</sup> However,

<sup>174</sup> See U.S. EPA (Environmental Protection Agency). 2001. *Groundwater Pump and Treat Systems: Summary of Selected Cost and Performance Information at Superfund-financed Sites*. EPA 542-R-01-021a. OSWER, Washington, DC 20460. December. Available at: <http://www.epa.gov/superfund/cleanup/postconstruction/p1report.pdf>.

<sup>175</sup> See U.S. EPA (Environmental Protection Agency) and USACE (Army Corps of Engineers). 2000. *A Guide to Developing and Documenting Cost Estimates during the Feasibility Study*. EPA 540-R-00-002. OSWER, Washington, DC 20460. July. Available at: [www.epa.gov/superfund/policy/remedy/pdfs/finaldoc.pdf](http://www.epa.gov/superfund/policy/remedy/pdfs/finaldoc.pdf).

<sup>176</sup> See U.S. EPA (Environmental Protection Agency). 1988. *Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA (Interim Final)*. EPA/540/G-89/004.

more recent guidance relies less heavily on this default period and more heavily on the actual project duration of each alternative considered in the RI/FS process (U.S. EPA and USACE, 2000).

In addition, EPA's CERCLA data from hardrock mining facilities indicates that perpetual O&M expenditures are common. Specifically, in U.S. EPA (2004),<sup>177</sup> EPA's Office of Inspector General collected survey responses from regional experts regarding expected long-term O&M durations at 156 hardrock mining facilities. The median response from that survey was that long-term O&M at hardrock mining facilities would continue into perpetuity. Therefore, the financial responsibility formula uses a perpetual period of O&M for both water treatment and long-term O&M. EPA solicits comment on the timeframes used in the net present value conversion. Specifically, EPA solicits comment on whether justifications of alternate timeframes exist for long-term O&M.

Finally, annualized O&M costs are converted to a net present value based on the ten-year short-term and perpetual long-term time horizons seen in the CERCLA cost data using the rate of return of the Superfund. Analysis of these real rates of return from the Superfund yielded a geometric mean of 2.63 percent. This approach is also consistent with recent EPA guidance on O&M cost estimation processes in the separate context of CERCLA settlement agreements and unilateral orders (U.S. EPA, 2015)<sup>178</sup> which recommends using a discount rate representative of real investment returns. EPA solicits comments on whether and how future rates of return should be automatically used to update the 2.63 percent rate of return of the Superfund. The Agency also solicits comments on the use of net present value of O&M.

(ee) State-Specific Adjustment Factors

On average, the sub-total of overhead costs calculated by EPA was found to be 35.78 percent of direct engineering costs. However, a similar sub-total of oversight cost percentages was not

OSWER, Washington, DC 20460. October. Available at: [www.epa.gov/superfund/policy/remedy/pdfs/540g-89004-s.pdf](http://www.epa.gov/superfund/policy/remedy/pdfs/540g-89004-s.pdf).

<sup>177</sup> See U.S. EPA (Environmental Protection Agency). 2004. *Nationwide Identification of Hardrock Mining Sites*. Report No. 2004-P-00005. OIG, Washington, DC, 20460. March. Available at: <https://www.epa.gov/sites/production/files/2015-12/documents/20040331-2004-p-00005.pdf>.

<sup>178</sup> See U.S. EPA (Environmental Protection Agency). 2015. *Guidance on Financial Assurance in Superfund Settlement Agreements and Unilateral Administrative Orders*. OECA, Washington, DC 20460. April 6. Available at: <https://www.epa.gov/sites/production/files/2015-04/documents/ja-guide-2015.pdf>.

estimated due to the region-specific nature of agency indirect costs. To calculate these percentages, region-specific indirect cost rates are multiplied by the national average agency direct cost percentage to estimate the agency indirect costs as a percentage of direct engineering costs. Adding agency direct cost percentage to the region-specific indirect cost percentages yields region-specific agency cost percentages. Total non-construction costs are estimated by adding the 35.78 percent overhead cost percentage sub-total to the region-specific total agency cost percentages. Using this approach, EPA calculated ten region-specific oversight cost percentages to be applied to the direct engineering costs estimated in the formula response components. These percentages can be found in Appendix II of the proposed rule.

Furthermore, the relationships estimated represent only a generic, nationwide engineering cost of a CERCLA response because the response category regressions were estimated using reclamation and closure plan cost data that had been normalized to national values. While this was necessary to perform regression analysis and develop a nationwide formula, the same labor and materials can have different prices in different locations. Hence, the resulting estimates described in earlier sections would immediately be inaccurate for any given state. To adjust for these locality differences in prices, the response component of the formula is multiplied by the most current state cost adjustment factors in USACE (2015).<sup>179</sup> These adjustment factors can be found in Appendix III of the proposed rule.

(ii) Natural Resource Damage Component

EPA collected data on both natural resource damages and natural resource damage assessment costs at hardrock mining sites from CERCLA court settlements and judgments, and voluntary payments. This effort resulted in data on 64 sites. EPA's data indicate that natural resource damages and response costs are not independent of each other. Instead, response actions have regularly been shown to influence natural resource damages. This is particularly true in the case of sites receiving technical impracticability

<sup>179</sup> See U.S. Army Corps of Engineers, "Civil Works Construction Cost Index System," Manual No. 1110-2-1304 (31 March 2012, revised through September 30, 2015). Available at: [http://www.publications.usace.army.mil/Portals/76/Publications/EngineerManuals/EM\\_1110-2-1304.pdf](http://www.publications.usace.army.mil/Portals/76/Publications/EngineerManuals/EM_1110-2-1304.pdf).

waivers. When a technical impracticability waiver is issued, previously projected response costs may be reduced. However, the remaining contamination may lead to additional natural resource damages.

One example summarized in U.S. EPA (2012)<sup>180</sup> is the technical impracticability waiver at the Silver Bow Creek/Butte Area. At that site, an EPA evaluation concluded that the water quality in an affected alluvial aquifer could not be improved within a reasonable time frame even assuming the most extensive and costly alternatives. Thus, EPA issued a technical impracticability decision that waived cleanup levels for several constituents in that aquifer. However, when such an aquifer is left contaminated, trustees may seek natural resource damages for that aquifer. In the case of the Silver Bow Creek/Butte Area, this same groundwater appeared in the trustees' final restoration plan.<sup>181</sup> So while the technical impracticability waiver reduced response costs, it increased the natural resource damages. Thus, while the proportion of total liabilities relating to response costs and natural resource damages was altered, the overall magnitude was similar.

EPA notes that although the extent of response actions ultimately necessary as a result of a release may affect the relative portion of how much natural resource damages may be in comparison with damages, the total magnitude of potential liabilities (response costs and natural resource damages combined) will increase or decrease together. This is effectively captured by a multiplier. Thus, EPA uses a similar approach here as to U.S. EPA (2014)<sup>182</sup> where the

Agency estimated natural resource damages as a percent of cleanup costs where both future cleanup costs and future natural resource damages were uncertain. This average percent was used as a multiplier for the purposes of estimating natural resource damages once potential future response costs were estimated. As with that previous study, the natural resource damages and response costs are uncertain, but EPA found that a similar relationship between damages and costs was presented.

Within this dataset, EPA had both natural resource damages and total response costs from the response component data collection for 24 sites. From this subset of 24, EPA divided the average natural resource damages by the average response costs to generate a hardrock mining-specific natural resource damages multiplier. This resulted in average natural resource damages and natural resource damage assessment costs of 13.4 percent of the response costs to account for natural resource damages and assessment costs. Thus, EPA included a multiplier of 1.134 in the financial responsibility formula for the natural resource damage component. EPA solicits comment providing additional natural resource data. The Agency also solicits comment on the appropriateness of a fixed multiplier to estimate natural resource damages within the hardrock mining class of facilities, particularly with respect to the risk of magnifying any potential bias from the response cost formula. EPA solicits comment on alternate approach such as the use of a geometric mean or median instead of the mean for the multiplier calculation. EPA solicits comment on the feasibility of running the response component of the model for facilities which EPA has natural resource damages data for an alternative method, if data is readily available.

EPA is also considering an alternative approach. Under this approach, EPA would use the median natural resource damages and natural resource damage assessment costs of 3.8 percent of the response costs to account for natural resource damages and assessment costs. Thus, EPA would include a multiplier of 1.038 in the financial responsibility formula for the natural resource damage component. EPA solicits comment on whether the median or average NRD multiplier is more representative for application to future hardrock mining facilities.

*Final Rule.* OSWER. Washington, DC. December. Available at: [www.regulations.gov](http://www.regulations.gov) Document ID#: EPA-HQ-RCRA-2009-0640-12034.

(iii) Health Assessment Component

Under 42 CFR 90.14, by the Agency for Toxic Substances and Disease Registry (ATSDR) is required to maintain documentation pertaining to the costs associated with all phases of a Public Health Assessment or a Health Consultation (HA) performed by the Agency to form the basis for cost recovery by EPA.<sup>183</sup> Upon EPA's request, ATSDR provided cost information for recently completed health assessments. ATSDR limited the data provided to the minimum, maximum, and average costs of health assessments conducted over the past 18 months (as of March 2016). ATSDR did not provide hardrock mining-specific data, and thus non-mining health assessment costs are included in this dataset.

Based on the information available to it, EPA adopted a fixed amount of \$550,000 representing the average health assessment cost reported by ATSDR as the health assessment component of the proposed formula. Health assessments often make use of EPA-collected data. Because this approach avoids potentially costly data collection activities, a relatively low amount of \$550,000 is not unexpected for an average cost. Furthermore, EPA expects future health assessments to generally be consistent with this amount since ATSDR has experience performing the same types of reports routinely. Finally, EPA notes that this average health assessment cost reported by ATSDR is consistent with additional second-hand sources of estimates that EPA presents in Section 7 of the Background Document. EPA solicits comment on the appropriateness of a fixed health assessment cost for all classes, including data that would justify any alternate approaches suggested.

#### (c) Hardrock Mining Financial Responsibility Formula

EPA's proposed rule requires that a facility's financial responsibility amount be adjusted for inflation to preserve the real value of the financial responsibility. This inflation adjustment must be made to the entire financial responsibility amount as calculated in 2014 dollars. The proposed rule uses an inflation

<sup>183</sup> See 42 CFR 90.14 Documentation and cost recovery: (a) During all phases of ATSDR health assessments and health effects studies, documentation shall be completed and maintained to form the basis for cost recovery, as specified in § 107 of CERCLA; (b) Where appropriate, the information and reports compiled by ATSDR pertaining to costs shall be forwarded to the appropriate EPA regional office for cost recovery purposes.

<sup>180</sup> See U.S. EPA (Environmental Protection Agency). 2012. *Summary of Technical Impracticability Waivers at National Priorities List Sites*. OSWER Directive 9230.2-24. August. Available at: [<sup>181</sup> See Butte Natural Resource Damage Restoration Council \(BNRC\) and Montana Natural Resource Damage Program \(NRDP\). 2012. \*Butte Area One: Final Restoration Plan\*. December. Available at: <https://dojmt.gov/wp-content/uploads/Final-BAO-Restoration-Plan.pdf>.](https://nepis.epa.gov/Exe/ZyNET.exe/P100EYIC.TXT?ZyActionD=ZyDocument&Client=EPA&Index=2011+Thru+2015&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C11thru15%5CTxt%5C00000005%5CP100EYIC.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/1425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL.</a></p>
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<sup>182</sup> See U.S. EPA (Environmental Protection Agency). 2014. *Regulatory Impact Analysis (RIA) for EPA's 2015 Coal Combustion Residuals (CCR)*

factor derived from the most recent Implicit Price Deflator for Gross Domestic Product (GDP) published by the U.S. Department of Commerce in its Survey of Current Business. The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for 2014. EPA selected the Implicit Price Deflator for the GDP as that has become the Department of Commerce's favored basis for the Implicit Price Deflators a representation of national output. Furthermore, the data is readily accessible from the Department of Commerce's Bureau of Economic Analysis providing for transparent implementation.<sup>184</sup> The Agency solicits comment on the appropriateness of the Engineering News-Record Construction Cost Index as an alternative inflation adjustment.

Additionally, in the absence of a site-specific remedial investigation/feasibility study (RI/FS) or ROD, EPA cannot categorically determine that source controls and water treatment activities would not be necessary to minimize the volume, toxicity, or mobility of hazardous substances. Therefore, as a conservative assumption to help ensure the adequacy of the amount of financial responsibility should source controls and water treatment prove necessary, EPA assumes that both will be used, and sets the variables corresponding to the activities equal to one for all hardrock mining facilities calculating CERCLA § 108(b) financial responsibility amounts. EPA solicits comment on two alternatives to this approach that could be used alone or in conjunction. In the first alternative, EPA solicits comment on whether a weighted average of costs with and without source controls or water treatment would be appropriate. The weights for this average would be determined based on historical use of these responses. EPA also solicits comment on whether a conservative upper confidence interval such as the 95 percent confidence levels presented in Appendix J of the background document would be appropriate to avoid

underestimating future financial responsibility needs.

Incorporating the net present value calculations and the assumptions of source controls and water treatment into the regression results, the response category equations for the response component are:

(1) Solid and hazardous waste disposal category = \$2,600,000<sup>185</sup>

(2) Open pit category =  $5.07 \times 10^{(4.24 + 1.08 \times \text{Log}_{10}[\text{Open Pit Disturbed Acres}])}$

(3) Underground mine category = \$4,500,000 for an underground mine with hydraulic head or \$200,000 for an underground mine otherwise.

(4) Waste rock category =  $1.85 \times 10^{(5.18 + 0.75 \times \text{Log}_{10}[\text{Waste Rock Disturbed Acres}])}$

(5) Heap/dump leach category =  $2.29 \times 10^{(4.57 + 1.01 \times \text{Log}_{10}[\text{Heap and Dump Leach Disturbed Acres}])}$

(6) Tailings category =  $1.71 \times 10^{(5.32 + 0.68 \times \text{Log}_{10}[\text{Tailings Disturbed Acres}])}$

(7) Process pond and reservoir category =  $1.64 \times 10^{(4.29 + 1.03 \times \text{Log}_{10}[\text{Process Pond and Reservoir Disturbed Acres}])}$

(8) Drainage category =  $9.56 \times 10^{(3.42 + 0.57 \times \text{Log}_{10}[\text{Total Disturbed Acres} + 1])}$

(9) Slag pile category = \$64,000 × [Slag Pile Acres]<sup>186</sup>

(10) Interim O&M category =  $\{1.46 \times 10^{(6.04 + 0.01 \times [\text{Net Precipitation}] + 0.34 \times \text{Log}_{10}[\text{Heap and Dump Leach Disturbed Acres} + 1] + 0.10 \times \text{Log}_{10}[\text{Tailings Impoundment Disturbed Acres} + 1])\} \times \{1 / 0.0263\} \times \{1 - (1 / [1.0263^{10}])\}$

(11) Water treatment category =  $\{1.16 \times 10^{(3.22 + 1.10 \times \text{Log}_{10}[\text{Flow}] + 0.70 \times [\text{In-Situ Leach}])}\} / 0.0263$

(12) Short-term O&M and monitoring category =  $\{1.82 \times 10^{(4.01 + 0.38 \times \text{Log}_{10}[\text{Total Disturbed Acres} + 1])}\} \times \{1 / 0.0263\} \times \{1 - (1 / [1.0263^{10}])\}$

(13) Long-term O&M and monitoring category =  $\{1.64 \times 10^{(3.12 + 0.58 \times \text{Log}_{10}[\text{Total Disturbed Acres} + 1])}\} / 0.0263$

Furthermore, the cost equation for water treatment requires the input of

gallon per minute flows that require treatment. However, as discussed earlier, EPA calculates the potential costs associated with the use of source control covers for many site features. Albright (2015)<sup>187</sup> provides results of EPA's *Alternative Cover Assessment Program* (ACAP). These results indicate that such controls in place will necessarily reduce the amounts of seepage that may require capture and treatment prior to discharge. Thus, EPA expects that source controls would have the effect of reducing the expected volumes of water requiring treatment. The average infiltration for the ACAP data set was five percent of precipitation. As a result of these considerations, EPA has adopted the presumption of 95 percent effectiveness for source control covers, resulting in a residual five percent infiltration based on gross precipitation. EPA solicits comment on data demonstrating that source controls reduce the costs of diversion and/or O&M other than water treatment.

This results in flows being calculated as  $0.05 \times \text{Precipitation} \times [\text{Total Disturbed Acres}] \times 0.05166$  for all flows except for underground mine flows and in-situ leach flows which are not assumed to receive the same types of source controls evaluated in ACAP. The Agency solicits comment on this approach for calculating the gallons per minute flow at a facility. EPA also solicits comment providing data demonstrating that source controls reduce the costs of diversion and/or O&M other than water treatment. EPA solicits comment on the exercise of validating the formula by running it for CERCLA sites that have incurred costs across all site features.

For a hypothetical facility with a single site feature of each type (e.g., a single heap leach), EPA shows the proposed financial responsibility formula in Equation 1. EPA solicits comment on the appropriateness of this draft formula developed in the formula-approach to determine a reasonable amount for CERCLA § 108(b) financial responsibility.

<sup>184</sup> See Table 1.1.9, Implicit Price Deflators for Gross Domestic Product. Available at: <http://www.bea.gov/iTable/iTableHtml.cfm?reqid=9&step=3&isuri=1&903=13>.

<sup>185</sup> No variables were found to predict the variability in solid and hazardous waste costs. Thus, an average cost was applied as discussed in Section 5 of the Background Document.

<sup>186</sup> Slag piles were represented by only one cost data point, and therefore were included as a fixed cost of \$64,000 per acre based on that data point.

<sup>187</sup> See Albright, William. 2015. *Final Covers for Mine Tailings*. Desert Research Institute Clu-In Seminar. Available at: [https://clu-in.org/conf/tio/mining\\_052015/slides/Albright\\_Day\\_Two.pdf](https://clu-in.org/conf/tio/mining_052015/slides/Albright_Day_Two.pdf).

Equation 1

$$TotalFinancialResponsibility_y = \frac{Deflator_{y*}}{Deflator_{2014}} \times \left( \sum_{i=1}^n ResponseCost_i \right) \times [1 + OverheadOversight_r] \times StateAdjustmentFactor_s \times 1.134 + \$550,000$$

Where:

$Deflator_y$  = the most recent available GDP Implicit Price Deflator for year  $y$ ; and  
 $Deflator_{2014}$  = the GDP Implicit Price Deflator for 2014

$i$  = the  $i$ th response category (e.g., water treatment costs);

$n$  = the total number of relevant response categories;

$r$  = EPA region  $r$  (e.g., EPA Region 3); and  
 $s$  = state  $s$  (e.g., Montana).

#### (d) Inputs to the Financial Responsibility Formula

To implement the formula and calculate a financial responsibility amount for the facility, the owner or operator will have to input facility information. The Agency anticipates that the information required by the formula will largely be existing information, and that most facilities will not have to develop information to implement the financial responsibility formula. EPA solicits comment on whether the information required is largely existing at facilities.

The first piece of information required is acreage. For the site feature-specific calculations, the acreage is the total of all areas covered by the particular site feature. For example, a facility with two waste piles would add the acreage of each together and input the total acreage into the calculation. For site-wide calculations, such as short-term O&M, the acreage entered would be the entire area covered by the hardrock mine and/or mineral processor.

Several inputs to the formula are yes/no determinations. These include the presence of a pressurized bulkhead, in-situ leaching, and underground mines. If these are not present, the owner or operator should enter a zero into the formula.

#### (e) Reductions to the Financial Responsibility Amount

The Agency is proposing under § 320.63(c) to allow (but not require) owners or operators to reduce the response cost component under § 320.63(b) by making an adequate demonstration that risk reducing regulatory requirements are in place. Owners and operators will have to

demonstrate that they meet specific minimum standards for various formula components, along with a general performance standard, and other requirements. This approach is specifically designed to account for reductions in risk at a facility that may result from compliance with applicable Federal, state, tribal, and local requirements. The Agency solicits comment on this approach.

In developing these proposed requirements, EPA sought to balance a number of competing concerns. EPA desires to account for risk-reducing effects of compliance with other programs, while acknowledging that requirements for hardrock mining and mineral processing facilities, and implementation of them, vary substantially across the country. The CERCLA § 108(b) proposed rules, however, are nationally applicable. EPA was thus concerned that, should it allow an owner or operator to invoke other requirements as justification for reducing the amount otherwise required by the formula, it should do so only to the extent that reductions can confidently be tied to reductions in risk in a nationally-applicable rule.

Similarly, in order for EPA to allow an owner or operator to reduce the amount of financial responsibility that it must obtain under CERCLA § 108(b) based on its compliance with non-CERCLA regulatory requirements imposing future risk-reducing controls, EPA must be confident that those non-CERCLA requirements will have their intended risk-reducing effects, by ensuring the controls will be implemented when necessary. Lastly, as discussed earlier, EPA has sought to develop an effective, nationally-applicable formula that can be readily applied by the regulated community and overseen by EPA. EPA is accordingly proposing to allow for simple, all-or-nothing reductions for the formula sub-components, when they can be justified. In sum, therefore, this proposed rule allows an owner or operator to rely on other regulatory controls in order to obtain reductions in the amount of CERCLA financial assurance it must obtain, but includes

several conditions that must first be met by the owner or operator. EPA intends for this approach to allow for a more tailored amount of financial responsibility under the nationally-applicable formula, while still providing assurance that the resultant amount is consistent with the level of risk.

First, the reductions incorporate a general performance standard in paragraph 326.63(c). In order to qualify for a reduction, the owners and operators must be prepared to demonstrate to EPA that any requirements relied upon under paragraph 320.63(d) also meet the general standard, that the engineering requirements will result in a minimum degree and duration of risk associated with the production, transportation, treatment, storage, or disposal, as applicable, of all hazardous substances present at that site feature. This general requirement will provide a benchmark against which the controls can be measured. In addition, this provision is intended to reflect that if the general performance standard is met, the proposed approach allows for a complete reduction from the financial responsibility formula component. Where the requirements do not result in a minimum level of risk, EPA cannot be confident that a complete reduction for that cost component is warranted.

Next, EPA is proposing to require that any of the requirements relied upon be enforceable against the owner or operator claiming the reduction, that they have in place adequate financial responsibility to assure that the requirements will be implemented, and that they certify that the facility is in compliance with the requirements. These conditions are intended to ensure that the underlying controls that form the basis of the risk reduction are highly likely to occur and thereby achieve their intended risk-reducing effect.

Third, EPA is proposing to require that the owner or operator certify that the facility is in compliance with the requirements relied upon in claiming a reduction to the facility's financial responsibility amount. This condition is intended to ensure that the controls



upon which the reduction is based are, in fact, currently implemented at the facility.

Fourth, the proposed rule also includes a general requirement that the owner and operator provide the information necessary for EPA to evaluate the claimed reductions. Specifically, § 320.63(c)(2) provides that information submitted must provide sufficient and detailed supporting information adequate to allow EPA to evaluate the adequacy of the financial assurance and of the underlying requirements for meeting the reduction.

Finally, EPA is proposing specific minimum standards for the various categories of reductions.<sup>188</sup> These are specified in § 320.63(d)(3). This portion of the proposed rule provides the criteria that owners or operators must meet for particular reductions. The performance standards in paragraph (c) describe objectives for reducing risk at facilities and include future engineering controls and practices that reduce the risk associated with the hazardous substances at the site. That paragraph provides reduction criteria for each component of the maximum financial responsibility formula—capital costs, interim O&M, short-term O&M, long-term O&M, water treatment, hazardous materials management, and surface water drainage. For capital costs, the paragraph provides reductions for each site-feature category—open pits, underground mines, waste rock, heap and dump leach, tailings impoundments and stacks, process ponds and reservoirs, and slag piles. Owners and operators that meet the criteria for a formula component reduction would not have to calculate financial responsibility for that component. Because the natural resource damage component is calculated by a multiplier, this component would produce a correspondingly smaller amount, as the reductions are claimed.

EPA solicits comment on the proposed reductions to the financial responsibility amount. EPA solicits comment specifically on whether the Agency has identified the appropriate criteria for the reductions, and whether the reduction criteria will provide incentives for owners or operators to implement more protective practices at their facilities to lower their financial responsibility amounts. EPA solicits comment on whether the criteria for the

reductions are described in sufficient detail to allow for effective implementation and, if not, how they might be modified. EPA solicits comment on whether the reduction criteria are likely to be complied with and/or enforced such that, at the applicable time, risk at the facility will, in fact, be reduced.

EPA solicits comment on whether alternate or more flexible engineering standards can substitute for some or all of the numeric engineering standards in the proposed reduction criteria (e.g. planning for a 200-year storm event, reduction of net precipitation by 95 percent). In addition, EPA requests comment on whether the proposed reduction criteria would limit flexibility necessary for innovative or different site-specific approaches and, if so, how those might be preserved under the proposed rule. EPA also invites comment on a possible role for third-party certifiers or other regulatory authorities in identifying alternative, protective site-specific controls as a basis for financial responsibility reductions. EPA also requests comment on whether other regulatory programs already impose the requirements that would satisfy the reduction criteria. Finally, EPA solicits comment on allowing reductions to the financial responsibility amount for other risk-reducing practices and/or controls (e.g., voluntary practices) that are implemented at hardrock mining facilities that should be accounted for in the reductions, and on how, if reductions were allowed for such practices and/or controls, EPA could assure that those controls would remain in place and be effective over time where there is no regulatory program overseeing their maintenance and operation.

As discussed above, EPA is seeking to develop reduction criteria standards that are appropriate in the context of a nationally applicable rule. The Agency requests comment on whether any particular reduction criteria in paragraph 320.63(c) might be inappropriate under particular facility conditions that could still be defined in the context of a national rule. Specifically, EPA requests that commenters identify particular facility conditions where a nationally applicable standard different from the reduction criteria proposed should be applied. EPA requests that commenters identify both those alternative facility conditions and any appropriate reduction criteria with particularity. EPA is particularly interested in objective criteria that define facility

conditions that could be verified by a certified professional.

#### *Program Deferral Approach*

As described above, EPA is proposing to allow reductions to the financial responsibility amount for the response component of the financial responsibility formula. Those reductions are based on criteria established in the rule for each of the thirteen response categories that together determine the response component amount. EPA is proposing that eligibility for the reductions be determined by owners and operators on a site-specific basis, subject to EPA review.

EPA has also considered whether reductions to the financial responsibility amount could be made by EPA, on a broader basis, to avoid expenditure of facility resources to determine eligibility for reductions, and reduce the burden on EPA to review each facility's claimed reductions individually. EPA is therefore also soliciting comment on whether the rule should also allow for EPA to conduct a programmatic review of other regulatory requirements and their implementation, with the objective of determining whether the reduction criteria are met across the program in question. Such a program deferral approach would provide for programmatic-based reductions in situations where the program meets the requirements for deferral of CERCLA § 108(b) requirements for the full response component of the financial responsibility formula—that is, for all facilities and all response categories.

Under this approach, owners and operators of facilities would not be required to comply with the requirements to calculate a financial responsibility amount and to obtain a financial responsibility instrument under EPA's CERCLA 108(b) regulations after EPA determines that a state or federal program meets certain criteria. The remainder of the requirements of Part 320 would remain applicable at the facility (e.g., notification to EPA, public notice requirements). Facilities would remain subject to these other requirements in order for EPA to monitor the regulated universe and ensure the continuing validity of any deferral determination. EPA would be able to withdraw its determination and impose all CERCLA § 108(b) requirements if the requirements for deferral are no longer met.

The criteria for deferral would be designed to assure that EPA would be able to make a program-wide determination that facilities regulated

<sup>188</sup> See U.S. EPA, Office of Land and Emergency Management, *Reductions Technical Support Document: Financial Responsibility Requirements under CERCLA § 108(b) for Classes of Facilities in the Hardrock Mining Industry Proposed Rule*, November 30, 2016 for discussion of the development of the reduction criteria.

by a particular program would be subject to, and in compliance with, requirements that will result in a minimum degree and duration of risk associated with the production, transportation, treatment, storage, or disposal of all hazardous substances present. This would involve EPA making a determination that: (1) The federal or state program has authority to impose all of the requirements necessary for the reductions described in proposed 320.63(d); (2) the program would impose those requirements on the same regulated universe subject to the proposed rule; (3) the program ensures that each facility obtains adequate financial assurance to ensure the other requirements will be implemented; and (4) the requirements will be enforced to assure compliance.

EPA recognizes potential advantages to this approach. First, deferral of these requirements would minimize the implementation of the CERCLA § 108(b) rule at facilities that are already subject to programmatic requirements that, if implemented and enforced, can be determined to result in a minimum level of risk, thereby focusing implementation resources on the remaining universe of facilities with less protective practices. This approach would also reduce costs for owners and operators subject to programs that qualify for deferral of CERCLA § 108(b) requirements, as they would not have to submit information to support the calculation of a financial responsibility amount, or the reductions to that amount. Finally, providing for deferral provides an incentive for programs to adopt the necessary requirements to comply with the reduction criteria.

At the same time, EPA recognizes several disadvantages to the programmatic deferral approach. First, EPA is concerned that it may be difficult for the Agency to ensure that facilities remain in compliance with the underlying requirements, and thus ensure that the facilities continue to present a minimum degree and duration of risk over time. Potential problems could include the necessity for EPA to monitor changes to permitting regimes and substantive technical requirements. EPA is also concerned about how it could ensure that the financial assurance actually provided by every facility under a given regulatory regime is sufficient to ensure that the reduction criteria would be met in practice. Without such an assurance, EPA may find it difficult to conclude that the regulatory program requirements relied upon for the deferral determination will result in minimum risk. This concern is presented particularly where the

determination of the amount of financial assurance is subject to the discretion of the regulator, instead of being identified with particularity in the terms of the regulations. In this case, EPA is unsure how it could make a broad-based determination that financial assurance requirements will be sufficient, if they have potential for varying stringency in practice. Finally, EPA is concerned that as a practical matter it may be difficult for the Agency to withdraw a programmatic deferral once granted, even where there is evidence that the criteria for programmatic deferral are no longer met. Thus, EPA expects that any deferral option would necessitate an oversight mechanism short of full withdrawal. EPA also expects that a dispute resolution process to resolve differences that arise among implementers would be an important component of a programmatic deferral approach.

It should be noted, however, that in taking this approach, EPA would not expect to review Federal and state closure and reclamation programs for adequacy, or to judge the quality or efficacy of those programs. EPA's concern would be whether requirements meeting the reduction criteria, designed for purposes of CERCLA § 108(b), are imposed and enforced at facilities, and secured with financial assurance adequate to assure their implementation. Those questions are separate from the question of whether the Federal or state closure program is adequate for its intended purpose or whether the financial assurance required is adequate financial responsibility for the purpose of that program.

EPA solicits comment on the programmatic deferral approach. EPA particularly solicits comment on whether regulators would be interested in seeking an EPA determination of programmatic deferral, whether existing programs would qualify for programmatic deferral based on the proposed reduction criteria, whether commenters believe EPA could assure compliance with the proposed reduction criteria if a programmatic deferral was implemented, how a conflict resolution process might be developed and implemented, and how a programmatic deferral approach might be improved.

#### Partial Program Deferral Approach

EPA also solicits comment on whether to consider partial deferral from the response component of the formula where a federal or state program met the criteria for deferral for some but not all of the thirteen response

categories. This would result in a requirement to calculate a financial responsibility amount and to obtain a CERCLA § 108(b) instrument, for a lower overall amount. This would not, however, otherwise change the operation of the rule in practice. As was discussed in section IV.D of this preamble, because the formula employs an aggregation of individual costs to obtain an overall amount for the facility, the individual cost components are not themselves intended to represent any sub-limits within the actual financial responsibility instrument—in other words, the total amount of funds would be available for any future Superfund action anywhere across the facility, and would not be tied to particular site features. This would remain the case in any partial deferral approach. For example, a program might include requirements that would satisfy the reduction criteria for the waste pile response category but not for the open pit category. In that situation, under this approach, owners or operators would not have to calculate an amount for waste pile areas at their facilities, or make the demonstrations necessary to qualify for reductions to that amount. Those facilities would still have to calculate a financial responsibility amount for open pit areas at their facilities, and any other portions of the formula not subject to an EPA partial deferral determination. The total amount of funds would be available for any future Superfund action

EPA sees a potential advantage to the regulated community from such an approach, because of the timing requirements of the statute. As was discussed in section VI.D.2 of this preamble, CERCLA § 108(b)(3) includes a statutory phasing provision that requires financial responsibility requirements to be imposed as quickly as can reasonably be achieved but in no event more than four years after the date of promulgation of the final rule. Thus, EPA has included provisions in the proposed rule reflecting this provision (§ 320.61). Owners and operators will need to comply with the requirement to calculate a financial responsibility amount and obtain a CERCLA § 108(b) instrument in accordance with the phase-in provisions of the proposed rule, until EPA makes a final determination on deferral. EPA's ability to make any deferral decisions (partial or complete) quickly, may in turn depend upon the actions of another regulator to make changes to its regulations, and/or the resources available to the Agency to undertake the necessary reviews. A partial program

deferral approach, even if adopted on a temporary basis, may allow EPA to make more rapid determinations on deferral requests, while federal and state mining programs make any necessary modifications to qualify for programmatic deferral. On the other hand, a partial deferral approach may increase the burden on EPA to undertake multiple reviews of many different programs.

EPA solicits comment on this approach. EPA requests comment on any drawbacks to allowing for partial deferral and, if the Agency were to adopt this approach, whether this approach should be a long-term component of the CERCLA § 108(b) requirements, or whether it should be a temporary mechanism to allow time for program modifications necessary to comply with the reduction criteria.

#### Partial Reductions Within Formula Sub-Components

Finally, EPA is also soliciting comment on whether partial reductions should be allowed within the formula sub-components, and how partial reductions might be structured. As was explained above, EPA is proposing to allow for all-or-nothing reductions when all reduction criteria are met, and when the general performance standard (and other requirements) are met. As also explained above, one key consideration is how to ensure that the reductions can confidently be tied to reductions in risk in a nationally-applicable rule. Accordingly, EPA does not expect that allowing partial reductions for a response category amount based on partial compliance with the reduction criteria would be appropriate, as the reduction criteria are not intended to reflect proportional reductions in risk—rather, EPA's intent is to establish a combined system of requirements that together, would result in a set of conditions that result in a minimum degree and duration of risk. Nonetheless, EPA solicits comment on whether partial reductions should be allowed for response categories. EPA requests information regarding how the amount of a partial reduction could be determined, and the basis upon which EPA could apportion the reduction in risk among the reduction criteria to assign a corresponding decrease in the financial responsibility, while still providing assurance that the resultant financial responsibility amount will be consistent with the level of risk.

#### 5. Information Submission and Recordkeeping Requirements (§ 320.64)

Owners or operators are required under § 320.66 to submit information to

support the calculation of financial responsibility at their facility, and to maintain that information for a period of three years. The information submitted must be in sufficient detail to enable EPA to review the cost estimate and determine its adequacy.

The Agency anticipates that the type of information can be found in existing documents such as the owners or operator's plan of operations, reclamation and/or closure plans, and permits. EPA solicits comment on these reporting and recordkeeping requirements.

#### 6. Third-party Certification (§ 320.65)

EPA is proposing that elements of the calculation of the financial responsibility amount submitted to EPA be certified by an independent qualified professional engineer. EPA believes that this requirement would improve the accuracy of submissions, and would thereby facilitate implementation of the rule by requiring less review by EPA of financial responsibility amount submissions.

The requirements to determine a financial responsibility amount that are proposed in § 320.63 include a formula in § 320.63(b) and criteria for reducing the financial responsibility amount in § 320.63(c). EPA solicits comment on the use of professional certifications in the implementation of those requirements. EPA is particularly interested in which elements of the formula would be best suited to certification by an independent professional engineer, what other independent professional certifications might be appropriate, and whether independent professional certifications are beneficial.

Proposed § 320.65 includes the requirement that the qualified professional engineer that certifies the financial responsibility amount be "independent." EPA is considering whether the requirement for independence would help strengthen the certifications under this proposal, and whether that extra level of protection is necessary in this rule where EPA is not the permitting authority and will therefore have less familiarity with the facility than it would in other circumstances (e.g., RCRA closure requirements under 40 CFR part 264 and Part 265). EPA solicits comment on the proposed requirement for independence of the qualified professional engineer, on whether a requirement that a qualified professional engineer be independent would strengthen the certification requirement, and on whether such a requirement is appropriate under this

proposed rule. EPA wants to ensure that the definition of "independent" contribute to the objectivity of the certifier. Thus, EPA solicits comment on criteria to define "independent," including criteria related to personal, professional, and economic relationships between the owner or operator and the certifier.

Finally, EPA solicits comment on whether certification by other professionals other than professional engineers could be incorporated into this proposed rule to facilitate implementation. For example, EPA has heard from states that they are using third parties to review site features, bonding requirements, and financial documents. EPA request comment on the experience of implementers and the regulated community on the use of professional certifications in regulatory programs, including the benefits and disadvantages of such an approach.

#### 7. Continued Risk at Hardrock Mining Facilities

Since issuing the 2009 *Priority Notice*, EPA has continued to gather data and information on hardrock mines, practices, and risks associated with classes of facilities within the industry. EPA's review of available data indicates abundant evidence that hardrock mining facilities continue to pose risks associated with the management of hazardous substances at their sites. EPA reached this determination after further identifying and analyzing various sources of data, including: (1) CERCLA site data to better understand the types and sources of releases that occurred at National Priority List (NPL) and NPL-equivalent cleanups, (2) Toxicity Release Inventory (TRI) and Resource Conservation and Recovery Act (RCRA) Hazardous Waste Biennial Report (BR) data to determine which facilities reported CERCLA hazardous substances/hazardous wastes, (3) Emergency Response Notification System (ERNS) to learn about the types and causes of releases reported, and (4) numerous existing reports that evaluated releases that occurred at hardrock mining and processing facilities.<sup>189</sup> Each of these are further discussed later in this preamble.

In developing this proposed rule, EPA also documented examples of releases and threatened releases of hazardous substances from recent and current mining operations. The documents developed by EPA can be found in the docket for this rulemaking, and are discussed below.

<sup>189</sup> These databases are all available on the EPA Web site—[www.epa.gov](http://www.epa.gov).

a. Releases from Mining and Mineral Processing Facilities<sup>190</sup>

This document discusses sources of releases at approximately thirty recently or currently operating mines and mineral processing facilities that had no previous significant legacy mining issues. These releases to the environment from mining and mineral processing activities, including tailings impoundments, waste rock piles, open pits, and leach pads were subsequently mitigated using CERCLA or CERCLA like actions under Federal and/or state statutory authority. Mines that have predicted future discharges to the environment and have proposed either preventative actions or CERCLA like mitigations also are discussed.

Examples of releases at currently operating facilities discussed in this document include:

*Smoky Canyon Mine/Pole Canyon Overburden Disposal Area (ODA):* At the Smoky Canyon Mine in Idaho, phosphate ore is extracted from a series of open pits, located on the eastern slope of the Webster Range between Smoky Canyon and South Fork Sage Creek. To extract the ore, JR Simplot removes and disposes the overburden nearby; the Pole Canyon Overburden Disposal Area (ODA). The Pole Canyon ODA is an external disposal area that covers approximately 120 acres. Downstream of the ODA, selenium concentrations in groundwater and surface water emanating from the toe of the ODA exceed risk-based screening-level benchmarks for human receptors (surface water and groundwater) and ecological receptors (surface water). Removal and remedial actions are currently ongoing at the site.

*Buckhorn Mine:* The Buckhorn gold mine owned by Kinross Corp. located in Washington has been in operation since 2007. The site is an underground mine that includes waste rock. Water management during spring snow melt has been a well-documented problem at the mine. In 2011 and 2012, the Buckhorn Mountain mine's groundwater capture zone failed to contain spring rains and snow melt, resulting in contaminated water reaching Gold Bowl Creek. Water generated in the underground mine can carry high concentrations of heavy metals such as copper, lead and zinc that must be captured and processed before being discharged at approved outfalls. Violations in 2011 include allowing water discharges causing slope instability and erosion, and for

discharging water at an unauthorized point. The mine is required to capture contaminated groundwater from around mine excavations and tunnels and under surface stockpiles, and pump it to a treatment plant. Since operations began at the mine in 2007, the Washington Dept of Ecology has issued \$62,000 in penalties, six notices of violation and six administrative orders directing the company to control stormwater, rectify groundwater capture zone inadequacies, prevent slope failures, and comply with permit limits for nitrates, sulfate, acidity, copper, lead, zinc and solids from stormwater ponds.

*Florida Canyon Mine:* The Florida Canyon gold and silver open pit mine with cyanide heap leach operation, located in Nevada, has been in operation since 1986. A groundwater plume consisting of weak acid dissociable (WAD) cyanide, mercury and nitrate was identified on the west side of the mine's leach pad and appeared to be related to process solution leakage. As a result of continued contamination of groundwater the Nevada Division of Environmental Protection (NDEP) issued a Finding of Alleged Violation and Order in August 2012. BLM also placed the mine in non-compliance in August 2012. The facility has identified and mitigated groundwater contaminant sources, as well as operated and optimized the groundwater plume pump-back system and evaluates on a quarterly basis to verify that the plume migration has been halted, and that groundwater cleanup is occurring.

*Jerritt Canyon:* The Jerritt Canyon mine located in Nevada has been in operation since 1981. The gold and silver mine is an open pit and underground cyanide vat leach operation that also processes refractory ores using both roasting and chlorination processes. Seepage from the Tailings Storage Facility 1 (TSF-1) was detected in the alluvium in 1987. In an effort to address the seepage issue nine trench drains were constructed along the embankment toes in 1988 to intercept and collect seepage from the impoundment. As of January 2015, a ring of ninety monitoring wells surrounded TSF-1, of which 76 are operational. The facility is required to operate, maintain and monitor the Seepage Remediation System at all times to ensure the capture of affected groundwater, to preclude further migration, and to ensure contraction of the overall extent of the TSF-1 seepage groundwater contaminant plume. Contamination from TSF-1 leakage has degraded groundwater in the immediate

vicinity, including in some cases with antimony, arsenic, cadmium, magnesium, manganese, mercury, selenium, and WAD cyanide. Authorization by NDEP to impound tailings slurry into another tailings storage facility (TSF-2) was granted in July 2013 and almost immediately, the 150 gpd permitted leak detection rate was exceeded. The facility believed that the specific cause of the exceedance was unknown but it was assumed to be puncture(s) in the primary liner system and/or residual meteoric waters that entered the system during liner repairs before operation began. After several unsuccessful attempts at addressing the leakage, the facility opted to manage TSF-2 as a single-lined facility and agreed to install vadose zone wells outside the periphery of TSF-2.

b. Overview of Practices at Hardrock Mining and Mineral Processing Facilities and Related Releases<sup>191</sup>

EPA also gathered information on current mining and mineral processing practices to better understand the extent to which present day practices might have changed, determine whether currently operating hardrock mining and processing facilities continue to release CERCLA hazardous substances, and evaluate the present and future concerns regarding these releases. Initial research efforts focused on characterizing practices within each commodity sector. However, hardrock mining encompasses multiple commodities that represent a broad range of activities and marketable products. Through initial research and consultation with mining experts, EPA concluded that, for the most part, many of the mining, mineral processing, and waste management practices that are in widespread use within the current U.S. hardrock mining industry have a common thread regardless of the commodity. EPA therefore concluded that rather than evaluate releases on a commodity by commodity basis, a better approach was to focus on commonly employed practices and, when necessary, also evaluate commodity-specific issues and processes. EPA thus identified the following thirteen hardrock mining, mineral processing, and associated waste management practices for detailed evaluation: (1) Surface and underground mining; (2) non-entry (in-situ leaching or solution) mining; (3) physical, gravity, and magnetic processing; (4) flotation; (5)

<sup>190</sup> See U.S. EPA, Office of Land and Emergency Management, Memorandum to the Record: *Releases from Hardrock Mining Facilities*, November 2016.

<sup>191</sup> See U.S. Environmental Protection Agency, Draft Comprehensive Report: *An Overview of Practices at Hardrock Mining and Mineral Processing Facilities and Related Releases of CERCLA Hazardous Substances*, November 2016.

cyanidation; (6) acid leach, solvent extraction, and electrowinning; (7) pyrometallurgical processes; (8) Bayer process for refining alumina; (9) ion exchange in uranium and phosphoric acid processing; (10) mine-influenced water; (11) waste rock piles; (12) tailings management; and (13) mining processes leaks and spills.

For each practice, EPA gathered information including literature reviews of technical references, academic sources, and government publications. EPA also consulted with United States Geological Survey (USGS) staff and mining experts. EPA focused this research and discussions on the following topics for each practice listed earlier: (1) Historical and current use, (2) technical description, (3) potential sources and releases of CERCLA hazardous substances and management practices to address those potential sources and releases, and (4) documented releases at historical sites and currently operating facilities.<sup>192 193 194 195</sup>

EPA developed a profile of historical and contemporary practices and the environmental releases of CERCLA hazardous substances associated with each practice. Information about historical sites was gathered largely from Record of Decision (ROD) and Remedial Investigation/Feasibility Study (RI/FS) documents. Information about currently operating sites came from various EPA databases, Emergency Response Notification System (ERNS) incident notifications, Mine Safety and Health Administration (MSHA) records, Federal and state permit documents, and general research.

EPA selected a sample of the 102 historical CERCLA sites (including both NPL and non-NPL sites at which removal actions occurred), involving hardrock mining and primary mineral processing sites, for additional data

<sup>192</sup> See U.S. Environmental Protection Agency Region 10, *EPA and Hardrock Mining: A Source Book for Industry in the Northwest and Alaska* (Washington, DC: U.S. Government Publishing Office, 2003).

<sup>193</sup> See U.S. Environmental Protection Agency, *Damage Cases and Environmental Releases from Mines and Mineral Processing Sites*, March, 2007.

<sup>194</sup> See *Mining Sites on Superfund's National Priorities List—Past and Current Mining Practices*, Van E. Housman and Stephen Hoffman, U.S. Environmental Protection Agency, Washington, D.C., Published in: *Proceedings*, Chapter 6, *Risk Assessment/Management Issues in the Environmental Planning of Mines, Society for Mining, Metallurgy and Exploration (SME)* (September 1992), *Proceedings*, Second International Conference on Environmental Issues and Management of Waste in Energy and Mineral Production, University of Calgary (1992).

<sup>195</sup> See U.S. EPA, Office of Land and Emergency Management, Memorandum to the Record: *Releases from Hardrock Mining Facilities*, November 2016.

collection to characterize the practices and releases of hazardous substances. Some findings of the study follow.

Underground and surface mining create large amounts of excavated material, with surface mining tending to generate greater amounts of waste rock. Large-scale surface (open-pit) mining techniques generally create a greater surface impact than underground or non-entry (e.g., in situ leaching) mining methods. Surface mines generate dust, large piles of waste rock, and large, usually permanent holes in the earth's surface. The corresponding amount of waste rock and tailings being mined and deposited is increasing as a result of large-scale mining operations. The scale of these mining operations poses formidable obstacles to effectively and efficiently addressing releases. Such large scale mining operations cause a significant increase in exposure of ore constituents to precipitation, resulting in the leaching of hazardous substances to ground and surface waters, and to the wind, resulting in air emissions. The Rio Tinto Kennecott Bingham Canyon site, an open-pit copper, gold, silver, and molybdenum mine located near Salt Lake City, Utah provides an example of the problems posed by such large scale mining operations. As part of its operations, Kennecott had deposited waste rock on the slopes of the nearby Oquirrh Mountains. The waste rock dumps leached metals-rich acidic water first through an unlined reservoir and then into a groundwater plume that extended 72 square miles. The State of Utah took legal action against Kennecott as a result of the contamination in 1986; as a result of a consent decree reached in 2007, Kennecott agreed to treat the contaminated groundwater for the next forty years.<sup>196</sup>

Similar to practices at some mines that became NPL sites, mining is currently performed in open pits and underground mines, both of which may discharge acidic waters, referred to as acid mine drainage that can result when stormwater, surface water or ground water comes in contact with sulfur bearing minerals, creating acidic water which dissolves and leaches toxic metals into the environment. The Formosa Mine, a former copper, zinc and thorium mine in southwest Oregon, provides an example of the risk posed

<sup>196</sup> See *Earthworks Factsheet: Problems with Bingham Canyon Mine*, *Earthworks*, published 2011. Accessed December 29, 2015, at: [https://www.earthworksaction.org/files/publications/FS\\_Problems\\_BinghamCanyon\\_2011\\_low.pdf](https://www.earthworksaction.org/files/publications/FS_Problems_BinghamCanyon_2011_low.pdf); and U.S. EPA Region 8 and Utah Department of Environmental Quality, *Five-Year Review Report: Kennecott North Zone Superfund Site, Salt Lake County and Tooele County, Utah* (Washington, DC: U.S. Government Printing Office, 2014).

by releases from underground mines. In this case, storm water-driven contaminant releases from the mine have led to an annual discharge of approximately five million gallons of acid rock drainage, containing up to 30,000 pounds of dissolved copper and zinc, along with other metals. One of the primary sources of these metals is underground mine workings; low pH shallow ground water and adit drainage to surface water, both laden with high concentrations of metals. According to the State of Oregon, the mine has contaminated 18 miles of the Oregon's Umpqua watershed (Middle Creek and South Fork of Middle Creek and Cow Creek)—eliminating prime habitat for the threatened Oregon coast Coho salmon and steelhead.<sup>197</sup>

Dust and waste rock, produced during both open-pit and underground mining, can release trace elements and other toxic substances. Waste rock and overburden piles are typically stored on-site and remain an important consideration for the environmental performance of currently operating mines. Disposal typically involves depositing the waste rock in dedicated dumps or piles, or in some cases using it as mine backfill. Waste rock can also be co-disposed with filtered tailings, or in a slurry pond. Further, releases from waste rock disposals can arise years after operations have ceased, through discharges of mine influenced water, and pile deformation or collapse. Thus, waste rock disposals are often the focus of reclamation and closure plans and require consistent and long-term maintenance, monitoring, and potentially treatment.

As with acid mine drainage, other mine influenced water can also be of concern. Mine influenced water encompasses any water whose chemical composition has been affected by mining or mineral processing. This includes not only acid mine drainage but also drainage that is neutral or alkaline. In addition to environmental concerns posed by acidity or alkalinity, mine influenced water often contains elevated concentrations of mobilized contaminants, suspended solids, or sulfate or arsenate content. There are many potential sources of mine influenced water, because it includes any natural waters that come into contact with mining operations. Common sources include groundwater affected by pits or underground workings, surface water that has entered

<sup>197</sup> Also see: *Earthworks, Modern Mining Needs a Modern Mining Law*. Available at: [https://www.earthworksaction.org/library/detail/modern\\_mining#.V-QJk37VD8](https://www.earthworksaction.org/library/detail/modern_mining#.V-QJk37VD8).

surface excavations, or any precipitation that comes into contact with pit faces, leach piles, waste rock piles, or tailings piles.

The risk for contamination from hazardous substances originating in waste rock depends on the mineralogy and geochemical composition of the waste rock and its level of exposure to air and water at the disposal site. For example, sulfide rock can generate acids that dissolve trace elements that, without long-term containment, collection, and treatment, pose a significant concern long after initial disposal. Discharges can take years to develop, and pose a long-term risk of hazardous releases at the site.

Environmental issues resulting from mine influenced water vary depending on commodity, climate, type of mine or mineral processing facility, and mine phase. A key characteristic for most mine influenced water (whether acidic, neutral, or alkaline drainage) is an elevated concentration of trace elements that have leached from surrounding solids such as waste rock, tailings, or mine surfaces. These acidic and metal-contaminated fluids are frequently a serious problem at mines and may be acutely or chronically toxic and may have harmful effects on humans, fish, animals, and plants.

An example of such a situation is the Barite Hill/Nevada Goldfields facility. The Barite Hill gold/silver mine located in South Carolina was previously owned by Nevada Goldfields, Inc., who operated an open pit cyanide heap leach operation on the property from 1989 until 1994. Nevada Goldfields conducted mine reclamation activities from 1995 until 1999 when they went bankrupt and subsequently abandoned the property. After the mine closed, the 10-acre Main Pit began to fill with water. At its highest, the Main Pit contained approximately sixty million gallons of highly acidic water with high dissolved metals content. The main mine pit, ponds, sediment, surface water and soil are contaminated with arsenic, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, zinc, and cyanide. Contamination affected surface water and sediment in Hawe Creek and its tributaries, posing a threat to people who eat fish from the Hawe Creek fishery as well as a nearby drinking water reservoir. When acid mine drainage occurs, it is extremely difficult and often very expensive to control, and also often requires costly long-term management measures.

Mineral processing practices likewise raise significant release issues. For example, flotation processes generate tailings that consist of a mixture of

waste material and the remaining liquid, which consists mostly of water and any remaining reagents. These are generally pumped to a tailings impoundment, where solids are settled out of the solution. In some cases, reagents have the potential for environmental harm. Although most of these reagents are consumed during flotation and only small residual quantities make it into the tailings, facilities might dispose of wastes from various processes in the same waste management units, with the resulting mixture containing more hazardous constituents than tailings from flotation alone.

The use of cyanide in gold mining operations creates additional risks, including the potential release of cyanide into soil, groundwater, and/or surface waters, which has resulted in catastrophic cyanide spills. Cyanide leaching has occurred since the mid 1900's. While the use of acid to leach copper dumps, the use of cyanide to leach gold in heaps, and the spread of solvent extraction techniques have changed some aspects of mining, the basic operation of removing ore from the ground and concentrating it through beneficiation has remained fundamentally the same as when most of the non-active NPL sites were in operation. In the case of heap and dump leaching, the metals and other compounds in the ores have become more mobile due to the increased use of efficient lixiviants. In addition to the release of cyanide, discharges from cyanidation processes both during operations and after closure can also contain potentially toxic elements including lead, cadmium, copper, arsenic, and mercury. Leaching tanks, leach pads, piping and storage facilities (e.g., process solution ponds and facilities associated with leaching) can release sulfuric acid and mobilized contaminants into the environment. These leaching solutions can pose significant environmental and human health risks if they are not contained successfully. Information on documented releases reveals that acid leach operations have caused contamination of both surface and ground waters in addition to injuring habitat and wildlife. Releases due to equipment failures, chronic seepage, or weather-related overflows seem to be the most common problems; acid leach operations need to ensure proper reclamation of spent dump or heap leach piles, maintenance of equipment, and preparation of systems for severe weather in order to minimize environmental impacts. Cyanide leaching processes create wastes that

can present risks of releases of hazardous substances such as cyanide, cyanide-metal complexes, and metals via groundwater and surface water routes. In addition, sulfuric acid can leach metals from other mining wastes and containment areas, transporting other contaminants to surface and groundwater systems. While leaching solutions are generally recycled back to the process, failure to contain them properly can result in releases. After leaching has been discontinued, the abandoned leach site can be a source of acidic effluents, hazardous trace elements, and total dissolved solids if it is not properly monitored and managed. Mine influenced water (e.g., acid, alkaline, or neutral mine drainage), i.e., runoff originating from exposed heap leach piles or tailings, is also a distinct risk associated with this practice.

The Beal Mountain Mine, a gold and silver mine in Montana, used cyanidation to extract precious metals until it was closed in 1997 when Pegasus gold went bankrupt. Although the mine is no longer operating, it has continued to pollute neighboring streams with cyanide, selenium and copper. Ongoing issues include the geotechnical stability of the pit high wall and leach pad dike, infiltration of precipitation and groundwater into the leach pad, and treatment and disposal of excess solution accumulating on the heap leach pad.<sup>198</sup> This mine also demonstrates the limitations of predicting environmental impacts of these facilities -when this mine was permitted, the Environmental Analysis concluded that the operation of the mine would have no impacts to water quality, because there will be no discharge of mine or process water to surface waters.<sup>199</sup>

Zortman and Landusky Mines, in Montana, likewise used cyanidation to extract precious metals and also underwent bankruptcy and left significant pollution at their respective sites. In addition to a heap leach pad leak, the Zortman and Landusky facility experienced cyanide releases from a leach pad pipe, a solution pond liner leak, and a process pond liner leak.<sup>200</sup>

<sup>198</sup> See USDA-FS, *Preliminary Leach Pad Investigation Beal Mountain Mine, February 2010*. Available at: <http://www.fs.usda.gov/detail/bdnf/landmanagement/projects/?cid=stelprdb5076989>.

<sup>199</sup> See *False Promises: Water Quality Predictions Gone Wrong—Large Mines and Water Pollution*, 2012. Available at: <http://wman-info.org/wp-content/uploads/2012/08/FalsePromisesWater.pdf>.

<sup>200</sup> See U.S. Bureau of Land Management, *Final Engineering Evaluation/Cost Analysis (EE/CA) For Water Management at the Zortman and Landusky Mines, Phillips County Montana*, prepared by Spectrum Engineering (Washington, DC: U.S.

According to BLM, “modern” open pit heap leach operations began in 1977.<sup>201</sup> The BLM, as the lead Federal agency, conducted removal actions under its CERCLA authority. In response to the numerous issues associated with cyanide leaching in Montana, the state, in 1998, enacted a referendum banning the development of new open pits that use cyanide leaching.

Releases also have occurred from other leach pad operations, including the Barrick Goldstrike mine in Nevada, where there was a release of 159,000 gallons of cyanide in 2003 and 21,625 gallons of sodium cyanide in 1995. Also, the Florida Canyon mine in Nevada released 52,500 gallons of sodium cyanide (30 percent solution) in 1996. The groundwater contamination that resulted from releases from this facility’s leach pad operation was previously discussed.

Similar to historical releases, tailings management played a role in roughly half of the publicly documented releases. Tailings are the waste material created when valuable minerals or metals have been extracted from ore. Depending on the commodity and the mineral processing method, tailings may contain chemical residues inherent to processing. For example, milling operations that practice flotation or leaching may produce tailings containing reagents such as lime or glycol ether and lixivants including acids and cyanide. The Robinson Nevada Mining Company operates the Robinson Operation surface mine in White Pine County, Nevada. This facility produces gold and copper using flotation processes. The facility released copper flotation tailings five times in 1996, leading to violations of its water pollution control permit.

Tailings usually take the form of a slurry (e.g., wet tailings), but may also undergo dewatering and disposal as paste or filtered tailings. Depending on the commodity and the beneficiation process, tailings may contain a variety of hazardous materials, originating from geologic components of the ore or chemicals introduced during processing. Therefore, they require proper disposal and storage.

In addition to the previously discussed releases from the tailings storage units at the Jerritt Canyon mine,

there have been releases at other tailings storage units, including: ArcelorMittal Minorca is an iron mining and processing facility located in Virginia, Minnesota. Three failures in the tailings and waste rock pipe and tailings dike at the site occurred in 2013 and 2014, discharging 8,500 cubic yards of tailings and waste rock and affecting 15.3 acres of wetlands, potentially destroying the area’s ability to function as a natural aquatic habitat and filtration system.<sup>202</sup>

The U.S. Silver Galena mine is a silver-lead and silver-copper underground mine located near Wallace, Idaho, and operated by the U.S. Silver Corporation since 2007. In 2014, U.S. Silver Corporation signed a Consent Agreement and Final Order with EPA Region 10 admitting to discharging wastewater from the Osburn tailings pond into Lake Creek and the Coeur d’Alene River that carried excessive concentrations of mercury and copper in 2012 and 2013. The discharge was the result of a failure to monitor treated water normally discharged to water system. U.S. Silver also admitted that on March 14, 2014, it discharged tailings slurry directly into Lake Creek.<sup>203</sup>

The Golden Sunlight mine located in Montana is a gold and silver open pit mine and underground cyanide vat leach operation. This facility’s original tailing disposal facility operated from 1983 to 1995. Seepage was detected from Tailing Impoundment No. 1 in 1983. To control effluent from the impoundment, the bentonite cut-off wall was immediately repaired. An extensive system of monitoring wells has been installed over the years, and several hydrogeologic investigations have been undertaken to continue to monitor, evaluate, and control leakage from the impoundment.

Tailings management presents significant environmental challenges to current mining operations. Because acid may not be generated for many years and most tailings ponds are designed to allow infiltration of water through the pond, the potential of acid generation and mobile metals are of such concern that many mines construct complex monitoring and water management systems for their tailings ponds. It is likely that some constituents of concern (i.e., arsenic, sulfates, etc.) have become more mobile due to crushing the ore to a smaller particle size. Although

operators now generally attempt to contain these waste management features, proper long-term management is required to safeguard against leaks, runoff, and catastrophic failure. Because reclamation and closure are yet to occur at currently operating facilities, the available data do not capture information characterizing the scope and efficacy of these practices. Based on the experience of currently closed sites, the environmental impacts of releases to groundwater and runoff from tailings impoundments and waste rock piles will continue to be of concern at these facilities long after closure.

Fugitive dust emissions from tailings storage units also can be a concern. For example, Hecla Greens Creek is a lead, zinc, silver, and gold underground mine located near Juneau, Alaska, and operated by the Hecla Greens Creek Mining Company. The mill produces 650,000 tons of tailings annually. In 2013, elevated concentrations of metals were detected in the snow and lichens adjacent to the tailings disposal facility. The USFS, who installed the lichen to act as a biomonitor of the recently expanded tailings facility, concluded the contamination was the result of fugitive dust emissions from the tailings.<sup>204</sup>

EPA recognizes various environmental regulatory programs may affect releases of CERCLA hazardous substances at hardrock mining and mineral processing facilities. Examples of the regulations include requirements under: (1) The Clean Water Act (CWA), (2) the Uranium Mill Tailings Radiation Control Act (UMTRCA), and (3) reclamation requirements such as the BLM’s 3809 regulations. However, EPA has found that significant issues involving noncompliance with regulatory requirements resulting in releases of hazardous substances persist. EPA’s ongoing concern with reducing the risk of mining waste contamination of drinking water, rivers, and streams, and work to cleanup mining and mineral processing facilities has been an enforcement priority for almost ten years, as reflected in the Agency’s National Enforcement Initiative (NEI): Reducing Pollution from Mineral Processing Operations reflects the Agency’s concerted effort to reduce the risk of mining waste contamination of drinking water, rivers, and streams, and work to cleanup mining and mineral

Government Printing Office, 2006). Accessed August 28, 2015 at: [http://www.blm.gov/style/medialib/blm/mt/field\\_offices/lewistown/zortman.Par.62509.File.dat/finaleec.pdf](http://www.blm.gov/style/medialib/blm/mt/field_offices/lewistown/zortman.Par.62509.File.dat/finaleec.pdf).

<sup>201</sup> See Zortman and Landusky Mines—Project History, February 2006. Available at: [http://www.blm.gov/style/medialib/blm/mt/field\\_offices/lewistown/zortman.Par.32256.File.dat/ZLbackground.pdf](http://www.blm.gov/style/medialib/blm/mt/field_offices/lewistown/zortman.Par.32256.File.dat/ZLbackground.pdf).

<sup>202</sup> See Pipeline, Storage Basin Failures Send Ore Tailings and Road Aggregate into Wetlands, Minnesota Pollution Control Agency, June 24, 2015.

<sup>203</sup> See U.S. Environmental Protection Agency, Consent Agree and Final Order In the Matter of U.S. Silver—Idaho Inc., Coeur and Galena Mines and Mills, Wallace, Idaho, effective 16 September 2014.

<sup>204</sup> See United States Department of Agriculture, Forest Service, Greens Creek Mine Tailings Disposal Facility Expansion: Final Environmental Impact Statement and Record of Decision (Washington, DC: U.S. Government Printing Office, 2013), Volume 1.

processing facilities.<sup>205</sup> The Agency's FY 2011–2013 National Enforcement Initiatives states 'At some sites, EPA's inspections have found significant non-compliance with hazardous waste and other environmental laws.' EPA's *National Enforcement and Compliance Strategy for Mineral Processing FY2008–2010* states 'Environmental impacts caused by the mineral processing and mining sectors are significant. The mineral processing and mining sectors generate more wastes that are corrosive or contain toxic metals than any other industrial sector. Over the past decade, we have found that many of the facilities that manage these wastes, due either to noncompliance with state or Federal environmental requirements or legally permissible waste management practices, have created groundwater, surface water, and soil contamination.'

EPA believes the results of this relatively recent effort to further document the state of current mining practices substantiates the findings from the other documents described herein and further reinforces the Agency's belief that currently operating hardrock mining and mineral processing facilities subject to this proposal continue to present risks of release of hazardous substances.

#### c. Evidence of CERCLA Hazardous Substances and Potential Exposures at CERCLA § 108(b) Mining and Mineral Processing Sites<sup>206</sup>

The document "Evidence of CERCLA Hazardous Substances and Potential Exposures at CERCLA § 108(b) Mining and Mineral Processing Sites" reports EPA preliminary efforts from 2009–2012 to examine CERCLA site-specific documents for estimated exposures of human and ecological receptors to CERCLA hazardous substances from mining and mineral processing sites cleaned up under Superfund in the past. The report also collects available information on potential exposures of human and ecological receptors to CERCLA hazardous substances from mining and mineral processing sites that were operational in 2009 (the most current available data at the time the evaluation took place).

EPA concluded the following: (1) Some of the sites operational in 2009 are already on Superfund's National

Priority List (NPL) requiring cleanup; (2) mining and mineral processing practices at sites cleaned up under Superfund in the past continue to be used at sites operational in 2009, especially when comparing sites that mine or process the same range of commodities; (3) there are similarities between the Contaminants of Concern<sup>207</sup> at sites cleaned up under Superfund in the past, and the CERCLA hazardous substances present at sites operational in 2009; (4) human and ecological receptors at sites cleaned up under Superfund in the past have parallel potential receptors at sites operational in 2009; and (5) environmental settings and exposure pathways at sites cleaned up under Superfund in the past have corresponding environmental settings and potential exposure pathways at sites operational in 2009.

Overall, the compiled information demonstrates that sites requiring cleaned up under Superfund in the past, and sites operational in 2009 share characteristics related to the potential release of CERCLA hazardous substances and the exposure of human and ecological receptors, and illustrates the applicability of EPA's CERCLA experience to evaluating currently operating mines and processors.

#### d. Previous Studies About Releases From Hardrock Mining and Mineral Processing Facilities

EPA has also identified numerous documents showing recent releases of CERCLA hazardous substances at hardrock mining and processing facilities and thus continuing risks of release or threatened release of CERCLA hazardous substances associated with those activities. These documents are available in the docket for this proposed rule and include:

##### Damage Cases and Environmental Releases from Mines and Mineral Processing Sites<sup>208</sup>

This document, published in 1997, presents summaries about mining and mineral processing damage cases that occurred since 1990. Many of the damage cases included in this document involved mining and mineral processing of commodities covered by this proposed rule. The release incidents occurred from the production, treatment, storage or disposal of hazardous substances involving

extraction and beneficiation operations, including inadequate containment of tailings, clay ponds, waste rock, process water, process solution (e.g., cyanide), wastewater, acid mine drainage, and stormwater. Many of the releases occurred through spills resulting from equipment failure, and operator error while others resulted from unusually heavy rains and, consequently, the generation of high stormwater volumes. The typical management practices used for storage or disposal of mineral processing secondary materials and wastes were found to have created or exacerbated ground water contamination in the immediate area. In some cases, a combination of feedstock, in-process materials, secondary materials, and wastes contributed to ground water, surface water, or soil contamination. EPA believes that this document presents a relatively accurate description of current mining and processing practices and the potential releases associated with these practices.

##### Mining Sites on Superfund's National Priorities List—Past and Current Mining Practices<sup>209</sup>

This document provides an overview of the types of releases of hazardous substances associated with the production, storage, and disposal of hazardous substances and the associated impacts, including NPL cleanups. It also documents that 'although some mining waste management practices have changed over time, the basic technology for extraction and beneficiation of mineral ores have remained fairly constant over the last fifty years.'

This document states that mining activities at many NPL sites resulted in the generation of tailings, acid drainage, waste dumps, and waste rock and that these are the same types of wastes generated by current mines. It further reports that tailings, mine water, and waste rock are the highest volume wastes generated by all past and current mining operations. In the case of tailings, it is likely that some constituents (*i.e.*, arsenic, sulfates, etc.) have become more mobile due to crushing the ore to a smaller particle size. In the case of heap and dump leaching, the metals and other compounds in the ores have become more mobile due to the increased use of

<sup>205</sup> See U.S. EPA Office of Enforcement and Compliance Assurance, *National Program Manager Guidance*, April 2015. Available at: [https://www.epa.gov/sites/production/files/2015-02/documents/oecas\\_draft\\_fy\\_2016-2017\\_national\\_program\\_manager\\_guidance\\_february\\_19\\_2.pdf](https://www.epa.gov/sites/production/files/2015-02/documents/oecas_draft_fy_2016-2017_national_program_manager_guidance_february_19_2.pdf).

<sup>206</sup> See U.S. EPA, Office of Land and Emergency Management, Memorandum to the Record: *Releases from Hardrock Mining Facilities*, November 2016.

<sup>207</sup> A CERCLA hazardous substance found at a concentration that a Superfund risk assessment has determined poses an unacceptable risk to human health or the environment.

<sup>208</sup> See U.S. EPA 1997, *Damage Cases and Environmental Releases from Mines and Mineral Processing Sites*.

<sup>209</sup> See Van E. Housman and Stephen Hoffman U.S. Environmental Protection Agency Washington D.C. Published in: *Proceedings, Chapter 6, Risk Assessment/Management Issues in the Environmental Planning of Mines, Society for Mining, Metallurgy and Exploration (SME)* (September 1992), and in: *Proceedings, Second International Conference on Environmental Issues and Management of Waste in Energy and Mineral Production, University of Calgary* (1992).



efficient lixiviants (*i.e.*, the solution used in hydrometallurgy to assist in extracting the desired metal from ore in heap leaching, dump leaching, and in situ leaching).

The document also states that ‘many current mining operations are extracting sulfide ores, having exhausted the less acidic oxide ores. Therefore, the potential for environmental damage from acid mine drainage at existing mines is possible, if favorable geologic and climatic factors exist. There are dozens of current mining operations with open pits or that have extensive underground tunnels are, similar to NPL sites, located in high sulfide environments.’ These current operations continuously pump and treat groundwater that enters the pit or mined tunnels as part of the overall mine water management system. Some of the larger currently operating mines are not only pumping and chemically treating mine water, they are using other control methods such as intercepting aquifers to control water flow into the mine and diverting entire surface streams. In many cases, once the decision is made to divert streams and intercept aquifers, active water management will have to continue indefinitely, long after the mine is closed.

Finally, the document states that current mining practice is to impound tailings behind engineered dams and attempt to control and treat discharges to surface water and groundwater. Current design rarely includes lining the ponds. Unlined tailings ponds are specifically designed either to introduce water directly to groundwater or direct it to leachate collection systems that flow into surface ponds at the base of a dam (toe ponds). Tailings management presents significant environmental challenges to current mining operations. Because acid may not be generated for many years and most tailings ponds are designed to allow infiltration of water through the pond, the potential for acid generation and mobile metals are of such concern that many mines construct complex monitoring and water management systems for their tailings ponds.

Although this document was published almost 25 years ago, EPA has concluded that it still presents a relatively accurate description of current mining and mineral processing practices and the potential releases associated with these practices, as identified in the more recent documents previously described.<sup>210 211</sup>

<sup>210</sup> See U.S. EPA, Draft Comprehensive Report: *An Overview of Practices at Hardrock Mining and*

Human Health and Environmental Damages from Mining and Mineral Processing Wastes<sup>212</sup>

EPA developed this document to illustrate the human health and environmental damages caused by management of wastes from mining (*i.e.*, extraction and beneficiation) and mineral processing, particularly damages caused by placement of mining and mineral processing wastes in land-based units, including piles, surface impoundments, and ponds as part of its ‘Phase IV’ Land Disposal Restrictions rulemaking under the RCRA Subtitle C program. This document presents 66 mining and mineral processing damage cases, including mining and mineral processing of commodities covered by this proposed rule. The damage cases demonstrate that land-based management practices for mining and mineral processing wastes are responsible for considerable damages to human health and the environment. These damages commonly arise from land placement of wastes in unlined units having minimally engineered release controls. These units include piles of slags, dusts, refractory bricks, sludges, waste rock and overburden, and spent ore; surface impoundments containing mill tailings and/or process wastewaters; and heap leaching solution ponds. In addition, many, if not most of the damage case facilities have caused human health or environmental damages through leaks or spills, such as releases from lined management units, valves, and pipes.

The damage cases illustrate the wide variety of human health and environmental impacts caused by wastes from mining and mineral processing operations, including groundwater, surface water, and soil contamination; human health damages or risks; and damages to vegetation, wildlife, and other biota. As noted earlier, in more recent documents prepared by EPA, many of the damage

*Mineral Processing Facilities and Related Releases of CERCLA Hazardous Substances*, November 2016.

<sup>211</sup> See U.S. EPA, Draft Report—*Discharges from Recently or Currently Operating Mines and Mineral Processing Facilities*, September 2016.

<sup>212</sup> See U.S. EPA December 1995. *Technical Background Document Supporting the Supplemental Proposed Rule Applying Phase IV Land Disposal Restrictions to Newly Identified Mineral Processing Wastes*. Damage cases used for this document were derived from previous studies by EPA identifying human health and environmental damages caused by mining and mineral processing waste management activities, including: *Report to Congress on Special Wastes from Mineral Processing*, July 1990; *Mining Waste Release and Environmental Effects Summaries*, Draft, March 1994; *Mining Sites on the National Priorities List: NPL Site Summary Report*, June 21, 1991; and *Mining Sites on the NPL*, August 1995.

cases cited in this document involved releases that EPA has concluded are still indicative of current mining and mineral processing practices and the potential releases associated with these practices.

e. Data Concerning Releases, Generation, and Management of CERCLA Hazardous Substances

EPA evaluated several databases, as follows:

(1) Releases Reported Under the Emergency Response Notification System (ERNS)

EPA also looked at releases of CERCLA hazardous substances reported under the Emergency Response Notification System (ERNS). EPA considered these data because of the potential insights the data offered on an annual basis over a prolonged period of time—providing a means by which to show the extent of and reasons for reported releases of CERCLA hazardous substances by hardrock mining and mineral processing facilities.

ERNS primarily contains initial accounts of releases reported to the National Response Center, made during or immediately after a release occurs. The National Response Center receives all reports of releases involving hazardous substances and oil that trigger Federal notification requirements under several laws. It also should be noted that the National Response Center is strictly an initial report-taking agency and does not participate in the investigation or incident response. The National Response Center receives initial reporting information only and notifies Federal and state On-Scene Coordinators for response.

From the National Response Center Web site (<http://www.nrc.uscg.mil/>), EPA downloaded, by year, the details for each call reporting a release—from 1990 through 2014. Although releases have been reported to the National Response Center since 1982, the data from 1982–1989 are difficult to use because of inconsistent formats, and missing and/or inconsistent data fields, among other problems. A more uniform and consistent format for documenting calls was put into place in 1990, so EPA examined National Response Center data from 1990 through 2014. For the purpose of this rulemaking, EPA only focused on reported releases that involved CERCLA hazardous substances.<sup>213</sup> The ERNS data contains information about the material and the

<sup>213</sup> See U.S. EPA, *Extracting Useable Data from ERNS Incidents Applicable to HRM Facilities*, December 2015.

quantity released, where and when the release occurred, and information about property damage, injuries, and deaths occurring due to the release. The ERNS data include a general Incident Type and Incident Cause. Analyzing information from the Incident Description for each reported release, EPA developed and assigned a more detailed description of the incident type and cause.

EPA's analyses show that, since 1990, more than 950 reported releases of CERCLA hazardous substances were associated with currently operating facilities in the hardrock mining industry.<sup>214</sup> Looking at the more recent data, approximately 435 of the releases were reported since 2000, for an average of about thirty reported releases per year since 2000. These ERNS data provide yet another indicator of ongoing reported releases of CERCLA hazardous substances at hardrock mining and mineral processing facilities. Many of the reported releases were due to: (1) Damage to/overflow of pond/impoundment/pile/landfill due to storms, (2) breaks or leaks of piping/hoses, (3) accidents/operator error, and (4) failure or overflow of process units and storage/treatment tanks/sumps.

EPA also reviewed a report that substantially relied on ERNS data to show pipeline, seepage control and tailings impoundment failures at operating copper porphyry mines in the U.S., and the associated water quality impacts.<sup>215</sup> This document states that 'copper porphyry mines are often associated with water pollution associated with acid mine drainage, metals leaching and/or accidental releases of toxic materials.'

## (2) Analysis of Toxics Release Inventory (TRI) Data

The Toxics Release Inventory (TRI) includes data on chemicals (including numerous CERCLA hazardous substances) that are released, recycled, treated, or used for energy recovery. Under TRI, releases include air emissions, surface water discharges, underground injection wells, and placement to land, including RCRA hazardous waste landfills and other landfills. TRI data also show quantities transferred to publicly owned treatment

works (POTWs) and to off-site facilities. In developing this proposal, EPA examined recent TRI data<sup>216</sup> in order to identify the types, amounts, and methods of hazardous substance management at facilities potentially subject to the rule. EPA's 2010 through 2013 Toxic Release Inventory (TRI) data indicates that the metal mining industry (e.g., gold ore mining, lead ore and zinc ore mining, and copper ore and nickel ore mining) reported quantities of onsite releases of hazardous substances, averaging nearly 1.7 billion pounds per year. In 2013, the metal mining sector reported the largest quantity of total disposal or other releases, accounting for 47 percent of the releases for all industries. It also represents almost three quarters (71 percent) of the on-site land disposal for all sectors in 2013. (See: <http://www.epa.gov/toxics-release-inventory-tri-program/2013-tri-national-analysis-metal-mining>.) The preliminary 2014 TRI data likewise show nearly 1.8 billion pounds of onsite releases. Specific hazardous substances of concern that are released into the environment by mining facilities include: Ammonia, benzene, chlorine, hydrogen cyanide, hydrogen fluoride, toluene, and xylene, as well as heavy metals and their compounds (e.g., antimony, arsenic, cadmium, chromium, cobalt, copper, lead, manganese, mercury, nickel, selenium, vanadium and zinc).

More than 99 percent of these onsite releases involved surface impoundments (e.g., tailings) and other land placement (e.g., waste piles) not subject to RCRA Subtitle C permits.<sup>217</sup> In addition to the placement of these quantities of CERCLA hazardous substances on the land, for the period covering 2010–2013, metal mining facilities also reported an average of three million pounds of air releases and over 800,000 pounds of surface water discharges. Over the time period of 2010–2012, releases of hazardous substances (ranging between 425,000 pounds and 978,000 pounds) also were reported due to catastrophic or one-time

events; in 2013, nearly 194 million pounds of such releases were reported.

In the 2009 *Priority Notice*, EPA used Toxics Release Inventory (TRI) data to provide an indication of the quantities of hazardous substances that were associated with facilities in the hardrock mining industry. Commenters objected to EPA's use of these data. Commenters noted that releases reported to TRI encompass releases that may be permitted under the Clean Air Act, Clean Water Act, Safe Drinking Water Act, and RCRA Subtitle C. Thus, these commenters argued that these releases should not be used to predict the risk of releases and exposures to hazardous substances associated with potential mismanagement of hazardous substances.

EPA considered these objections to the use of these data, in developing its data for this proposal. The Agency recognizes that a significant portion of the TRI releases reported as air emissions and surface water discharges are likely permitted by Federal/state regulatory authorities. EPA also recognizes that some of the surface impoundments, landfills, and waste piles used to manage wastes containing these large volumes of hazardous substances might be designed and operated to mitigate releases into the environment.

These data provide some perspective about the number of currently operating facilities and offer insights on the types, amounts, and management of hazardous substances at hardrock mining and mineral processing facilities potentially subject to this proposed rule. The presence of such significant amount of hazardous substances, even if subject to regulatory controls, provides some indication of the potential for risks to result if improperly managed. In addition, EPA previously has discussed the evidence of non-compliance with regulatory standards. Thus, the TRI data provide relevant information on the risks associated with hardrock mining facilities.

## (3) Analysis of RCRA Hazardous Waste Biennial Report (BR) Data

The RCRA Hazardous Waste Biennial Report (BR) contains data reported by hazardous waste handlers and must be submitted by large quantity hazardous waste generators and treatment, storage, and disposal facilities every two years. Because RCRA hazardous wastes, by statute, are designated CERCLA hazardous substances, EPA analyzed the BR data for the 2009, 2011, and 2013 reporting cycles. These data show the quantities of RCRA hazardous waste streams generated and how the waste

<sup>214</sup> See U.S. EPA, *Analyses of ERNS Data Applicable to HRM Facilities*, December 2015.

<sup>215</sup> See Bonnie Gestring, *U.S. Copper Porphyry Mines Report: The Track Record of Water Quality Impacts Resulting from Pipeline Spills, Tailings Failures, and Water Collection and Treatment Failures* (Washington, DC: Earthworks, July 2012). Available at: [https://www.fxsp0;earthworkfxsp0;saction.fxsp0;org/files/publications/porphyry\\_copper\\_mines\\_track\\_record\\*8-2012.pdf](https://www.fxsp0;earthworkfxsp0;saction.fxsp0;org/files/publications/porphyry_copper_mines_track_record*8-2012.pdf).

<sup>216</sup> TRI is a publicly available EPA database that contains information on a list of 581 individually listed chemicals and thirty chemical categories that are being used, manufactured, treated, transported, released into the environment, or recycled. Facilities (certain regulated industries and federal facilities) are required to annually report to TRI under the Emergency Planning and Community Right to Know Act (EPCRA § 313).

<sup>217</sup> Many of the wastes generated by mining and processing operations, i.e., those processes that remove, concentrate, and/or enhance values contained in ores and minerals or beneficiated ores and minerals, have been excluded from regulation under RCRA Subtitle C per the Beville Amendment.

was managed. It is important for the reader to note that many wastes generated by mining and mineral processing operations are excluded from RCRA Subtitle C hazardous waste regulation under the Bevill Amendment.)

EPA found a wide variation in the quantity of hazardous waste generated by facilities in the hardrock mining industry, including nearly 3,000 tons in 2009, nearly 25,000 tons in 2011, and more than 13,000 tons in 2013. These generated quantities, for the most part, do not represent actual releases to the environment but instead represent amounts of hazardous substances produced and managed at the reporting facilities. The sources and types of hazardous wastes generated by these facilities are numerous and varied, including: (1) Contaminated soil from remediation and/or past contamination; (2) contaminated soil and debris from spills and accidental releases; (3) filters, solid adsorbents, ion exchange resins and spent carbon from air pollution control devices; (4) sludges, liquids, solids from cleanout of process equipment; (5) laboratory analytical wastes; (6) spent process liquids or catalysts, (7) removal of tank sludge, sediments, or slag; and (8) discarding off-specification or out-of-date chemicals or products.

To a large extent, facilities in the hardrock mining industry ultimately transfer their RCRA hazardous wastes to offsite treatment and disposal facilities. However, for those facilities that do treat and dispose of hazardous wastes onsite, the potential co-mingling of hazardous wastes with Bevill excluded wastes or non-hazardous wastes is a concern to EPA. Indeed, EPA has determined that some facilities place mixtures of exempt wastes (e.g. tailings) and non-exempt wastes in an on-site waste management unit.<sup>218</sup> Recently, EPA and the U.S. Department of Justice announced a settlement with Mosaic Fertilizer, LLC that will ensure the proper treatment, storage, and disposal of an estimated sixty billion pounds of hazardous waste at Mosaic's facilities in Bartow, Lithia, Mulberry and Riverview in Florida and St. James and Uncle Sam in Louisiana. At these facilities, sulfuric acid is used to extract phosphorus from

mined phosphate rock, which produces large quantities of a solid material called phosphogypsum and wastewater that contains high levels of acid. EPA inspections revealed that Mosaic was mixing certain types of highly-corrosive substances from its fertilizer operations, which qualify as hazardous waste, with the phosphogypsum and wastewater from mineral processing (Bevill wastes), which is a violation of Federal and state hazardous waste laws. The phosphogypsum piles can contain several billion gallons of highly acidic wastewater, which can threaten human health and cause severe environmental damage if it reaches groundwater or local waterways. In August 2016, one of these facilities (the New Wales in Mulberry) experienced a sinkhole, leaking 215 million gallons of contaminated water into the Floridian aquifer.

In the 2009 *Priority Notice*, EPA also used BR data to show the quantities of hazardous wastes that were associated with facilities in the hardrock mining universe. Commenters objected to EPA's use of these data to justify the need for financial responsibility requirements. Specifically, commenters stated: (1) That the BR data simply show the quantities of RCRA hazardous wastes that are generated and managed in accordance with the RCRA Subtitle regulations. They argued that thus these data are not an indicator of mismanagement and provide no information concerning the degree and duration of risk associated with the production, transportation, treatment, storage, or disposal of hazardous substances; (2) that EPA did not discuss whether, or how often, the generation of hazardous waste corresponds to on-site discharges of hazardous substances, or to costly cleanups; and (3) that the volume of hazardous waste reported on the RCRA BR may not be a realistic indicator of risk for CERCLA § 108(b) purposes. High volume waste streams often are highly dilute aqueous wastes that are managed in Clean Water Act wastewater treatment facilities.

EPA recognizes that the BR data concerning volume of hazardous waste generated and managed onsite, when considered alone, does not provide a direct indicator of risk of release or of mismanagement of wastes. Notwithstanding the issues pointed out by commenters, EPA believes these data do offer insights on the types, amounts, and management of RCRA hazardous wastes (by definition, CERCLA hazardous substances) at hardrock mining and mineral processing facilities potentially subject to this proposed rule.

e. Government Expenditures—Historical CERCLA Costs

EPA conducted analysis of historical response costs at 319 hardrock mining and processing sites on the National Priorities List (NPL) and at non-NPL CERCLA sites. EPA used this information to help further identify the magnitude of continuing risks from hardrock mining facilities potentially subject to the rule. Such costs also serve as a measure of the severity of consequences impacting human health and the environment as a result of releases of and exposure to hazardous substances. Specifically, the past and estimated future costs associated with protecting public health and the environment through what is often extensive and long-term reclamation and remediation efforts can be substantial.

The Agency developed a database for purposes of analysis that uses the "Expenditures", "ROD Costs", and "Settlements" data derived from CERCLIS, Integrated Financial Management System (IFMS), and Office of Enforcement and Compliance Assurance (OECA) information resources. These data sources for response costs included: (1) Fund expenditures incurred at each site to date, the type of expenditure (broadly speaking, construction versus non-construction) and the source of funds (whether the Fund was reimbursed by the potentially responsible party (PRP) through a "special account"); and (2) Records of Decision (RODs) at each site. A ROD is a document that provides the justification for the remedial action (treatment) chosen at a Superfund site. It also contains information concerning site history, site description, and site characteristics. The ROD Costs database provides a dollar estimate for each remedial action chosen at a site. Last, information was compiled about settlements with PRPs, including "cash out" funds accrued and deposits into special accounts associated with settlements at each site.

Following a review of the discussed data sources, EPA developed a tailored approach that attempts to characterize the total (*i.e.*, past and future) response cost at each of the historical sites identified, taking advantage of all available data sources and site characteristics. EPA then verified and adjusted the response costs using reports from the U.S. Government Accountability Office (GAO) and from the Office of the Inspector General

<sup>218</sup> See U.S. EPA, *Mineral Processing Facilities Placing Mixtures of Exempt and Non-Exempt Wastes in On-Site Waste Management Units, Technical Background Document Supporting the Supplemental Proposed Rule Applying Phase IV Land Disposal Restrictions to Newly Identified Mineral Processing Wastes*, December 1995. (Note: See EPA's Supplemental Phase IV LDR Final Rule [63 F.R. 28595–97 (May 26, 1998)], which included discussion of mineral processing secondary materials and Bevill Exclusion issues.

(OIG)) that investigated past and future costs at NPL sites.<sup>219 220</sup>

In considering the total remediation and other expenditures experienced at these sites (including both past and projected future expenditures necessary to complete cleanup), EPA estimates that the historical response costs total \$12.9 billion at 243 hardrock mining and minerals processing facilities evaluated for which data were available at the time of the analyses. The estimate of response costs for just 117 NPL sites from the sample totals more than \$12 billion, or an average of more than \$103 million per site. Federal expenditures to date total roughly one-third of the total (or \$4 billion), paid for through EPA's Superfund program. Such significant cleanup costs may be considered as an indication of the relative risks present at these sites, and the potential magnitude of environmental liabilities associated with this industry overall. It should be noted that this data does not capture funds spend cleaning up hardrock mining facilities outside of the Superfund program (e.g., by a state cleanup authority).

Costs associated with ATSDR Health Assessments and Natural Resource Damages further increase the liabilities attributable to the hardrock mining and mineral processing sectors. EPA identified documented natural resource damages settlements at 64 sites within this sector. This statistic alone suggests that as many as 25 percent of CERCLA sites in this sector have also been the source for associated damages to natural resources. Based on the natural resource damages cases identified, the values of the damages average more than \$16 million across all of the cases, with individual settlements ranging from \$32,000 to over \$400 million.

#### f. EPA's Conclusions Regarding Risks Posed by Facilities in the Hardrock Mining Universe

Information available to EPA indicates strongly that the hardrock mining industry continues to present risks associated with the production, transportation, treatment, storage, and disposal of hazardous substances. Mining activities at many NPL sites resulted in the generation of tailings, acid drainage, waste dumps, and waste rock; these are the same types of wastes

generated by current mines. In many cases, releases were largely due to the direct discharge of wastes into the local environment or minimal containment efforts. For example, the P4/Monsanto-South Rasmussen facility, operating near Soda Springs in southeast Idaho, discharged wastewater containing high concentrations of selenium and heavy metals from a waste rock dump at the mine without a required permit. Further, P4's unpermitted discharges, which contained selenium levels far above Idaho's state water quality standards, polluted a nearby wetland and an unnamed tributary of Sheep Creek, as well as downstream waters that drain to the Snake River. P4 agreed to pay a \$1.4 million civil penalty for alleged Clean Water Act violations and to continue collecting selenium-contaminated leachate from the waste rock pile and to prevent leachate from entering nearby creeks and wetlands until such time as the company either obtains a National Pollution Discharge Elimination System permit, or it undertakes a restoration of the waste rock dump under another state or Federal order.

Additionally, many releases described in publicly available information occurred after closure of the mine or mineral processing site, suggesting that the potential for releases and adequate monitoring remains a long-term concern after closure of the mining or mineral processing operation.

While some mining waste management practices have changed over time, the basic technologies for extracting and processing of mineral ores have remained fairly constant over approximately the last 50 years. Mining technology has become more efficient over time in recovering mineral values—allowing lower grade ores to be mined which produce more waste. At the same time, a combination of economic and technological factors have increased the scale of surface disturbance and waste generation. Mining and mineral processing facilities generate more toxic and hazardous waste than any other industrial sector.

Underground and surface mining create large amounts of excavated material. Disposal typically involves depositing the waste rock in dedicated dumps or piles, or in some cases using it as mine backfill. Waste rock can also be co-disposed with paste or filtered tailings, or in a slurry pond. Waste rock and overburden piles are typically stored on-site, which may result in acidic or other mine-influenced water. Common sources include groundwater affected by pits or underground workings, surface water that has entered

surface excavations, or any precipitation that contacts pit faces, leach piles, waste rock piles, or tailings piles. Sulfide rock can generate acids that dissolve trace elements which, without long-term containment, collection, and treatment, pose a significant concern long after initial disposal.

Further, releases from waste rock disposal can arise years after operations have ceased, through discharges of mine influenced water, and pile deformation or collapse. Most mines require ongoing management for acidic drainage. Evidence has shown that such problems continue to be a problem even at sites that have been inactive for more than a century. Thus, discharges can take years to develop, and pose a long-term risk of hazardous releases at the site.

EPA's research indicates that all processing of ore, including physical and magnetic processing, can result in spills of intermediate material and waste. This is because transport within the facility of the many different commodities and process chemicals used in hardrock mining activities is required between subsequent processing steps, thus resulting in risk of release. In addition, where operators use toxic process chemicals, the potential for harm associated with these spills is increased. Similarly, ore must be transported from the extraction site to the mineral processing facility. Process water and solutions are often stored in ponds on site for use and recycling. Slurries are piped from mill facilities to storage facilities (which can include waste management features such as tailings ponds) by pipeline, truck, or conveyor. The slurry, containing ore and process chemicals, can contain mobilized contaminants and other hazardous substances. EPA has documented that leaks also often occur due to liner failures, containment failures during transport or at exchange points (e.g., conveyor drop points or truck offloads), and defects in pipe seams. EPA has also documented that operator error, such as mishandling of solutions (e.g., over-fills) or equipment, and severe weather events that overwhelm containment systems can contribute to these types of releases.

Finally, information available to EPA indicates that potential risks posed by hardrock mining and mineral processing facilities can affect all environmental media. Air, land, and water contamination may result when waste rock dumps, tailings disposal facilities and open pits are not maintained properly and release hazardous

<sup>219</sup> See U.S. Government Accountability Office, *Superfund: EPA's Estimated Costs to Remediate Existing Sites Exceed Current Funding Levels, and More Sites Are Expected to Be Added to the National Priorities List*. Report No. GAO-10-380. May 2010 (the GAO Report).

<sup>220</sup> See Office of Inspector General, *Nationwide Identification of Hardrock Mining Sites*. Report No. 2004-P-00005. March 31, 2004 (the OIG Report).

substances to the environment.<sup>221</sup> EPA has also documented that releases of CERCLA hazardous substances have occurred and continue to occur, including ongoing releases that have not yet been detected and/or mitigated.

## VII. Statutory and Executive Orders Reviews

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

This action is an economically significant regulatory action that was submitted to the Office of Management and Budget (OMB) for review. Any changes made in response to OMB recommendations have been documented in the docket. The EPA prepared an analysis of the potential costs and benefits associated with this action. This analysis, Regulatory Impact Analysis, is available in the docket. Section I.C. of this preamble summarizes the results of the RIA. As discussed in that section of the preamble, on annualized basis, the estimated regulatory costs to private entities for the two options in the proposed action are \$171 million (without a financial test), and \$111 million (with a financial test). EPA also segregated the costs borne by private entities into social cost (borne by society) and intra-industry transfers. The majority of the industry costs represent a transfer from the regulated industry to the financial industry, and hence the quantified annualized net social costs are estimated at \$30 million to \$44 million. Similarly, the Agency conducted a qualitative analysis of the benefits of the rule; however, the results were not monetized. As such, the net benefit-cost analysis of the two options may have an annual effect on the economic near \$100 million or more. Accordingly, EPA submitted this action to the OMB for review under Executive Order 12866, and plans to incorporate changes in response to OMB recommendations on the proposal rule.

### B. Paperwork Reduction Act (PRA)

The information collection activities in this proposed rule have been submitted for approval to the OMB under the PRA. The ICR document that the EPA prepared has been assigned EPA ICR number 2554.01. You can find a copy of the ICR in the docket for this rule, and it is briefly summarized here.

The proposed rule would require that owners or operators of facilities subject to the rule submit information to EPA. This ICR addresses the following proposed information requirements that are part of the rule: (1) Submit an initial Notification Form to EPA within thirty days of the effective date of the regulation; (2) make relevant information available to the public on the company's website; (3) calculate financial responsibility amount and submit information to support the calculation to EPA; (4) submit evidence that support the establishment of financial responsibility; (5) update financial responsibility amount at minimum every three years and submit evidence of proper maintenance of financial responsibility; (6) notify EPA when the owner or operator and the issuer of financial instruments enter Chapter 11 bankruptcy proceedings; (7) notify EPA of any claim pursuant to CERCLA naming the owner, operator, or guarantor as defendant; (8) notify EPA when the facility is no longer authorized to operate or the date by which the owner or operator must provide notification that the facility is ceasing operations under another regulatory program; and (9) maintain a record of all of the information related to financial responsibility requirements and retain those records for three years after the owner or operator released from financial responsibility requirements.

EPA believes that submission of the information would be needed for effective implementation of CERCLA § 108(b) requirements. By requiring the owner or operator to submit information about the facility to EPA, these requirements would better enable the Agency to assure full compliance with the requirements for financial responsibility throughout the time the facility is subject to those requirements.

As discussed in section VI.A.3. of this preamble, some element of the information required for submission under this proposed rule may be claimed as proprietary business information or trade secrets. As described in that section, the proposal would not require or provide for posting of this sensitive information. However, the Agency expects that much of the information submitted to EPA under the proposal could be made available.

*Respondents/affected entities:*  
Hardrock Mining Industry.

*Respondent's obligation to respond:*  
Mandatory, pursuant to CERCLA §§ 104, 108, and 115, 42 U.S.C. §§ 9604, 9608, 9615.

*Estimated number of respondents:*  
221.

*Frequency of response:* One to three times (the first three years).

*Total estimated burden:* 7,057 hours (per year). Burden is defined at 5 CFR 1320.3(b).

*Total estimated cost:* \$490,504 (per year), includes \$12,532 annualized capital or operation & maintenance costs.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for the EPA's regulations in 40 CFR are listed in 40 CFR part 9.

Submit your comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden to EPA. This information should be submitted to the docket for this proposed rule (Docket No. EPA-HQ-SFUND-2015-0781). You may also send your ICR-related comments to OMB's Office of Information and Regulatory Affairs via email to [OIRA\\_submission@omb.eop.gov](mailto:OIRA_submission@omb.eop.gov), Attention: Desk Officer for EPA. Since OMB is required to make a decision concerning the ICR between thirty and sixty days after receipt, OMB must receive comments no later than February 10, 2017. EPA will respond to any ICR-related comments in the final rule.

### C. Regulatory Flexibility Act (RFA)

Pursuant to section 603 of the RFA, EPA prepared an initial regulatory flexibility analysis (IRFA) that examines the impact of the proposed rule on small entities along with regulatory alternative that could minimize that impact. The complete IRFA is available for review in the docket and is summarized here.

#### 1. Why EPA is Considering This Action

A series of studies and reviews conducted by the EPA Office of Inspector General (OIG) and the Government Accountability Office (GAO) from 2004 through 2008 demonstrated that the hardrock mining industry presented a risk to EPA and taxpayers with respect to the amount of cleanup costs for which they would be responsible. Information available to EPA indicates strongly that the hardrock mining industry continues to present risks associated with the production, transportation, treatment, storage, and disposal of hazardous substances. In accordance with CERCLA § 108(b) and in response to these concerns, EPA is publishing the proposed rule that would create a financial responsibility program in CERCLA.

<sup>221</sup> See U.S. EPA. 2004. *Cleaning Up the Nation's Waste Sites: Markets and Technology Trends*. EPA 542-R-04-015. Accessed at: <http://www.epa.gov/tio/pubisd.htm>.

## 2. Objectives of, and Legal Basis for, the Proposed Rule

The proposed rule endeavors to increase the likelihood that owners and operators will provide funds necessary to address the CERCLA liabilities at their facilities, thus preventing the burden from shifting to the taxpayer. In addition, the rule would provide an incentive for implementation of sound practices at hardrock mining facilities that would decrease the need for future CERCLA actions.

## 3. Estimate of the Number of Small Entities To Which the Proposed Rule Would Apply

For purposes of assessing the impacts of this regulation on small entities, a

small entity is defined as: (1) A small business as defined by the Small Business Administration's (SBA) regulations at 13 CFR part 121.201; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

For the purposes of this analysis, EPA identified approximately 221 mines/processing facilities in the potentially regulated universe; of these, 53 facilities are estimated to have a small owner (including joint ventures), corresponding to 43 firms. Twelve

additional mines have owners of unknown size (due to lack of available company data). Most (38) of these 53 facilities engage in mining/extraction; 15 facilities engage in processing/refining only.

Depending on the specific NAICS code of the owner, the determination of "small entity" status depends on either the revenue or the number of employees of the firm. The minimum threshold for revenue in the relevant NAICS codes ranges from \$11 million to \$36.5 million. The employment qualifications ranges from 100 employees to 1,500 employees. Table C-1 lists summary information on the small entity universe.

TABLE C-1—SUMMARY OF SMALL BUSINESS STATISTICS (COMPANY REVENUES)

NAICS code	Industry	SBA small business size standard (as of February 2016)		Number of small firms	Average annual revenues of small firms (\$Millions)	Average number of employees of small firms	Number of small firms facing annual compliance costs >1% (Median)*	Number of small firms facing annual compliance costs >3% (Median)*
		Revenues (\$millions)	Employees					
211111	Crude Petroleum and Natural Gas Extraction		1250	1	\$61	194	1	0-1.
212210	Iron Ore Mining		750	1	100	475	1	0-1.
212221	Gold Ore Mining		1500	10	96	261	6-7	5-6.
212234	Copper Ore and Nickel Ore Mining		1500	5	22	80	5	4.
212291	Uranium-Radium-Vanadium Ore Mining		250	2	15	48	1	0-1.
212392	Phosphate Rock Mining		1000	<1	<1	6	1	0.
212393	Other Chemical and Fertilizer Mineral Mining		500	1	<1	3	1	1.
212399	All Other Nonmetallic Mineral Mining		500	3	329	173	2	2.
213114	Support Activities for Metal Mining	20.5		2	<1	7	2	2.
213115	Support Activities for Nonmetallic Minerals (except Fuels).	7.5		1	<1	2	1	1.
236115	New Single-family Housing Construction (Except For-Sale Builders).	36.5		1	8	10	1	0.
238910	Site Preparation Contractors	15		2	2	100	2	1.
325180	Other Basic Inorganic Chemical Manufacturing		1000	2	168	295	0-1	0.
325312	Phosphatic Fertilizer Manufacturing		750	1	47	315	1	0-1.
327992	Ground or Treated Mineral and Earth Manufacturing		500	2	32	111	2	1.
331313	Alumina Refining and Primary Aluminum Production		1000	1	2	550	1	1.
331410	Nonferrous Metal (except Aluminum) Smelting and Refining.		1000	1	13	83	1	0.
331491	Nonferrous Metal (except Copper and Aluminum) Rolling, Drawing and Extruding.		750	1	34	500	1	1.
423520	Coal and Other Mineral and Ore Merchant Wholesalers.		100	1	15	54	0	0.
522390	Other Activities Related to Credit Intermediation	20.5		1	<1	1	1	1.
551112	Offices of Other Holding Companies	20.5		2	<1	2	2	2.
561499	All Other Business Support Services	15		1	<1	1	1	1.
561990	All Other Support Services	11		1	<1	2	1	1.
Unknown	Unknown			Up to 12 additional.	Unknown	Unknown	Up to 12 additional firms.	Up to 12 additional firms.
TOTAL				44 to 56 firms			35 to 49 firms	25 to 42 firms.

As required by section 609(b) of the RFA, EPA convened a Small Business Advocacy Review (SBAR) Panel to obtain advice and recommendations from small entity representatives that potentially would be subject to the rule's requirements. The SBAR Panel evaluated the assembled materials and small-entity comments on issues related to elements of an IRFA. A copy of the full SBAR Panel Report is available in the rulemaking docket.

The SBAR Panel recommended that EPA:

(1) Solicit comment on whether to provide for programmatic-based deferral of the requirement for owners and operators of facilities to calculate an individual financial responsibility amount and to obtain a financial responsibility instrument in situations where all facilities regulated by a particular Federal or state mining program could qualify for reductions for the full response component of the financial responsibility formula—that is, for all response categories, and at all facilities.

(2) propose to allow reductions to the financial responsibility amount applicable at facility for future requirements that are enforceable against the owner and operator, that are supported by adequate financial assurance, and with which the owner and operator are in compliance, and solicit comment on allowing reductions to the financial responsibility amount for other risk-reducing practices and/or controls (*e.g.*, voluntary practices) that are implemented at hardrock mining facilities that should be accounted for in the reductions, and on how, if reductions were allowed for such practices and/or controls, EPA could assure that those controls would remain in place and be effective over time where there is no regulatory program overseeing their maintenance and operation.

(3) provide in the rule discussion and solicitation of comment on the impact of the financial test on small businesses. The discussion and solicitation of comment should consider whether making a financial test available would increase the available capacity for third-party instruments in the marketplace and increase the availability of such instruments to owners or operators of small businesses and/or whether it would create a competitive disadvantage for small business, and solicit comment on those concerns.

(4) solicit comment on all aspects of the proposed financial responsibility formula, including comment on specific elements of the formula such as the robustness of the regression analyses,

identification and treatment of influential data points (*i.e.* potential outliers), the use and calculation of the individual smear factors, and the assumption of source controls.

(5) solicit comment on the criteria used to identify lower-level of risk of injury classes in the proposed rule, and whether it would be feasible and appropriate to identify additional classes as presenting a lower level of risk of injury, particularly classes of mines that differ in their operations and associated risks from more traditional hardrock mines, and on whether such classes of mines, defined based on facility characteristics, could potentially encompass iron ore, phosphate, and uranium mines.

(6) request comment on whether more alternate or more flexible engineering standards can substitute for some or all of the numeric engineering standards in the proposed reduction criteria (*e.g.* planning for a 200-year storm event, reduction of net precipitation by 95 percent), on whether the proposed reduction criteria would limit flexibility necessary for innovative or different site-specific approaches and, if so, how those might be preserved, and on whether other regulatory programs already impose the requirements that would satisfy the reduction criteria.

EPA revised the rule to include in § 320.63 a proposal to allow reductions to the financial responsibility amount applicable at facility for future requirements that are enforceable against the owner and operator, that are supported by adequate financial assurance, and with which the owner and operator are in compliance. These reductions are described in section VI.D.4. of this preamble. EPA also solicited comment on most of the areas recommended by the Panel.

#### 4. Projected Reporting, Recordkeeping, and Other Compliance Requirements of the Proposed Rule

EPA estimates industry costs for the owner/operator companies that are unable to utilize a self-insurance option under the proposed rule as the resources expended and/or foregone to obtain a third-party financial responsibility instrument. Additional administrative and recordkeeping costs to industry include reading the regulations, submitting initial facility information to EPA and the public, calculating financial responsibility amounts, choosing a financial responsibility instrument, acquiring and maintaining a financial responsibility instrument, recalculating financial responsibility amounts to reflect any changes in facility operations, and any functions

the rule requires of owners and operators upon the transfer of a facility, owner or operator default, a CERCLA claim against the owner or operator, and release from financial responsibility.

As described earlier, EPA began its assessment of the impact of regulatory options on small entities by first estimating the number of small entities owning hardrock mining facilities that would be subject to the proposed rule. EPA then assessed whether these small entities would be expected to incur costs that constitute a significant impact; and whether the number of those small entities estimated to incur a significant impact represent a substantial number of small entities.

To assess whether small entities' compliance costs might constitute a significant impact, EPA averaged the annualized compliance costs as a percentage of entity revenue (cost-to-revenue test). EPA compared the resulting percentages to impacts criteria of one percent and three percent of revenue. Small entities estimated to incur compliance costs exceeding one or more of the one percent and three percent impact thresholds were identified as potentially incurring a significant impact.

Table C-1 shows that 35 to 49 small entities may face an average annual compliance cost of greater than the one percent of revenues. Similarly, 25 to 42 small entities may experience impact on revenues above three percent. The results of the impacts analysis do not vary significantly between the two regulatory options. However, impacts are generally lower under Option 2 due to the lower compliance costs when a financial test is available.

These results may suggest that a significant number of small entities expected to incur annualized cost of more than the three percent of the revenue thresholds. However, because of data limitations, the screening level analysis relied upon estimated financial responsibility amounts for each facility based on facility type, rather than actual size and nature of operations. Further, reliable and current revenues information for small, private firms was not readily available. As a result, these results are not suggestive of impacts for any specific company or entity.

#### 5. Related Federal Rules

These are the only financial responsibility requirements for non-transportation related facilities pursuant to CERCLA.



## 6. Description of Alternatives to the Proposed Rule

The Agency considered alternatives to provisions of this rule. Those alternatives are discussed in section VII.K. of this preamble.

### D. *Unfunded Mandates Reform Act (UMRA)*

This action contains a Federal mandate under UMRA, 2 U.S.C. 1531–1538, that may result in expenditures of \$100 million or more for state, local and tribal governments, in the aggregate, or the private sector in any one year. Accordingly, EPA has prepared a written statement required under section 202 of UMRA. The statement is included in the docket for this action and briefly summarized here.

The RIA estimates the rule may affect 221 hardrock mining and processing facilities. EPA estimates that the regulation will have aggregate annual compliance costs ranging from \$111 million to \$171 million to the private sector. A detailed assessment of the anticipated costs and benefits (presented qualitatively) of the Federal mandate is provided in the RIA.

In accordance with UMRA § 205, EPA is proposing a range of regulatory options. The options can be summarized as: (1) A financial responsibility regulation that allows for a financial test, and (2) a financial responsibility regulation that does not allow for a financial test. These options are all considered to be technologically feasible and economically achievable.

This action is not subject to the requirements of § 203 of UMRA because it contains no regulatory requirements that might significantly or uniquely affect small governments.

### E. Executive Order 13132: Federalism

EPA believes that this action will not have federalism implications as defined by agency policy for implementing Executive Order 13132, entitled “Federalism.”

Earlier in the development of this proposed rule, EPA projected that the CERCLA § 108(b) rules would have federalism implications under the terms of Executive Order 13132, and EPA planned certain outreach activities accordingly. As discussed in Section IV of this preamble, EPA spent significant time and effort gathering and evaluating information on regulated entities and considering various approaches to structuring the proposed rule. EPA also considered as part of this the potential relevance of CERCLA § 114(d). In light of further development of the proposed rule and its resultant analysis of the

question of federalism implications as explained below, EPA has come to expect that this action does not, in fact, have federalism implications. Regardless of this determination on the applicability of the Executive Order, EPA nonetheless engaged its intergovernmental partners in the same pre-proposal outreach activities expected under the Executive Order.

As part of the regulatory impact analysis, EPA analyzed the CERCLA § 108(b) proposed rule’s potential for federalism implications as defined in the Executive Order to include regulations that have “substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.” EPA typically considers a policy or regulation to have federalism implications if it results in the expenditure by State and/or local governments in the aggregate of \$25 million or more nationally in any one year, or if the policy or regulation results in preemption, whether by intent or effect, of State or local government law. The proposed CERCLA § 108(b) rule does not impose requirements on, nor is expected to result in significant expenditure by, state and/or local governments. Further, as discussed in Section V of the preamble, EPA does not believe that CERCLA § 114(d) gives a preemptive effect to EPA’s CERCLA § 108(b) financial responsibility regulations over state reclamation bonding requirements.

In any case, this proposed rule is of significant interest to state and/or local governments. Therefore, consistent with the EPA’s policy to promote intergovernmental communication and cooperation, and in response to the considerable interest shown by states prior to and during the development of this action, EPA engaged in extensive pre-proposal consultation, under the auspices of Executive Order 13132, to ensure that our state and local partners would have the opportunity to provide meaningful and timely input into its development. EPA also anticipates additional state and local government input in response to the proposed rule. In this regard, EPA is interested in receiving information on any state hazardous substance response program(s) that require demonstrations of financial responsibility for claims made and that states believe could be preempted by this proposal. EPA is committed to continued interactions with the states before promulgating any final rule.

### F. *Executive Order 13175: Consultation and Coordination With Indian Tribal Governments*

This action does not have tribal implications as specified in Executive Order 13175 (Executive Order 13175). Executive Order 13175, Consultation and Coordination with Indian Tribal Governments,<sup>222</sup> requires EPA to develop an accountable process to ensure “meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications.” EPA believes that any tribal impacts from this regulation will be limited, because no tribal governments own or operate facilities in the potentially regulated universe.

Earlier in the development of this proposed rule, EPA projected that the CERCLA 108(b) rules would have tribal implications and EPA planned certain outreach activities accordingly. As discussed in Section IV of this preamble, EPA spent significant time and effort gathering and evaluating information on regulated entities and considering various approaches to structuring the proposed rule. In light of further development of the proposed rule and its resultant analysis of the question of tribal implications as explained below, EPA has come to expect that this action does not, in fact, have tribal impacts. Regardless, EPA held early engagement with tribal governments as guided by EPA Policy on Consultation and Coordination with Indian Tribes.

To assess the impact on tribal governments, EPA identified tribal lands and associated tribes that overlap with the “included” universe of currently operating facilities potentially subject to the CERCLA § 108(b) rulemaking. Relevant tribal lands were identified through a GIS dataset available from the U.S. Census Bureau.<sup>223</sup> This dataset included the following legal and statistical entities: Federally recognized American Indian reservations and off-reservation trust land areas;<sup>224</sup> State-recognized

<sup>222</sup> See 65 FR 67249, November 9, 2000.

<sup>223</sup> See U.S. Census Bureau. (2014). “TIGER/Line Shapefile, 2014, Series Information File for the Current American Indian/Alaska Native/Native Hawaiian Areas National (AIANNH) National Shapefile.” Accessed at: <https://catalog.data.gov/dataset/tiger-line-shapefile-2014-series-information-file-for-the-current-american-indian-ala>.

<sup>224</sup> The Census Bureau defines off-reservation trust land as “areas for which the United States holds title in trust for the benefit of a tribe (tribal trust land) or for an individual American Indian (individual trust land). Trust lands can be alienated or encumbered only by the owner with the approval of the Secretary of the Interior or his/her authorized representative. Trust lands may be located on or off a reservation; however, the Census Bureau tabulates

American Indian reservations; Hawaiian home lands (HHLs); Alaska Native village statistical areas (ANVSAs); Oklahoma tribal statistical areas (OTSAs); Tribal designated statistical areas (TDSAs); and State designated tribal statistical areas (SDTSAs).

To estimate the physical extent of the facilities, buffers of varying sizes were projected around these coordinates in ArcGIS. Half mile, one-mile, and ten-mile buffers were projected around each set of coordinates. The number of facilities overlapping tribal lands varied considerably depending on the size of the buffer used: with the half-mile buffer, four facilities overlapped three tribal land areas; with the one-mile buffer, six facilities overlapped four tribal land areas; and with the ten-mile buffer, 35 facilities overlapped 38 tribal land areas. A complete list of the facilities and tribes that fall within these buffers is presented in the RIA.

EPA has concluded that this action will have limited tribal implications to the extent that the facilities in its regulated universe are located close to tribal lands. As no tribal governments own or operate any of the regulated facilities, and therefore will not incur any direct compliance costs as a result of the proposed rule, Executive Order 13175 does not apply to this rule.

Although Executive Order 13175 does not apply, the EPA consulted with tribal officials during the development phase of the proposed rule, consistent with the EPA Policy on Consultation and Coordination with Indian Tribes. In early June 2016, EPA sent letters to all federally recognized Indian tribes, notifying them of the opportunity to provide input to the proposed rule during the consultation and coordination period. EPA conducted tribal outreach activities including a tribal webinar on June 22, 2016, and conference calls with the National Tribal Caucus on August 3, 2016, and the Great Lakes Fish and Wildlife Commission on August 8, 2016. EPA also participated in the Tribal Lands and Environment Forum from August 15–18, 2016, where several tribal leaders expressed interest in the proposed rulemaking. The EPA also intends to hold a second round of consultation and coordination with tribal officials aligned with the public

comment period for the proposed rule. EPA also intends to summarize comments and input received from both consultation and coordination periods with the final action.

#### *G. Executive Order 13045: Protection of Children From Environmental Health and Safety Risks*

This action is not subject to Executive Order 13045 because EPA does not expect the environmental health risks or safety risks addressed by this action present a disproportionate risk to children. EPA expects that by adjusting the amount of financial responsibility to account for environmentally safer practices, the proposed rule would provide an incentive for implementation of sound practices at hardrock mining facilities and thereby decrease the need for future CERCLA actions. To the extent that environmental conditions surrounding mine sites improve following this rule, the children living in close proximity to mining facilities are likely to benefit. To assess the proportional distribution of the benefits of the proposed rule, EPA prepared an analysis of the demographic characteristics of populations surrounding hardrock mining site to identify the number and proportion of children living in close proximity to these sites. This analysis is presented in the Regulatory Impact Analysis (RIA), which is available in the docket.

As discussed in the RIA, of the 775,000 people living within one mile of regulated facilities, approximately 188,000 or 24.3 percent, are under the age of 18. Nationwide, approximately 23.5 percent of the population is under the age of 18. To the extent that environmental conditions surrounding mine and mineral processor sites improve following this rule, the children living in close proximity to mining facilities are likely to benefit.

#### *H. 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. This proposed rule would establish financial responsibility requirements under CERCLA designed to assure that owners and operators of facilities provide funds to address CERCLA liabilities at their sites, and to create incentives for sound practices that will minimize the likelihood of a need for a future CERCLA response. The proposed rule is not expected to impact energy production, distribution, or consumption.

#### *I. National Technology Transfer and Advancement Act (NTTAA)*

This rulemaking does not involve technical standards.

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

EPA believes that this action does not have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994).

The documentation for this decision is contained in the Regulatory Impact Analysis (RIA). A copy of the RIA can be found in the docket for this rule. As discussed in Section 8 of the RIA, EPA examined whether the actions being proposed under the proposed rules present environmental justice concerns for communities surrounding mining facilities.

EPA conducted an analysis of demographic characteristics of populations near hardrock mining and mineral processing facilities to determine whether the benefits of the proposed rule are differentially distributed. For this analysis, the agency analyzed national census population data within one-mile, five-mile, 15-mile, and 25-mile radii from mining facilities, and compared them with the demographic characteristics of states and national levels. Of the 221 hardrock mining/mineral processing facilities in the RIA universe, the total population within one mile of these sites is approximately 775,000 people, of which 260,000 (34 percent), belong to a minority group. In addition, 157,000 (21 percent) live below the Federal Poverty Level. Both of these proportions are roughly comparable to nationwide benchmarks. Nationally, 37 percent of the population belongs to a minority group, and 16 percent of the population lives below the Federal Poverty Level. The analysis also compared the concentrations of minority groups and people living in poverty to state averages. The results show that within one-mile radius, 230 (36 percent) census block groups exceeded the statewide minority average, and 356 (56 percent) census block groups exceeded their respective statewide poverty levels.

EPA expects this proposed rule will, when made final, increase the likelihood that owners and operators will provide funds necessary to address the CERCLA liabilities at their facilities, thus preventing owners or operators from shifting the burden of cleanup to

data only for off-reservation trust lands with the off-reservation trust lands always associated with a specific federally recognized reservation and/or tribal government.”

See U.S. Census Bureau. “Geographic Terms and Concepts—American Indian, Alaska Native, and Native Hawaiian Areas.” Accessed August 21, 2015 at: [https://www.census.gov/geo/reference/gtc/gtc\\_aianha.html](https://www.census.gov/geo/reference/gtc/gtc_aianha.html).

other parties, including the taxpayer. In addition, EPA expects that by adjusting the amount of financial responsibility to account for environmentally safer practices, the proposed rule would provide an incentive for implementation of sound practices at hardrock mining facilities and thereby decrease the need for future CERCLA actions. Groups within the proximity of hardrock mining sites are expected to benefit from the environmental performance improvements, and other benefits of the rule. This analysis shows that the percentage of minority and low-income populations in and near hardrock mining sites are proportionally represented (in some case higher) compared to national and state averages. This analysis indicates that minority and low-income communities are expected to benefit as much as any other group under the proposed rule.

**List of Subjects in 40 CFR Part 320**

Environmental protection, Financial responsibility, Hardrock mining, Hazardous substances.

Dated: December 1, 2016.

**Gina McCarthy,**  
*Administrator.*

For the reasons set forth in the preamble, title 40, chapter I of the Code of Federal Regulations is proposed to be amended by adding part 320 to read as follows:

**PART 320—FINANCIAL RESPONSIBILITY REQUIREMENTS FOR CERCLA LIABILITIES**

**Subpart A—General Facility Requirements**

- Sec.
- 320.1 Purpose, scope.
- 320.2 Applicability.
- 320.3 Definitions and usage.
- 320.4 Availability of information; confidential business information.
- 320.5 Notification requirement.
- 320.6 General information submission requirements.

- 320.7 Requirement for electronic submission of information.
- 320.8 Recordkeeping requirements.
- 320.9 Requirements for public notice.

**Subpart B—General Financial Responsibility Requirements**

- 320.20 Applicable financial responsibility amounts.
- 320.21 Procedures for establishing financial responsibility.
- 320.22 Maintenance of instruments.
- 320.23 Incapacity of owners or operators, corporate guarantors, or financial institutions.
- 320.24 Notification of claims brought against owners, operators, or guarantors.
- 320.25 Facility transfer.
- 320.26 Notification of cessation of operations.
- 320.27 Release from financial responsibility requirements.

**Subpart C—Available Financial Responsibility Instruments.**

- 320.40 Letter of credit.
- 320.41 Surety bond.
- 320.42 Insurance.
- 320.43 [Reserved] (Option 1—Preferred Option).
- 320.43 Financial test (Option 2).
- 320.44 [Reserved] (Option 1—Preferred Option).
- 320.44 Corporate guarantee (Option 2).
- 320.45 Trust fund.
- 320.46 Use of multiple financial responsibility instruments.
- 320.47 Use of a financial instrument for multiple facilities.
- 320.48 Consolidated form and multiple owners and/or operators.
- 320.49 [Reserved]
- 320.50 Wording of the Instruments.

**Subpart D—G [Reserved]**

**Subpart H—Hardrock Mining Facilities**

- 320.60 Applicability
- 320.61 Timeframes for Compliance
- 320.62 Definitions
- 320.63 Determining the Financial Responsibility Amount
- 320.64 Information Submission and Recordkeeping Requirements
- 320.65 Third-party Certification.

**Subpart A—General Facility Requirements**

**§ 320.1 Purpose and Scope.**

(a) The purpose of this part is to establish requirements under § 108(b) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42, U.S.C. 9601, et seq., for current owners and operators of non-transportation-related facilities to establish and maintain evidence of financial responsibility.

(b) The amount of financial responsibility under this part must be consistent with the degree and duration of risk associated with the production, transportation, treatment, storage, or disposal of hazardous substances at their facilities, and must be available to pay for the response costs, health assessment costs, and natural resource damages under CERCLA for which the owner and operator are responsible.

**§ 320.2 Applicability.**

(a) The regulations of this part apply to current owners and operators of facilities that are authorized to operate, or should be authorized to operate, on or after the effective date of the rule under which they become subject to this part. The Federal Government and States are exempt from the requirements of this part.

(b) Owners and operators of all facilities within the classes identified in Table A–1 must comply with the applicable requirements of subparts A through C of this part.

(c) Owners and operators of facilities identified in Table A–1 of this section must also comply with the applicable class-specific requirements as specified in Table A–1 of this section.

(d) The requirements of this part apply until EPA releases the owner and operator from the obligation to maintain financial responsibility for its facility in accordance with § 300.25 or § 300.27.

TABLE A–1

Facility class(es)	Effective date	Applicable class-specific requirements
Owners and operators of hardrock mining facilities identified in § 320.60(a).	[Date 30 days after date of publication of Final Rule].	Subpart H.

**§ 320.3 Definitions and usage.**

(a) As used in this part, words in the singular include the plural; words in the plural include the singular; and words in the masculine gender also include the feminine and neuter genders as the case may require.

(b) When used in this part, the following terms have the meanings

given in this paragraph. Terms not defined in this part have the meaning given by CERCLA or the national Oil and Hazardous Substances Pollution Contingency Plan, 40 CFR part 300.

*Administrator* means the EPA Administrator, or designee thereof.  
*Authoriz(-ed)/(-ation) to operate* means the owner or operator has obtained

permission through a permit, license, or other legally applicable form of permission to conduct the activities under Federal, state, or local law, and is irrespective of the level of activity at the facility that causes the owner and operator to be subject to this part.

*Current § 108(b) financial responsibility amount* means the most

recent amount required to be prepared under § 320.20 of this part.

*Electronic financial responsibility reporting compliance date* means the date that EPA announces in the **Federal Register**, on or after which owners and operators are required to file submissions required by this part in an EPA electronic system, or its successor system.

*Enforceable Document* means a document issued under a Federal, state, tribal, or local governmental authority, to which the owner or operator is currently subject, and the requirements of which can be enforced against the owner or operator by the issuing authority. An enforceable document can be a permit, a settlement, an order, or any other document that meets the above criteria.

*Parent Corporation* means a corporation that directly owns at least 50 percent of the voting stock of the corporation which is the facility owner or operator; latter corporation is deemed a subsidiary of the parent corporation.

*Substantial Business Relationship* means the extent of a business relationship necessary under applicable State law to make a guarantee contract issued incident to that relationship valid and enforceable. A "substantial business relationship" must arise from a pattern of recent or ongoing business transactions, in addition to the guarantee itself, such that a currently existing business relationship between the guarantor and the owner or operator is demonstrated to the satisfaction of the Administrator.

#### **§ 320.4 Availability of information; confidential business information.**

(a) Any information provided to EPA under this part, or required to be provided to the public by the owner or operator under this part, will be made available to the public to the extent and in the manner authorized by the Freedom of Information Act, 5 USC 552, section 104 of CERCLA, and EPA regulations implementing the Freedom of Information Act and section 104 of CERCLA, as applicable.

(b) Any person who submits information to EPA in accordance with this part, or who is required to provide information to the public under this part, may assert a claim of business confidentiality covering part or all of that information by following the procedures set forth in § 2.203(b). Information covered by such a claim will be disclosed by EPA, or will be required to be released by the owner or operator only to the extent, and by means of the procedures, set forth in part 2, subpart B, of this chapter.

However, if no such claim accompanies the information when it is received by EPA, it may be made available to the public without further notice to the person submitting it.

(c) Assertions of claims of business confidentiality will not be considered by EPA if the information is covered by a Class Determination of non-confidentiality.

#### **§ 320.5 Notification requirement.**

(a) (1) Each owner and operator that is authorized to operate or should be authorized to operate on the effective date of the final rule under which the facility becomes subject to the requirements of this part must complete the Notification Form in Appendix A of this part, providing all information requested, and submit it to the Administrator within thirty days of the effective date of that regulation.

(2) Owners or operators that become authorized to operate after the effective date of the final rule that makes their facility subject to the requirements of this part must submit the notification form required in paragraph (a)(1) of this section prior to beginning operations.

(b) Within thirty days of receiving notification EPA will:

(1) Provide the owner or operator acknowledgement of receipt of the notification, and

(2) If the facility has not received one, assign and provide an EPA Identification number to the facility.

(c) Owners and operators must notify EPA of changes at their facilities by updating their Notification Form, and/or other documents required under the applicable class-specific subpart, and resubmitting it to EPA within thirty days of the change.

#### **§ 320.6 General information submission requirements.**

Owners and operators must submit information as required by this part to support financial responsibility requirements including:

(a) The notification form required in § 320.5;

(b) Information required under the public involvement requirements of § 320.9;

(c) Notifications required under subpart B of this part;

(d) Demonstration of financial responsibility as required under subpart C of this part; and

(e) Information required under class-specific requirements identified in Table 1 of § 320.1(f) as applicable to the facility.

#### **§ 320.7 Requirement for electronic submission of information.**

(a) Information submitted to the Administrator under the requirements of this part must be submitted in paper format until the electronic reporting compliance date, defined in § 320.3.

(b) Electronic submissions that are obtained, completed, and transmitted in accordance with this section, and used in accordance with this section, are the legal equivalent of paper submissions bearing handwritten signatures, and satisfy for all purposes any requirement in these regulations to obtain, complete, sign, provide, use, or retain such information.

(c) Where an electronic signature is required, such signature must be a legally valid and enforceable signature under applicable EPA and other Federal requirements pertaining to electronic signatures.

(d) The Administrator may waive the requirement for electronic submission under the following conditions:

(1) *General waiver.* The Administrator may grant a general waiver for a renewable period of one year to owners or operators that cannot comply with the requirement for electronic submission. The owner or operator must submit a written request for a general waiver to the Administrator at least thirty days in advance of the date the first submission that would be subject to the requested general waiver is due to EPA or, for a renewal, thirty days in advance of the expiration of the waiver. The request for a general waiver must describe the conditions(s) in paragraphs (i) through (iv) that prevent electronic submission of information. The Administrator may grant a general waiver upon a finding that:

(i) The owner or operator is unable to gain access to a system allowing electronic reporting because the owner or operator is located in an area with insufficient broadband access;

(ii) Obtaining a system to support electronic submission would impose an undue cost burden on the owner or operator;

(iii) The owner or operator's electronic system is incompatible with the Agency's, or

(iv) Religious practices of the owner or operator prohibit the use of necessary technologies.

(2) *Emergency waiver.* The Administrator may grant a non-renewable emergency waiver for an individual submission required under this part to an owner or operator that would not be unable to comply with the requirement for electronic submission. The owner or operator must submit a written request for an emergency waiver

within ten days of the date the submission was due to EPA. The request for an emergency waiver must describe the condition(s) in paragraphs (i) through (iii) that prevented the electronic submission of information and must be accompanied by a paper copy of the information due. The Administrator may grant an emergency waiver upon a finding that one of the following events occurred that prevented the electronic submission of information by the owner or operator:

- (i) A large-scale national disaster (e.g., hurricane);
- (ii) A prolonged electronic reporting system outage; or
- (iii) A prolonged failure of the owner's and operator's computer system.

#### **§ 320.8 Recordkeeping requirements.**

(a) The owner or operator must develop a facility record that contains information related to its compliance with the financial responsibility requirements under this part.

(b) The facility record must include, at a minimum, the information that must be submitted to EPA under § 320.6(a), as applicable, and all notifications received from EPA related to the financial responsibility obligations of the facility.

#### **§ 320.9 Requirements for public notice.**

[PROPOSED REGULATORY TEXT FOR APPROACH 1]

(a) Within sixty days of the date it becomes subject to the requirements of this part, the owner or operator must establish and maintain a website titled "CERCLA Section 108(b) Financial Responsibility Information" and submit to EPA the URL of a location on its company Web site where it will make information available to the public.

(b) Within thirty days of receiving the URL, EPA will post on its website notice to the public that the facility is subject to § 108(b) requirements, and provide the public the facility name, EPA ID, and the URL.

(c) Beginning ninety days after the effective date of the final rule under which the facility becomes subject to the requirements of this part, the owner or operator must make information available to the public on its company website at the URL provided to EPA. The initial posting must include at least the information required under paragraph (d)(1).

(d) The information on the website must include, at a minimum:

- (1) The current name and contact information for a person that will provide the public information about

the facility's financial responsibility requirement under CERCLA § 108(b);

(2) Information the owner or operator is required to submit, or has submitted, to EPA under this part so long as that information is not successfully claimed as Confidential Business Information under 40 CFR 2.203(b).

(3) Notifications from EPA to the owner or operator.

(e) The owner or operator must assure that the information is readily available to the public by placing it in a prominent position on the company's website, and by assuring that public access is not obstructed by complex or overly burdensome access processes, passwords, or other information requirements.

(f) The owner or operator must update the website with new information including information submitted to EPA in compliance with this part. Information submitted to EPA must be posted on the owner or operator's website within thirty days of submitting it to EPA.

[PROPOSED REGULATORY TEXT FOR APPROACH 2]

(a) EPA will provide the public information related to facilities subject to financial responsibility requirements under this part. That information may include, at a minimum:

(1) The current name and contact information for a person that can provide the public information about the facility's financial responsibility requirement under this part;

(2) Information the owner or operator is required to submit, or has submitted, to EPA under this part so long as that information is not successfully claimed as Confidential Business Information under 40 CFR 2.203(b).

(3) Notifications from EPA to the owner or operator.

#### **Subpart B—General Financial Responsibility Requirements**

##### **§ 320.20 Applicable financial responsibility amounts.**

Owners and operators must calculate a current amount of financial responsibility at their facilities in accordance with the requirements of this section, and in accordance with applicable class-specific subparts identified in § 320.1(f) Table 1.

##### **§ 320.21 Procedures for establishing financial responsibility.**

Owners and operators must submit evidence of financial responsibility and supporting information to EPA in accordance with the requirements of this section, and in accordance with

applicable class-specific subparts identified in § 320.2 Table 1.

##### **§ 320.22 Maintenance of instruments.**

(a) An owner or operator must recalculate the financial responsibility level three years after the date the owner or operator is first required to submit the full amount of financial responsibility under § 320.61, every three years thereafter, and within sixty days after every successful claim against a CERCLA § 108(b) financial responsibility instrument. The recalculation must use the most current facility information available. The owner or operator must submit the revised financial responsibility amount to EPA, along with supporting documentation.

(b) If the resulting amount of financial responsibility required is greater than the amount of financial responsibility provided by the current CERCLA § 108(b) financial responsibility instrument(s), the owner or operator must submit evidence of the increased value of the instrument(s) within sixty days of the recalculation.

(c) If the resulting amount of financial responsibility required is less than the amount of financial responsibility provided by the current CERCLA § 108(b) financial responsibility instrument(s), the owner and operator may submit a written request to the Administrator to lower the required financial responsibility amount at the facility. The request must include updated information to support the revised financial responsibility amount. The amount of financial responsibility required at the facility may be reduced to the recalculated amount only with written approval by the Administrator.

##### **§ 320.23 Incapacity of owners or operators, corporate guarantors, or financial institutions.**

[PROPOSED REGULATORY TEXT FOR OPTION 1 (Preferred Option)]

(a) An owner or operator must notify the Regional Administrator by certified mail of the commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming the owner or operator as debtor, within ten days after commencement of the proceeding.

(b) An owner or operator who demonstrates financial responsibility under this part by obtaining a trust fund, surety bond, letter of credit, or insurance policy will be deemed to be without the required financial responsibility in the event of bankruptcy of the trustee or issuing institution, or a suspension or revocation of the authority of the trustee

institution to act as trustee or of the institution issuing the surety bond, letter of credit, or insurance policy to issue such instruments. The owner or operator must provide other evidence of financial responsibility within sixty days after such an event.

[PROPOSED REGULATORY TEXT FOR OPTION 2]

(a) An owner or operator must notify the Administrator by certified mail of the commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming the owner or operator as debtor, within ten days after commencement of the proceeding. A corporate guarantor of a corporate guarantee as specified in § 320.44, if named as a debtor, must make such a notification, as required under the terms of the corporate guarantee (§ 320.50(f)).

(b) An owner or operator who demonstrates financial responsibility under this part by obtaining a trust fund, surety bond, letter of credit, or insurance policy will be deemed to be without the required financial responsibility in the event of bankruptcy of the trustee or issuing institution, or a suspension or revocation of the authority of the trustee institution to act as trustee or of the institution issuing the surety bond, letter of credit, or insurance policy to issue such instruments. The owner or operator must provide other evidence of financial responsibility within sixty days after such an event.

**§ 320.24 Notification of claims brought against owners, operators, or guarantors.**

An owner or operator subject to this part must notify the Administrator by certified mail of the filing of any claim pursuant to CERCLA naming the owner or operator or the owner or operator's guarantor, as defendant, within ten days after commencement of the proceeding. Such notification shall include a copy of any papers filed by the claimant with a court, or other information allowing the Administrator to identify the court, case name and number, and parties.

**§ 320.25 Facility transfer.**

(a) If a facility, or a portion of a facility, subject to the requirements of this part is sold or otherwise transferred to another owner, or if the operation of a facility is transferred to another operator, the previous owner or operator must maintain financial responsibility for the facility, or transferred portion of the facility, in accordance with this part, until the Administrator releases the previous owner or operator from the obligation to maintain financial

responsibility under paragraph (b) of this section.

(b) Any new owner or operator of a facility must provide evidence of financial responsibility as required in this part for the facility or portion of the facility prior to assuming ownership or operation. Upon the new owner or operator's demonstration of financial responsibility in accordance with this part, the Administrator will provide notice to the prior owner and operator that they are no longer required to provide evidence of financial responsibility in accordance with this part.

**§ 320.26 Notification of cessation of operations.**

The owner or operator must notify the Administrator thirty days prior to:

- (1) The date the facility is no longer authorized to operate, or
- (2) The date the owner or operator is required under another applicable regulatory program to notify the relevant regulatory authority that the facility is ceasing operations, whichever is earlier.

**§ 320.27 Release from financial responsibility requirements.**

(a) The owner or operator may petition to be released from its obligations under this part by submitting a request to the Administrator, which must include evidence demonstrating that the degree and duration of risk associated with the production, transportation, treatment, storage and disposal of hazardous substances is minimal. Upon receiving such request, the Administrator will evaluate facility information, including the information submitted by the owner or operator, regarding the degree and duration of risk associated with the production, transportation, treatment, storage, and disposal of hazardous substances at the facility, and make a determination regarding the owner's or operator's request.

(1) If the Administrator determines that the degree and duration of risk associated with the production, transportation, treatment, storage, and disposal of hazardous substances at the facility is minimal, and that the facility should therefore be released from the requirements of this part, the Administrator will post the draft decision on the EPA website, provide the public opportunity to comment on the decision, and post the Agency's final decision, and response to comments received, on the EPA website.

(2) If the Administrator determines (either initially or following consideration of public comment during the procedures described in paragraph

(a)(1) of this section), that the degree and duration of risk associated with the production, transportation, treatment, storage, and disposal of hazardous substances is not minimal, the Administrator will not release the owner or operator from the requirement to maintain financial responsibility in accordance with this part. The Administrator will provide notice of the Agency's final decision, and response to comments received, and will provide the owner or operator a detailed written statement explaining the decision.

(3) An owner or operator that petitions the Administrator under the procedures in this section and does not obtain a release from requirements under this part may submit a petition for a renewed determination under this section only if the owner or operator can provide additional, relevant information, not previously considered by the Administrator, demonstrating that there is minimal risk associated with the production, transportation, treatment, storage, and disposal of hazardous substances at the facility.

(b) [Reserved].

**Subpart C—Available Financial Responsibility Instruments**

[PROPOSED REGULATORY TEXT FOR OPTION 1 (Preferred Option)]

Owners and operators may demonstrate financial responsibility using one or a combination of the financial responsibility instruments provide in §§ 320.40 through 320.43.

[PROPOSED REGULATORY TEXT FOR OPTION 2]

Owners and operators may demonstrate financial responsibility using one or a combination of the financial responsibility instruments provide in §§ 320.40 through 320.45.

**§ 320.40 Letter of Credit.**

(a) An owner or operator may satisfy the requirements of this part by obtaining an irrevocable standby letter of credit which conforms to the requirements of this section and is issued by an institution which has the authority to issue letters of credit and whose letter of credit operations are regulated and examined by a Federal or state agency.

(b) The wording of the letter of credit must be identical to the wording specified in § 320.50(b). The letter of credit must either be issued in favor of:

(1) The trustee of a trust fund established by an agreement worded identical to the language in § 320.50(a) and must authorize the trustee to make draws on the letter of credit to

administer the claims process for CERCLA response costs, health assessment costs, and natural resource damages in accordance with the terms of the trust agreement; or

(2) Any and all third-party CERCLA claimants and must provide for payment directly to claimants for CERCLA response costs, health assessment costs, and natural resource damages.

(c) If the letter of credit is issued in favor of the trustee of a trust fund, the owner or operator must submit a certified copy of the letter of credit to the Administrator and submit the original letter of credit to the trustee authorized to make draws on the letter of credit. An acknowledgment of the receipt of the letter of credit from the trustee must be submitted by the owner or operator to the Administrator.

(d) If the letter of credit is issued in the favor of any and all third-party CERCLA claimants, the owner or operator must submit the originally signed letter of credit to the Administrator.

(e) An owner or operator who uses a letter of credit to satisfy the requirements of this part must also establish a trust fund and update Schedule A of the trust agreement within sixty days after a change in the amount of CERCLA § 108(b) financial responsibility. This trust fund must meet the requirements of the trust fund specified in § 320.45, except that:

(1) An originally signed duplicate of the trust agreement must be submitted to the Administrator with the original or the certified copy of the letter of credit; and

(2) Unless the trust fund is funded pursuant to the requirements of this part, including by holding the letter of credit as specified in this section, the following are not required by these regulations:

(i) Payments into the trust fund as specified in § 320.45;

(ii) Annual valuations as required by the trust agreement; and

(iii) Notices of payment as required by the trust agreement.

(f) The letter of credit must be irrevocable and issued for a period of at least one year. The letter of credit must provide that the expiration date will be automatically extended for a period of at least one year unless, at least 120 days before the current expiration date, the issuing institution notifies both the owner or operator, the trust fund trustee (if the letter is issued in favor of the trustee), and the Administrator by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days will begin on the date when the owner or

operator, the trust fund trustee (if applicable), and the Administrator have received the notice, as evidenced by the return receipts. If the issuing institution timely notifies the owner or operator, the trustee, and the Administrator, and the owner or operator fails to submit and obtain the Administrator's approval of alternate financial responsibility within ninety days of the receipt of such notice, the Administrator is authorized to draw on the letter of credit as specified in paragraphs (k) and (l) of this section.

(g) The letter of credit must be issued in an amount at least equal to the current required CERCLA § 108(b) financial responsibility amount, except as provided in § 320.46.

(h) Whenever the required amount of CERCLA § 108(b) financial responsibility increases to an amount greater than the credit, the owner or operator, within sixty days after the increase, must either cause the credit to be increased to an amount at least equal to the CERCLA § 108(b) financial responsibility amount and submit evidence of such increase to the Administrator and the trust fund trustee (if the letter is issued in favor of the trustee), or obtain other financial responsibility as specified in this part to cover the increase. Whenever the required amount of CERCLA § 108(b) financial responsibility decreases, the credit may be reduced to the amount of the current required CERCLA § 108(b) financial responsibility amount following written approval by the Administrator.

(i) If the letter of credit is issued in favor of the trust fund trustee, parties may make claims against the trust fund in accordance with the terms of the trust agreement in order to receive payment from the letter of credit.

(j) If the letter of credit provides for direct payment, claimants may make claims as follows:

(1) Any party that obtains a final judgment from a Federal court awarding CERCLA response costs, health assessment costs, and/or natural resource damages associated with the facility against any of the current owners or operators may make a claim against the letter of credit. The party may only make a claim after the thirtieth day after the judgement and if they have not recovered or been paid the funds from any other source.

(2) The Administrator or other authorized Federal agency may make a claim against the letter of credit for payment if payment has not been made as required by a CERCLA settlement associated with the facility between a

current owner or operator and EPA or another Federal agency.

(3) The Administrator or another authorized Federal agency may make a claim against the letter of credit requesting payment into a trust fund established pursuant to a CERCLA unilateral administrative order issued to a current owner or operator if performance at the facility as required by the order has not occurred. The Administrator or another Federal agency may only make the claim against the letter of credit if the owner or operator has provided a written statement that the letter of credit may be used to assure the performance of the work required in the order.

(k) If the owner or operator does not establish alternate financial responsibility as specified in this part and obtain written approval of such alternate financial responsibility from the Administrator within ninety days after receipt by the owner or operator, the trust fund trustee (if the letter is issued in favor of the trustee), and the Administrator of a notice from the issuing institution that it has decided not to extend the letter of credit beyond the current expiration date:

(1) The Administrator will draw on the letter of credit if the letter of credit is issued in favor of any and all third party CERCLA claimants; or

(2) If the letter of credit is issued in favor of the trust fund trustee, the Administrator will inform the trustee of the trust fund that the owner or operator did not establish alternate financial responsibility and obtain written approval of such alternate financial responsibility within ninety days. In accordance with the terms of the trust agreement, this notice will prompt the trustee to draw on the letter of credit and deposit any unused portion of the letter of credit into the trust fund.

(l) The Administrator may delay the drawing or the notification to the trustee of the trust fund that the owner or operator did not establish alternate financial responsibility and obtain written approval of such alternate financial responsibility within ninety days if the issuing institution grants an extension of the term of the credit. During the last thirty days of any such extension the Administrator will draw on the letter of credit or notify the trustee of the trust fund that the owner or operator did not establish alternate financial responsibility and obtain written approval of such alternate financial responsibility if the owner or operator has still failed to provide alternate financial responsibility as specified in this section and obtain

written approval of such financial responsibility from the Administrator.

(m) The Administrator will return the letter of credit to the issuing institution for termination or agree to the termination of the trust holding the letter of credit when:

(1) An owner or operator substitutes alternate financial assurance as specified in this part; or,

(2) The Administrator releases the owner or operator from the requirements of this part in accordance with § 320.27.

#### § 320.41 Surety bond.

(a) An owner or operator may satisfy the requirements of this part by obtaining a surety bond which conforms to the requirements of this paragraph and submitting the originally signed bond to the Administrator.

(b) The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on Federal bonds in Circular 570 of the U.S. Department of the Treasury.

(c) The wording of the surety bond must be identical to the wording specified in § 320.50(c).

(d) A surety bond may be used to satisfy the requirements of this section only if the Attorneys General or Insurance Commissioners of:

(1) The state in which the surety is incorporated, and

(2) Each state in which a facility covered by the surety bond is located have submitted a written statement to EPA that a surety bond executed as described in this section and § 320.50(c) of this part is a legally valid and enforceable obligation in that state.

(e) The surety bond may be issued by multiple sureties provided that each is liable for its individual vertical percentage share of the total penal sum of the bond.

(f) An owner or operator who uses a surety bond to satisfy the requirements of this part must also establish a standby trust fund and update Schedule A of the trust agreement within sixty days after a change in the amount of CERCLA § 108(b) financial responsibility. This standby trust fund must meet the requirements specified in § 320.45, except that:

(1) An originally signed duplicate of the trust agreement must be submitted to the Administrator with the surety bond; and

(2) Until the standby trust fund is funded pursuant to the requirements of this section, the following are not required by these regulations:

(i) Payments into the trust fund as specified in § 320.45;

(ii) Annual valuations as required by the trust agreement; and

(iii) Notices of nonpayment as required by the trust agreement.

(g) The surety bond must guarantee that the owner or operator will:

(1) Make payments or ensure that payments are made for CERCLA response costs, health assessment costs, and/or natural resource damages associated with the facility as required in a final court judgment from a Federal court against any current owner or operator within thirty days to the party or parties obtaining the judgment;

(2) Make payments or ensure payments are made as required in a CERCLA settlement associated with the facility between any of the current owners and operators at the facility and EPA or another Federal agency;

(3) Perform or ensure the performance of the work required at the facility by a CERCLA unilateral administrative order issued to any of the current owners or operators by EPA or by another Federal agency for which the owner or operator provides a written statement allowing for the bond to assure performance of the work; and

(4) Provide alternate financial responsibility as specified in this part or ensure that alternate financial responsibility as specified in this part is provided for facilities covered by the bond, and obtain the Administrator's written approval or ensure the Administrator's written approval is obtained of the financial responsibility provided, within ninety days after receipt by both the owner or operator and the Administrator of a notice of cancellation of the bond from the surety.

(h) Under the terms of the surety bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond and must make payment in accordance with the direction of the claimant and the terms of the bond. Provided, however, the liability of the surety will be limited to the penal sum of the bond plus the amount of any investigation or legal defense fees incurred by the surety.

(i) The penal sum of the bond must be in an amount at least equal to the required current CERCLA § 108(b) financial responsibility amount, except as provided in § 320.46.

(j) Whenever the required amount of CERCLA § 108(b) financial responsibility increases to an amount greater than the penal sum, the owner or operator, within sixty days after the increase, must either cause the penal sum to be increased to an amount at least equal to the CERCLA § 108(b) financial responsibility amount and submit evidence of such increase to the Administrator, or obtain other financial

assurance as specified in this section to cover the increase. Whenever the required amount of CERCLA § 108(b) financial responsibility decreases, the penal sum may be reduced to the amount of the current required CERCLA § 108(b) financial responsibility amount following written approval by the Administrator.

(k) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Administrator. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Administrator, as evidenced by the return receipts.

(l) The owner or operator may terminate the bond if the Administrator has given prior written authorization based on his receipt of evidence of alternate financial responsibility as specified in this part or the Administrator releases the owner or operator from the requirements of this part in accordance with § 320.27.

#### § 320.42 Insurance.

(a) An owner or operator may satisfy the requirements of this part by obtaining insurance for CERCLA response costs, health assessment costs, and natural resource damages that conforms to the requirements of this section. Each insurance policy must be amended by the attachment of a CERCLA § 108(b) endorsement as worded in § 320.50(d).

(b) At a minimum, the insurer must be licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more states.

(c) The owner or operator must submit a signed duplicate original of the CERCLA § 108(b) financial responsibility endorsement to the Administrator, or regional delegees of the Administrator as applicable if the endorsement covers facilities located in multiple regions. The endorsement must provide coverage effective when required by the compliance schedule in § 320.2.

(d) The owner or operator may obtain insurance from up to four insurers to demonstrate CERCLA § 108(b) financial responsibility. If the owner operator obtained insurance from multiple insurers, an endorsement from each insurer must be submitted and must provide that a claimant may make a claim against each of the insurers providing evidence of financial responsibility for the insurer's proportional share of the CERCLA



§ 108(b) financial responsibility up to the face value of the policy.

(e) The insurance policy must provide coverage for third-party CERCLA claims against all current owners and operators at the facility as required by this part.

(f) An owner or operator who uses insurance to satisfy the requirements of this part must also establish a standby trust fund and update Schedule A of the trust agreement within sixty days after a change in the amount of CERCLA § 108(b) financial responsibility. This standby trust fund must meet the requirements of the trust fund specified in § 320.45, except that:

(1) An originally signed duplicate of the trust agreement must be submitted to the Administrator with the endorsement; and

(2) Unless the standby trust fund is funded pursuant to the requirements of this part, the following are not required by these regulations:

(i) Payments into the trust fund as specified in § 320.45;

(ii) Annual valuations as required by the trust agreement; and

(iii) Notices of payment as required by the trust agreement.

(g) The insurance must provide first dollar coverage irrespective of any deductibles or self-insured retention both of which must be paid by the insurer with a right of reimbursement from the insured. The policy must be issued for a face amount at least equal to the required current CERCLA § 108(b) financial responsibility amount, except as provided in § 320.46, § 320.1(g)(1) and paragraph (d) of this section. The term “face amount” means the total amount the insurer is obligated to pay under the policy as required by this section, without sub-limits except for those that specify facility specific amounts of coverage, exclusive of legal defense and investigation costs, and must be segregated and independent from other coverage provided for by the policy that is outside the scope of paragraphs (h), (i), (j), and (l) of this section. Actual payments by the insurer will not change the face amount, although the insurer’s future liability will be lowered by the amount of the payments.

(h) The policy must provide for the payment awarded in final court judgments from a Federal court against any of the current owners and operators for CERCLA response costs, health assessment costs, and/or natural resource damages associated with the facility to the party obtaining the judgment should such payment not be made within thirty days.

(i) The policy must provide for payment as required by a CERCLA

settlement associated with the facility between any of the current owners or operators at the facility and EPA or another Federal government agency should payment as required by the settlement not be made.

(j) The policy must also provide for payment into a trust fund established pursuant to a CERCLA unilateral administrative order issued to any of the current owners or operators at the facility by EPA or another Federal agency in instances where performance at the facility as required by the order does not occur. The owner or operator must have provided a written statement allowing the insurance policy be used to assure performance of the work required in the order.

(k) The endorsement must provide that cancellation, failure to renew, or any other termination of the insurance by the insurer will be effective only upon written notice to the owner operator and the Administrator by certified mail and only after the expiration of 120 days beginning with the date of receipt of the notice by both the Administrator and the owner or operator, as evidenced by the return receipts. Such automatic renewal of the policy must, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy.

(l) The endorsement must specify that in instances where the owner or operator fails to obtain alternate financial responsibility and obtain written approval of such alternate financial responsibility from the Administrator within ninety days after receipt by both the owner or operator and the Administrator of a notice from the insurer that it has decided to cancel, not renew or otherwise terminate the insurance policy the insurer will be liable up to the face value of the policy for payment into the standby trust following notification by the Administrator.

(m) The endorsement must also provide that in the case of a release or threatened release of (a) hazardous substance(s) from a facility covered by the policy, the insurer acknowledges that any claim authorized by section 107 or section 111 of CERCLA may be asserted directly against the insurer as provided by CERCLA § 108(c)(2). Further, the endorsement must state that the insurer consents to suit with respect to these claims subject to the limitations in section 108(d) of CERCLA.

(n) The owner or operator must maintain the insurance in full force and effect until the Administrator consents to termination of the insurance by the owner or operator as specified in paragraph (p) of this section.

(o) Whenever the required CERCLA § 108(b) financial responsibility amount increases to an amount greater than the face amount of the policy, the owner or operator, within sixty days after the increase, must either cause the face amount of the policy to be increased to an amount at least equal to the required amount and submit evidence of such increase to the Administrator, or obtain other financial responsibility as specified in this section to cover the increase. Whenever the amount of required CERCLA § 108(b) financial responsibility decreases, the face amount may be reduced to the amount of the current required CERCLA § 108(b) amount following written approval by the Administrator.

(p) The Administrator will give written consent to the owner or operator that he or she may terminate the insurance policy when:

(1) An owner or operator substitutes alternate financial responsibility as specified in this part; or

(2) The Administrator releases the owner or operator from the requirements of this section in accordance with § 320.27.

[PROPOSED REGULATORY TEXT FOR § 320.43 OPTION 1 (Preferred Option)]

#### § 320.43 [Reserved]

[PROPOSED REGULATORY TEXT FOR § 320.43 OPTION 2]

#### § 320.43 Financial Test.

(a) An owner or operator may satisfy the requirements of this section, up to the amount specified in this section, by demonstrating that it passes a financial test.

(1) To cover up to the full amount of financial responsibility required at its facility, the owner or operator must have:

(i) At least one long term credit rating of AAA, AA+, AA-, A+, A or A- as issued by Standard and Poor’s (S&P), or an equivalent as issued by another Nationally Recognized Statistical Rating Organization (NRSRO);

(ii) Tangible net worth at least six times the amount of environmental obligations, including guarantees, covered by a financial test or guarantee, including this financial test and the corporate guarantee in § 320.44; and

(iii) Assets located in the United States amounting to either at least ninety percent of total assets; or at least six times the amount of financial responsibility obligations covered by a financial test or guarantee, including this financial test and the corporate guarantee in § 320.44; and

(2) To cover up to one half of the value of the financial responsibility

amount specified in this section, the owner or operator must have:

(i) At least one-long term credit rating of BBB+ or BBB as issued by S&P, or the equivalents as issued by another NRSRO;

(ii) Tangible net worth at least six times the financial responsibility obligations covered by a financial test or guarantee, including this financial test and the corporate guarantee in § 320.44; and

(iii) Assets located in the United States amounting to either at least ninety percent of the firm's total assets or at least six times the amount of financial responsibility obligations covered by a financial test or guarantee, including this financial test and the corporate guarantee in § 320.44.

(b) To demonstrate that it satisfies this financial test, an owner or operator must post on its website, include in its facility record, and annually submit all of the following:

(1) A letter to the Administrator signed by its chief financial officer (CFO) as worded in § 320.50(e).

(2) A special report of procedures and findings from an independent certified public accountant (CPA) resulting from an agreed-upon procedures engagement in accordance with the American Institute of Certified Public Accountants' (AICPA) Statement on Standards for Attestation Engagements (SSAE) and Related Attestation Interpretations, AT section 201—Agreed Upon Procedures Engagements, or any future superseding standards set by AICPA or any superseding body. The report would be required to describe the procedures performed and related findings as to whether or not there were differences or discrepancies identified between the financial information in the owner's or operator's CFO's letter and the owner's or operator's most recent audited annual financial statements. Where differences or discrepancies were found in the comparison of the owner's or operator's CFO's letter and the owner's or operator's most recent audited annual financial statements, the report of procedures and findings would reconcile any differences or discrepancies.

(3) A copy of the owner's or operators' most recent independently audited annual financial statements prepared in accordance with an accounting standard deemed acceptable by the SEC.

(c) An owner or operator of a facility must submit the three items specified in paragraph (b) of this section to the Administrator within sixty days of the date on which the CERCLA financial responsibility amount is first established.

(d) After the initial submission of the items specified in paragraph (b) of this section, the owner or operator must send annually updated information to the Administrator within sixty days after the close of each succeeding fiscal year. This information must consist of the three items specified in paragraph (b) of this section.

(e) An owner or operator who no longer meets the requirements of paragraph (a) of this section for any portion of his CERCLA financial responsibility requirement must send notice of the intent to establish an alternate financial responsibility instrument as specified in this section to the Administrator to cover the portion of the obligations that can no longer be covered by the financial test. This notice must be sent by certified mail within thirty days. The owner operator must then obtain alternate financial responsibility for the entire amount of required coverage as specified in paragraph (a) of this section. The owner or operator must submit evidence of coverage to the Administrator within 120 days of no longer meeting the requirements.

(f) The Administrator may, based on a reasonable belief that the owner or operator may no longer meet the requirements of paragraph (a) of this section for any portion of the CERCLA financial responsibility obligation, require reports of financial condition at any time from the owner or operator in addition to those specified in paragraph (b) of this section. If the Administrator finds, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of paragraph (a) of this section for any portion of the CERCLA liability financial responsibility obligation, the owner or operator must provide alternate financial responsibility as specified in this section within thirty days after notification of such a finding.

(g) The Administrator may disallow use of this test on the basis of qualifications of opinion given in the independent certified public accountant's report in the agreed upon procedures engagement or the audited financial statements. An adverse opinion or disclaimer of opinion in either report will result in disallowance of the test. The Administrator will evaluate other qualifications on an individual basis. The owner or operator must provide alternate evidence of financial responsibility within thirty days after notification of the disallowance.

(h) The owner or operator is no longer required to submit the items specified in paragraph (b) of this section when:

- (1) An owner or operator substitutes alternate financial responsibility as specified in this section; or
- (2) The Administrator releases the owner or operator from the requirements of this section in accordance with § 320.27.

[PROPOSED REGULATORY TEXT FOR § 320.44 OPTION 1 (Preferred Option)]

**§ 320.44 [Reserved]**

[PROPOSED REGULATORY TEXT FOR § 320.44 OPTION 2]

**§ 320.44 Corporate guarantee.**

(a) An owner or operator may meet the requirements of this part by obtaining a written guarantee, hereinafter referred to as "guarantee."

(b) The guarantor must be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business relationship" with the owner or operator. The guarantor must meet the requirements for owners or operators in § 320.43 (a) through (g) and must comply with the terms of the guarantee.

(c) The wording of the guarantee must be identical to the wording specified in the Corporate Guarantee at § 320.50(f) of this part. A certified copy of the guarantee must accompany the items sent to the Administrator as specified in § 320.43(b). One of these items must be the letter from the guarantor's chief financial officer. If the guarantor's parent corporation is also the parent corporation of the owner or operator, this letter must describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" with the owner or operator, this letter must describe this "substantial business relationship" and the value received in consideration of the guarantee.

(d) The terms of the guarantee must provide that:

(1) In the event that payment for CERCLA response costs, health assessment costs, and/or natural resource damages associated with the facility required in a final court judgment from a Federal court against one of the current owners or operators is not made within thirty days, the guarantor shall do so;

(2) In the event payment is not made as required in a CERCLA settlement associated with the facility between a current owner or operator and EPA or another Federal government agency, the guarantor shall do so;

(3) In the event that performance at a facility covered by the guarantee does not occur as required under a CERCLA unilateral administrative order issued to a current owner or operator by EPA or another Federal agency and for which the owner or operator provides a written statement allowing the guarantee to serve as financial responsibility assuring the work in the order, the guarantor shall make payment into a trust fund established pursuant to the order;

(4) The corporate guarantee will remain in force unless the guarantor sends notice of termination by certified mail to the owner or operator and to the Administrator. Termination may not occur, however, unless and until the owner or operator obtains, and the Administrator approves alternate financial responsibility complying with the requirements of this part; and

(5) If the owner or operator fails to provide alternate financial responsibility as specified in this part and obtain the written approval of such alternate financial responsibility from the Administrator within ninety days after receipt by both the owner or operator and the Administrator of a notice of termination of the corporate guarantee from the guarantor, the guarantor will provide such alternative financial responsibility, in accordance with the requirements of this part, in the name of the owner or operator.

(e) The guarantee must provide for payment as described in this section up to the required amount of the CERCLA § 108(b) financial responsibility covered by the guarantee.

(f) In the case of a corporation incorporated in the United States, a guarantee may be used to satisfy the requirements of this part only if the Attorneys General or Insurance Commissioners of:

(1) The state in which the guarantor is incorporated, and

(2) Each state in which a facility covered by the guarantee is located have submitted a written statement to EPA that a guarantee executed as described in this section and § 320.50(f) is a legally valid and enforceable obligation in that state.

(g) In the case of a guarantee provided by a corporation incorporated outside the United States, a guarantee may be used to satisfy the requirements of this part only if:

(1) The non-U.S. corporation has identified a registered agent for service of process in each state in which a facility covered by the guarantee is located and in the state in which it has its principal place of business; and

(2) The Attorney General or Insurance commissioner of each state in which a

facility covered by this guarantee is located and the state in which the guarantor corporation has its principal place of business has submitted a written statement to EPA that a guarantee executed as described in this section and § 320.50(f) is a legally valid and enforceable obligation in that state.

#### § 320.45 Trust fund.

(a) An owner operator may satisfy the requirements of this section by establishing a trust fund that conforms to the requirements of this paragraph, and submitting an originally signed duplicate of the trust agreement to the Administrator. The trustee must be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or state agency.

(b) The wording of the trust agreement must be identical to the wording specified in § 320.50(a)(1), and the trust agreement must be accompanied by a formal certification of acknowledgment (for example, see § 320.50(a)(2)). Schedule A of the trust agreement must be updated within sixty days after a change in the amount of § 108(b) financial responsibility.

(c) Payments into the trust fund must be made so that the value of the trust fund is at least as great as the required CERCLA § 108(b) financial responsibility amount required under § 320.20. The trust must be fully funded within four years of the owner operator being subject to the regulations. This funding amount may include the value of any letters of credit held by the trust in accordance with § 320.40. Receipt from the trustee for these payments must be submitted by the owner or operator to the Administrator.

(d) Whenever the required financial responsibility amount increases, the owner operator must compare the new amount with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the new amount, the owner or operator, within sixty days after the change in the required § 108(b) financial responsibility amount, must either deposit an amount into the fund so that its value after this deposit at least equals the required § 108(b) financial responsibility amount, or obtain other financial assurance as specified in this section to cover the increase.

(e) If the value of the trust fund is greater than the required financial responsibility amount, the owner or operator may submit a written request to the Administrator for release of the amount of in excess of the required CERCLA § 108(b) financial responsibility amount.

(f) If the owner or operator substitutes other financial responsibility as specified in this section for all or part of the trust fund, it may submit a written request to the Administrator for release of the amount in excess of the required amount of CERCLA § 108(b) financial responsibility.

(g) Within sixty days after receiving a request from the owner operator for release of funds as specified in paragraph (e) or paragraph (f) of this section, the Administrator will notify the trustee that the trust fund contains amounts in excess of the required amount. Following this notification, the trustee may release the excess funds in accordance with the terms of the trust agreement.

(h) The trust, up to the value of funds held including letters of credit held in accordance with § 320.40, is required to provide for payment:

(1) To parties that obtain a final court judgment from a Federal court against any of the current owners or operators at the facility for awarding CERCLA response costs, health assessment costs, and/or natural resource damages associated with a facility covered by the trust agreement should payment not occur as required by the judgment within thirty days.

(2) As required in a CERCLA settlement associated with the facility between a current owner or operator and EPA or another Federal agency if payment is not otherwise made.

(3) Into a trust fund established pursuant to a CERCLA unilateral administrative order issued to one of the current owners or operators by EPA or another Federal agency in the event the work is not performed at the facility as required by the order. The Administrator or other Federal agency shall only make such a claim if the owner or operator provides written consent for the financial responsibility instrument to assure the obligations under the unilateral administrative order.

(i) The Administrator will agree to the termination of the trust when:

(1) The owner operator substitutes alternate financial assurance as specified in this section; or

(2) The Administrator releases the owner or operator from the requirements of this section in accordance with § 320.27.

#### § 320.46 Use of multiple financial responsibility instruments.

(a) An owner or operator may satisfy the requirements of this part by establishing more than one financial instrument per facility.

(b) The instruments must be as specified in §§ 320.40 through 320.45, respectively, except that it is the combination of instruments, rather than the single instrument, which must demonstrate financial responsibility for an amount at least equal to the required CERCLA § 108(b) financial responsibility amount.

(c) An owner or operator using a trust fund in combination with a surety bond, letter of credit or insurance policy, including a trust fund holding a letter of credit, may use the trust fund as the standby trust fund for the other instruments.

(d) A single standby trust fund may be established for two or more instruments. A claimant may make a claim against any of the instruments used to provide evidence of financial responsibility.

**§ 320.47 Use of a financial instrument for multiple facilities.**

(a) An owner or operator may use a financial responsibility instrument specified in this part to meet the requirements of this section for more than one facility.

(b) Evidence of financial responsibility submitted to the Administrator must include for each facility, the EPA Identification Number, name, address, and the amount of funds for § 108(b) financial responsibility assured by the instrument.

(c) If the facilities covered by the instrument are in more than one Region, identical evidence of financial responsibility must be submitted to and maintained with the regional delegates of the Administrator, as applicable, of all such Regions.

(d) The amount of funds available through the instrument must be no less than the sum of funds that would be available if a separate instrument had been established and maintained for each facility.

**§ 320.48 Consolidated form and multiple owners and/or operators.**

(a) Where a facility is owned or operated by more than one person, evidence of financial responsibility covering the facility may be established and maintained by one of the owners or operators, or, in consolidated form, by or on behalf of two or more owners or operators.

(b) When evidence of financial responsibility is established in a consolidated form, the proportional share of the cost of demonstrating the financial responsibility for each participant shall be shown in a separate letter to the Administrator.

(c) The evidence shall be accompanied by a statement authorizing

the owner or operator submitting the evidence of financial responsibility to act for and on behalf of each participant in submitting and maintaining the evidence of financial responsibility.

**§ 320.49 [Reserved]**

**§ 320.50 Wording of the instruments.**

(a)(1) A trust agreement for a trust fund, as specified 40 CFR 320.45 must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted.

**TRUST AGREEMENT**

EPA contact information:  
[Insert Name, Phone Number, Mailing Address of EPA and Point of Contact(s)]  
Account Number: [insert account number]

Trust Agreement (the "Agreement") is entered into as of [insert date] by and between [insert name of owner(s)/operator(s)], a business [insert relevant entity (corporation, partnership, association, proprietorship, etc.)], (the "Grantor") and [insert name of corporate trustee], [insert "incorporated in the state of [name of state]" or "a national bank"] (the "Trustee").

Whereas, the United States Environmental Protection Agency ("EPA") has established regulations applicable to the Grantor requiring that an owner or operator of a facility subject to the regulations demonstrate financial responsibility as proof that funds will be available when needed for payment of CERCLA response costs, health assessment costs, and natural resource damages at the facility.

Whereas, the Grantor has elected to establish a trust to provide all or part of such financial responsibility and/or to receive the proceeds from a letter of credit to assure all or part of such financial responsibility for the facilities identified herein.

Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this agreement, and the Trustee is willing to act as trustee,

Now, therefore, the Grantor and the Trustee agree as follows:

**Section 1. Definitions as used in this Agreement.**

a) "Grantor" means the owner or operator who enters into this Agreement and any successors or assigns of the Grantor.

b) "Trustee" means the Trustee who enters into this Agreement and any successor Trustee.

**Section 2. Identification of Facilities and Financial Responsibility Amounts.**

This Agreement pertains to the facilities and CERCLA 108(b) financial responsibility amounts identified on attached Schedule A [on Schedule A, for each facility list the EPA Identification Number, name, address, current owners and operators, and the current financial responsibility amount, and portions thereof, for which financial responsibility is being demonstrated by this Agreement.]

**Section 3. Establishment of Fund.** The Grantor and the Trustee hereby establish a trust fund (the "Fund") for the benefit of any and all parties with valid third-party CERCLA claims against the Grantor or other current owners and operators arising from the operation of the facilities covered by this Agreement. The Grantor and Trustee do not intend for the Trustee to qualify as a "guarantor" as that term is used in CERCLA sections 101(13) and 108(c)(2), and therefore intend that the Trustee will not be subject to a direct action by Trustee's agreement to act as Trustee for the Fund. The Grantor and Trustee intend for the Fund to qualify as a "guarantor" as that term is used in CERCLA sections 101(13) and 108(c)(2), and therefore intend that only the Fund will be subject to any direct action brought pursuant to CERCLA section 108(c)(2). The Fund is established initially as consisting of property, which are acceptable to the Trustee, described in Schedule B attached hereto. Such property, along with any other monies and/or property subsequently transferred to the Trustee, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement, are referred to herein collectively as the Fund. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor under CERCLA.

**Section 4. Payments from the Fund.** The Trustee shall make payments from the Fund to parties with valid CERCLA claims against the Grantor or other current owners or operators at the facility(-ies). To make these payments, the Trustee shall draw on any letters of credit described in Schedule B and/or make payments from the funds held by the Fund described in Schedule B. The Trustee shall make payment from the Fund for valid third-party CERCLA claims only up to the lesser of: (1) The value of the valid third-party CERCLA claim; or (2) the amount of CERCLA 108(b) financial responsibility provided

for the facility(ies) associated with the claim provided by the Fund as identified in Schedule A.

The Trustee shall satisfy valid unpaid CERCLA claims by making payments on a first come first served basis from the Fund only upon receipt of one or more of the following documents and only in amounts up to the values specified in the document(s):

(i) A final court judgment dated at least 30 days earlier from a Federal court, in favor of the claimant, awarding CERCLA response costs, health assessment costs, and/or natural resource damages associated with a facility covered by this Agreement against the Grantor or any of the current owners or operators at a facility covered by this agreement;

(ii) A written signed statement from the EPA Administrator or another Federal government agency requesting payment from the Fund on the grounds that payment has not been made as required by a CERCLA settlement associated with a facility covered by this Agreement and with any of the current owners or operators; or

(iii) A written signed statement from the EPA Administrator or other Federal government agency requesting payment from the Fund into a trust fund established pursuant to a CERCLA unilateral administrative order on the grounds that performance at a facility covered by this Agreement has not occurred as required by a CERCLA unilateral administrative order issued to a current owner or operator that references this trust agreement.

In addition to one of the documents listed above, all claimants must also present the following:

A signed statement from the claimant certifying that these amounts have not been recovered or paid from any other source, including, but not limited to, the owners or operators, insurance, judgments, agreements, and other financial responsibility instruments.

In the event of simultaneous valid claims that exceed the value of the Fund, the Trustee shall pay the claimants a pro rata share of their claim determined by the size of each valid claim.

In addition to the payment instructions above, in the case of a release or threatened release from a facility covered by the Agreement, any claim authorized by section 107 or 111 of CERCLA may be asserted directly against the Fund as provided by CERCLA section 108(c)(2) subject to the limitations in CERCLA section 108(d). The Fund shall be entitled to all rights and defenses provided to guarantors by CERCLA section 108(c). The Fund is

available for paying and defending claims in these instances.

In addition, if notified by the EPA Administrator that the trust fund contains amounts in excess of the required CERCLA 108(b) financial responsibility amount, the Trustee shall refund to the Grantor such amounts in excess of the required CERCLA 108(b) financial responsibility amount.

*Section 5. Payments Comprising the Fund.* Payments made to the Trustee for the Fund shall consist of cash or securities acceptable to the Trustee and/or a standby letter of credit as specified in 40 CFR 320.50(b). In the event of receipt of a notice of a decision not to extend the expiration date of a letter of credit from an institution issuing a letter of credit held by the Fund, the Trustee shall draw on the letter of credit prior to expiration occurring and deposit any unused portion of the credit into the Fund if the EPA Administrator informs the Trustee that the owner operator did not establish alternate financial responsibility and obtain written approval of such alternate financial responsibility from the EPA Administrator within the time frame provided by 40 CFR 320.40(k) and (l).

*Section 6. Trustee Management.* The Trustee shall invest and reinvest the principal and income of the Fund and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with the Grantor's disclosures communicated in writing to the Trustee from time to time of the names of all current owners and operators and their affiliates including issuers of securities or other obligations, subject, however, to the provisions of this Section. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge its duties with respect to the trust fund with undivided loyalty and solely in the interest of the beneficiaries and with the reasonable care, skill, and caution of a prudent investor, in light of the purposes, terms, distribution requirements, and other circumstances of the trust; *except that*:

(i) Securities or other obligations of the Grantor, or any other current owner or operator of the facilities, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a-2(a), shall not be acquired or held, unless they are securities or other obligations of the Federal or a state government;

(ii) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal or state government;

(iii) The Trustee is authorized to hold and draw upon standby letters of credit specified as in 40 CFR 320.50(b); and

(iv) The Trustee is authorized to hold cash awaiting investment or distribution un-invested for a reasonable time and without liability for the payment of interest thereon.

*Section 7. Common and Collective Investment Practices.* The Trustee is expressly authorized in its discretion:

(a) To transfer from time to time any or all of the assets of the Fund to any common or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be jointly invested with the assets of other trusts participating therein; and

(b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 80a-1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

*Section 8. Express Powers of Trustee.* Without in any way limiting the powers and discretions conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

(a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;

(b) To hold and draw upon standby letters of credit that are worded as specified in 40 CFR 320.50(b);

(c) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(d) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United

States Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;

(e) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the Federal or state government;

(f) To compromise or otherwise adjust all claims in favor of or against the Fund.

*Section 9. Taxes and Expenses.* All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses shall be paid directly by the Grantor. All other expenses incurred by the Trustee in connection with the administration of this Trust including fees for legal services rendered to the Trustee, the compensation of the Trustee, and all other proper charges and disbursements of the Trustee not paid directly by the Grantor shall be paid from the Fund.

*Section 10. Annual Valuation.* The Trustee shall annually, at least 30 days prior to the anniversary date of establishment of the Fund, furnish to the Grantor and to the appropriate EPA Administrator a statement confirming the value of the Trust including the value of any funds held by the Trust and of any letters of credit held by the Trust. Any letters of credit shall be valued at the face amount less the value of any draws. Any securities in the Fund shall be valued at market value as of no more than sixty days prior to the anniversary date of establishment of the Fund. The failure of the Grantor to object in writing to the Trustee within 90 days after the statement has been furnished to the Grantor and the EPA Administrator shall constitute a conclusively binding assent by the Grantor barring the Grantor from asserting any claim or liability against the Trustee with respect to matters disclosed in the statement.

*Section 11. Advice of Counsel.* The Trustee may from time to time consult with counsel, who may be counsel to the Grantor, with respect to any question arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

*Section 12. Trustee Compensation.* The Trustee shall be entitled to reasonable compensation for its services

as agreed upon in writing from time to time with the Grantor.

*Section 13. Successor Trustee.* The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in a writing sent to the Grantor, the EPA Administrator, and the present Trustee by certified mail 10 days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 9.

*Section 14. Instructions to the Trustee.* All orders, requests, and instructions to the Trustee shall be in writing, signed by such persons as are designated in the attached Exhibit A or such other designees as the Grantor may designate by amendment to Exhibit A. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests, and instructions. All orders, requests, and instructions by the EPA Administrator to the Trustee shall be in writing, signed by the EPA Administrator, or designee thereof, and the Trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor or EPA hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or EPA, except as provided for herein.

*Section 15. Notices of Payment.* If a payment for CERCLA response costs, health assessment costs, and/or natural resource damages is made under Section 4 of this trust, the Trustee shall notify the Grantor of such payments and the amounts thereof within five (5) working days. If the Grantor ceases to exist, such

notice shall be provided to the EPA Administrator. Further, the Trustee shall notify the EPA Administrator of all claims against the Fund resulting from a direct action under CERCLA section 108(c).

*Section 16. Amendment of Agreement.* This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee, and the EPA Administrator, or by the Trustee and the EPA Administrator if the Grantor ceases to exist.

*Section 17. Irrevocability and Termination.* Subject to the right of the parties to amend this Agreement as provided in Section 16, this Trust shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee, and the EPA Administrator, or by the Trustee and the EPA Administrator, if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, shall be paid to the Grantor.

*Section 18. Immunity and Indemnification.* The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Trust, or in carrying out any directions by the Grantor or the EPA Administrator issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Trust Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense. EPA does not indemnify either the Grantor or the Trustee due to the restrictions imposed by the Anti-Deficiency Act, 31 U.S.C. 1341.

*Section 19. Choice of Law.* This Agreement shall be administered, construed, and enforced according to the laws of the state of [enter name of state].

*Section 20. Interpretation.* As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement.

In Witness Whereof the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals to be hereunto affixed and attested as of the date first above written. The parties below certify that the wording of this Agreement is identical to the wording

specified in 40 CFR 320.50(a) as such regulations were constituted on the date first above written.

\_\_\_\_\_  
[Signature of Grantor]

\_\_\_\_\_  
[Printed Name of Grantor]

[Title]

Attest:

[Title]

[Seal]

\_\_\_\_\_  
[Signature of Trustee]

\_\_\_\_\_  
[Printed Name of Trustee Official]

\_\_\_\_\_  
[Mailing Address, Telephone Number, Email of Trustee Official]

Attest:

[Title]

[Seal]

(2) The following is an example of the certification of acknowledgement which must accompany the trust agreement for a trust fund as specified in 40 CFR 320.45 of this chapter. State requirements may differ on the proper content of this acknowledgement.

State of \_\_\_\_\_

County of \_\_\_\_\_

On this [date], before me personally came [owner or operator] to me known, who, being by me duly sworn, did depose and say that she/he resides at [address], that she/he is [title] of [corporation], the corporation described in and which executed the above instrument; that she/he knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that she/he signed her/his name thereto by like order.

\_\_\_\_\_  
[Signature of Notary Public]

(b) A letter of credit, as specified in 40 CFR 320.40 of this chapter, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

Irrevocable Standby Letter of Credit

IRREVOCABLE STANDBY LETTER OF

CREDIT NUMBER: [insert number]

ISSUER: [insert name and address of issuing institution]

ISSUANCE DATE: [insert date]

MAXIMUM AMOUNT: \$[insert dollar amount]

APPLICANT:

[Insert name of Owner or Operator of Facility]

[Insert contact person(s), title(s), and contact information (address, phone, email, etc.)]

FACILITY:

[Insert EPA Identification number(s), name(s), address(es) and CERCLA 108(b) financial responsibility amount(s) covered by the letter of credit for facility(ies) to be covered by this instrument]

TO:

[If the letter of credit is established in favor of any and all third-party CERCLA claimants insert:

“Administrator(s)

Region(s) [region numbers]

U.S. Environmental Protection Agency (EPA)

[Insert name and mailing address of Administrator or designee(s)]”

Or,

If letter of credit is established in favor of a trust fund trustee insert the name and mailing address of trustee]

Dear Sir or Madam:

We hereby establish our Irrevocable Standby Letter of Credit No. [insert number] in the favor of [insert either “any and all third-party CERCLA claimants” or the name of trustee of the trust fund that will hold the letter of credit], at the request and for the account of [insert name of Owner or Operator of Facility] (the “Applicant”), in the amount of \$[insert amount] (the “Maximum Amount”) for the [insert name(s) and address(es) of the facility(ies) to be covered by this instrument] (the “Facility”). The letter of credit is established to assure payment for the current owners or operators’ CERCLA response costs, health assessment costs, and/or natural resource damages associated with the facilities covered by this letter. Payment shall be made up to amounts provided above for each facility and not to exceed in total the Maximum Amount, upon presentation of:

[If letter of credit is established in favor of a trust fund trustee insert: “A demand for payment from [name of trust fund trustee] bearing reference to this letter of credit number No. [insert number]

If letter of credit is issued in favor of any and all third-party CERCLA claimants insert: “A demand for payment bearing reference to this letter of credit number No. [insert number]; and

A final court judgment dated at least 30 days earlier from a Federal court, in favor of the claimant, awarding CERCLA response costs, health assessment costs, and/or natural resource damages associated with a facility covered by the letter of credit against any of the current owners or operators at a facility covered by the letter of credit accompanied by a certification from the claimant that

reads as follows: ‘I hereby certify that the amount of the demand is payable pursuant to regulations issued under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 as amended.’; or

A certification from the EPA Administrator or another Federal agency that reads as follows: ‘I hereby certify that the amount of the demand is payable pursuant to regulations issued under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 as amended.’”]

This letter of credit is effective as of [date] and shall expire on [date at least one year later], but such expiration date shall be automatically extended for a period of [at least one year] on [date at least one year later as specified above] and on each successive expiration date, unless, at least 120 days before the current expiration date, we notify [If letter of credit is issued in favor of a trust fund trustee insert: “[name of trustee],” ] the EPA Administrator and the Applicant by certified mail that we have decided not to extend this letter of credit beyond the current expiration date. In the event of such notification, any unused portion of the credit shall be paid into the accompanying trust fund issued by [insert name of issuing institution of trust fund] with account number [insert account number of the trust fund] upon presentation by [If issued in favor of any and all third-party CERCLA claimants enter “the EPA Administrator”; if issued in favor of a trust fund trustee insert name of trustee] of a demand for payment compliant with the terms above within 120 days after the date of receipt of such notification by both you and [owner’s or operator’s name], as shown on the signed return receipts.

Whenever this letter of credit is drawn on under and in compliance with the terms of this credit, we shall duly honor such demand upon presentation to us and shall pay as directed by claimant or the trustee.

[Insert if letter of credit is issued in favor of any and all third-party CERCLA claimants: “In the case of a release or threatened release of (a) hazardous substance(s) from a facility covered by the letter of credit, we acknowledge that any claim authorized by section 107 or 111 of CERCLA may be asserted directly against us as provided by CERCLA section 108(c)(2). We consent to suit with respect to these claims subject to the limitations in CERCLA section 108(d). We acknowledge that we are entitled to all rights and defenses provided to guarantors by CERCLA section 108(c). We will provide notice of

any such resulting claims and payments to the EPA Administrator.”]

This credit is subject to [insert the most recent edition of either the Uniform Customs and Practice for Documentary Credits or International Standby Practices published and copyrighted by the International Chamber of Commerce.]

We certify that the wording of this letter of credit is identical to the wording specified in 40 CFR 320.50(b) as such regulations were constituted on the date shown immediately below. [Signature(s) and title(s) of official(s) of issuing institution] [Date].

(c) A surety bond, as specified in 40 CFR 320.41 of this chapter, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

EPA contact information:  
U.S. Environmental Protection Agency  
[Insert Name, Phone Number, Mailing Address of the Administrator and Points of Contact]

Surety Bond No. [Insert number]  
Date bond executed: [Insert date]  
Parties [Insert name and address of owner or operator], Principal, incorporated in [Insert state of incorporation] of [Insert city and state of principal place of business] and [Insert name and address of surety company(ies)], Surety Company(ies), of [Insert surety(ies) place of business].

EPA Identification Number, name, address, and CERCLA 108(b) financial responsibility amount, specifying the portion covered by this bond, for each facility guaranteed by this bond:

Total penal sum of bond: \_\_\_\_\_

Purpose: This is an agreement between the Surety(ies) and the Principal under which the Principal and Surety(ies) hereto are firmly bound to any and all third-party CERCLA claimants, in the above penal sum plus the amount of any investigation or legal defense fees incurred by Surety(ies) for the payment of which we bind ourselves, our heirs, executors, administrators, successors and assigns jointly and severally; provided that, where the Surety(ies) are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum “jointly and severally” only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such percentage of

the total penal sum only as is set forth opposite the name of each Surety plus the amount of any investigation or legal defense fees incurred by Surety, but if no limit of liability is indicated, the limit of liability shall be the total penal sum of the bond plus the amount of any investigation or legal defense fees incurred by Surety. We agree to be responsible for the following:

(1) the satisfaction of valid third-party CERCLA claims against the Principal or the other current owners and operators for CERCLA response costs, health assessment costs, and natural resource damages associated with the facility(ies) covered by this bond in the sums prescribed herein; and

(2) the guarantee that the Principal or other current owners and operators shall obtain alternate financial responsibility as specified in subpart C of 40 CFR 320 for the facility(ies) covered by this bond and obtain written approval of that financial responsibility provided within 90 days of receipt by the EPA Administrator and the Principal of a notice of cancellation of the bond from the Surety(ies).

The aforementioned responsibilities are subject to the governing provisions and the following conditions. Any provision in this bond conflicting with the following governing provisions or conditions shall be deemed deleted herefrom and provisions conforming to such governing provisions or condition shall be deemed incorporated herein.

Governing Provisions:

(1) the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended.

(2) Rules and regulations of the U.S. Environmental Protection Agency (EPA), particularly 40 CFR part 320.

Conditions:

(1) The Principal and all the current owners and operators at the facility(ies) covered by this bond are subject to the applicable governing provisions that require the Principal and all the current owners and operators to have and maintain CERCLA § 108(b) financial responsibility to cover CERCLA response costs, health assessment costs, and natural resource damage claims.

(2) This bond assures that the Principal will ensure that at facilities covered by this bond: (a) payments will be made as required by final court judgments from a Federal court against a current owner or operator for CERCLA response costs, health assessment costs, and/or natural resource damages within 30 days; (b) payments will be made when required by a CERCLA settlement with a current owner or operator; (c) work will be performed as required in CERCLA unilateral administrative

orders issued to a current owner or operator for which the owner or operator has provided a written statement allowing the bond to assure the performance of the work in the order; and (d) CERCLA 108(b) financial responsibility coverage will be maintained as described in condition 1.

(3) If the Principal fails to perform as described above the Surety(ies) becomes liable on this bond obligation.

(4) The Surety(ies) shall satisfy a valid claim for CERCLA response costs, health assessment costs, and/or natural resource damages only upon the receipt of one of the following documents plus the additional signed statement specified below:

(a) A final court judgment dated at least 30 days earlier from a Federal court, in favor of the claimant, awarding CERCLA response costs, health assessment costs, and/or natural resource damages associated with a facility covered by this bond against the Principal or any of the current owners or operators at a facility covered by this bond;

(b) A written signed statement from the EPA Administrator or another Federal government agency requesting payment from the Surety(ies) on the grounds that payment has not been made as required by a CERCLA settlement associated with a facility covered by this bond and with any of the current owners or operators; or

(c) A written signed statement from the EPA Administrator or other Federal government agency requesting payment from the Surety(ies) into a trust fund established pursuant to a CERCLA unilateral administrative order on the grounds that performance at a facility covered by this bond has not occurred as required by a CERCLA unilateral administrative order issued to a current owner or operator.

AND  
A signed statement from the claimant certifying that these amounts have not been recovered or paid from any other source, including, but not limited to, the owner operator, insurance, judgments, agreements, and other financial responsibility instruments.

(5) In addition to condition 4, in the case of a release or threatened release of (a) hazardous substance(s) from a facility covered by the bond, the Surety(ies) acknowledge that any claim authorized by section 107 or 111 of CERCLA may be asserted directly against the Surety(ies) as provided by CERCLA section 108(c)(2). The Surety(ies) consent(s) to suit with respect to these claims subject to the limitations in CERCLA section 108(d). The Surety(ies) shall be entitled to all



rights and defenses provided to guarantors by CERCLA section 108(c). The Surety(ies) will provide notice of any such resulting claims and payments to the EPA Administrator.

(6) If upon notice of cancellation by the Surety(ies) the Principal fails to obtain replacement CERCLA financial responsibility consistent with subpart C of 40 CFR 320 and written approval of the EPA Administrator of that replacement financial responsibility within 90 days of receipt of said notice by the EPA Administrator and the Principal the Surety(ies) shall become liable on this bond and shall make payment into the standby trust fund as directed by the EPA Administrator.

(7) The liability of the Surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the aggregate to the penal sum of the bond. In no event shall the obligation of the Surety(ies) hereunder exceed the amount of said penal sum plus the amount of any investigation or legal defense fees.

(8) The Surety(ies) may cancel the bond by sending notice of cancellation by certified mail to the Principal and the EPA Administrator, provided, however, that cancellation shall not occur during the 120 days beginning on the date of receipt of the notice of cancellation by the Principal and the EPA Administrator, as evidenced by the return receipt.

(9) The Principal may terminate this bond by sending written notice to the Surety(ies), provided however, that no such notice shall become effective until the Surety(ies) receive(s) written authorization for termination of the bond by the EPA Administrator.

(10) The Surety(ies) hereby waive(s) notification of amendments to applicable laws, statutes, rules and regulations and agree(s) that no such amendment shall in any way alleviate its (their) obligation on this bond.

(11) This bond is effective from [insert date] (12:01 a.m., standard time, at the address of the Principal as stated herein) and shall continue in force until cancelled or terminated as described above.

In Witness Whereof, the Principal and Surety(ies) have executed this Bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the Principal and Surety(ies) and that the wording of this surety bond is identical to the wording specified in 40 CFR 320.50(c), as such

regulations were constituted on the date this bond was executed.

PRINCIPAL  
[Signature(s)]  
[Name(s)]  
[Name, Telephone Number, Email of Representative]  
[Title(s)]

[Corporate Seal]  
CORPORATE SURETY[IES]  
[Name and address]

State of incorporation: \_\_\_\_\_

Liability Limit: % \_\_\_\_\_

[Signature(s)]

[Name(s) and title(s)]

[Corporate seal]

[For every co-surety, provide signature(s), corporate seal, liability limit and other information in the same manner as for Surety above.]

Bond premium: \$ \_\_\_\_\_

(d) A CERCLA § 108(b) insurance endorsement as required in 40 CFR 320.42 must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

CERCLA § 108(b) Financial Responsibility Endorsement

EPA contact information:  
[Insert Name, Phone Number, Mailing Address of EPA Administrator and Points of Contact]

1. This endorsement certifies that the policy to which the endorsement is attached provides liability insurance covering CERCLA response costs, health assessment costs, and natural resource damages in connection with the insured's obligation to demonstrate financial responsibility under 40 CFR 320. The coverage applies at [list EPA Identification Number, name, address, total CERCLA 108(b) financial responsibility amount for each facility] for CERCLA response costs, health assessment costs, and natural resource damages at a covered facility. The limits of liability are [insert the dollar amount(s) of the limits and the percentage share of the Insurer's liability for each covered facility], exclusive of legal defense and investigation costs.

2. The insurance afforded with respect to such facilities is subject to all of the terms and conditions of the policy; provided, however, that any provision, exclusion, definition, condition, retroactive date, clause, defense, or other term of the policy inconsistent with 40 CFR 320.42, or subsections (a) through (f) of this Paragraph 2 are hereby amended to conform with 40 CFR 320.42 and subsections (a) through (f) below:

(a) The Insurer will make payment only for third-party CERCLA claims as

defined in section 101 of CERCLA; the insurance coverage is not available for payments to the insured. The Insurer will make:

i. payments awarded in final court judgments from a Federal court against any of the current owners and operators for CERCLA response costs, health assessment costs, and/or natural resource damages associated with a facility covered by the policy to the party obtaining the judgment should such payments not otherwise be made within 30 days.

ii. payments as required by a CERCLA settlement associated with a facility covered by the policy between EPA or another Federal government agency and any of the current owners and operators should such payments not occur.

iii. payments in instances where performance does not occur at a facility covered by the policy as required by a CERCLA unilateral administrative order issued by EPA or another Federal agency for which the owner or operator has provided a written statement that the policy be used to assure performance of the work required in the order.

iv. payment into a standby trust in instances where the owner or operator fails to obtain alternate financial responsibility and obtain written approval of such alternate financial responsibility from the EPA Administrator within 90 days after receipt by both the insured and the EPA Administrator of a notice from the insurer that it has decided to cancel, terminate or fail to renew the insurance policy beyond the current expiration date as provided for in paragraph (f) below.

(b) In addition to the payment condition in subsection (a), in the case of a release or threatened release of (a) hazardous substance(s) from a facility covered by the policy, the insurer acknowledges that any claim authorized by section 107 or section 111 of CERCLA may be asserted directly against the insurer as provided by section 108(c)(2) of CERCLA. Insurer consents to suit with respect to these claims subject to the limitations in section 108(d) of CERCLA. The Insurer will be entitled to all rights and defenses provided to guarantors by section 108(c) of CERCLA. Insurer will provide notice of any such resulting claims and payments to the EPA Administrator.

(c) Bankruptcy or insolvency of the insured shall not relieve the Insurer of its obligations under the policy to which this endorsement is attached.

(d) The Insurer is liable for the payment of amounts within any

deductible or self-insured retention applicable to the policy, with a right of reimbursement by the insured for any such payment made by the Insurer.

(e) Whenever requested by the Administrator of the U.S. Environmental Protection Agency (EPA), the Insurer agrees to furnish to the EPA Administrator a signed duplicate original of the policy and all endorsements.

(f) Cancellation, failure to renew or any other termination of the insurance by the insurer will be effective only upon written notice to the owner operator and the EPA Administrator by certified mail and only after the expiration of 120 days beginning with the date of receipt of the notice by both the Administrator and the owner or operator, as evidenced by the return receipts.

Attached to and forming part of policy No. \_\_\_ issued by [name of Insurer], herein called the Insurer, of [address of Insurer] to [name of insured] of [address] this \_\_\_ day of \_\_\_, 20\_\_\_. The effective date of said policy is \_\_\_ day of \_\_\_, 20\_\_.

I hereby certify that the wording of this endorsement is identical to the wording specified in 40 CFR 320.50(d) as such regulation was constituted on the date first above written, and that the Insurer is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more states.

[Signature of Authorized Representative of Insurer]

[Type name]

[Title], Authorized Representative of [name of Insurer]

[Address, Phone Number, Email of Representative]

[PROPOSED REGULATORY TEXT FOR PARAGRAPHS (e) and (f)—Option 2 only]

(e) A letter from the chief financial officer, as specified in § 320.43, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

#### FINANCIAL TEST

Letter from Chief Financial Officer

[Address to EPA Administrator or Regional delegees for every Region in which facilities for which financial responsibility is to be demonstrated through the corporate financial test are located.]

I am the Chief Financial Officer (“CFO”) of [insert name and address of firm] (“firm”). This letter is in support

of this firm’s use of the financial test to demonstrate Financial Responsibility for CERCLA 108(b) as specified in 40 CFR part 320.43.

[Fill out paragraphs 1–4, below, and provide supporting documentation, when required as specified below. If your firm has no facilities that belong in a particular paragraph, write “None” in the space indicated.]

1. This firm is the owner or operator of the facilities, listed below, for which Financial Responsibility is demonstrated through the financial test specified in 40 CFR part 320.43. The current CERCLA § 108(b) Financial Responsibility amount and the amount covered by the financial test are provided for each listed facility:

[For each facility, identify: Facility name; Address; EPA Identification Number; CERCLA § 108(b) financial responsibility amount; and amount covered by financial test]

2. This firm guarantees, through the guarantee specified in 40 CFR part 320.44, financial responsibility of the following facilities owned or operated by the guaranteed party. The current CERCLA § 108(b) financial responsibility amount so guaranteed are shown for each listed facility:

[For each facility, identify: Facility name; Address; EPA Identification Number; CERCLA § 108(b) financial responsibility amount; and amount covered by financial test]

The firm identified above is: [insert one or more: (1) The direct or higher-tier parent corporation of the owner or operator; (2) owned by the same parent corporation as the parent corporation of the owner or operator, and receiving the following value in consideration of this guarantee \_\_\_ [insert description of value received] ; or (3) engaged in the following substantial business relationship with the owner or operator \_\_\_ [insert characterization of relationship] , and receiving the following value in consideration of this guarantee \_\_\_ [insert description of value received]].

[Attach a written description of the business relationship or a copy of the contract establishing such relationship to this letter].

3. The firm, as owner or operator or guarantor, is using a financial test to secure the environmental obligations of the facilities listed below for which financial responsibility is required. These obligations include, but are not limited to: current cost estimates for corrective action, closure, post-closure care, and amounts required for third-party liability for hazardous waste treatment, storage and disposal facilities under 40 CFR 264.101, 264.142,

264.144, 264.147, 265.142, 265.144 and 265.147 and as required by order under section 3008(h) of RCRA, 42 U.S.C. 6928(h); cost estimates for municipal solid waste landfill units under 40 CFR 258.71, 258.72 and 258.73; current plugging and abandonment cost estimates for underground injection control facilities under 40 CFR 144.62; cost estimates for underground storage tanks under 40 CFR 280.93; cost estimates for facilities storing polychlorinated biphenyls under 40 CFR 761.65; cost estimates for underground injection control class VI facilities for corrective action under 40 CFR 146.84, for injection well plugging under 40 CFR 146.92, for post injection facility care and facility closure under 40 CFR 146.93, and emergency and remedial response under 40 CFR 146.94; any financial responsibility required under any CERCLA settlement or order; and any other environmental obligation assured through a financial test or guarantee, excluding those costs represented in paragraphs 1 and 2 listed above. The cost estimates by obligation are provided for each listed facility:

[For each facility, identify: Facility name; Address; EPA Identification Number (if any); and amount covered by financial test]

4. The total of all such environmental obligations the firm is covering with a financial test or for which it issued a corporate guarantee for the listed facilities in paragraphs 1–3 above [sum of the portion covered by the financial test in paragraph 1 plus the sums in paragraphs 2 and 3] is \$ [insert amount], as of \_\_\_ [insert date].

5. The firm [insert “is required” or “is not required”] to file a Form 10–K or 20–F with the Securities Exchange Commission (SEC) for the latest fiscal year.

6. The fiscal year of the firm ends on [month, day]. The figures for the following items marked with asterisk are derived from this firm’s independently audited, year-end financial statements for the latest completed fiscal year, ended [date].

7. The firm has received a qualified or adverse accountant’s opinion for the latest completed fiscal year ended [insert date] \_\_\_ (Yes/ No) \_\_\_

8. The firm represents that as of the latest completed fiscal year-end [insert date] \_\_\_, the Assets located in the United States in the amount of \$ \_\_\_ amount to at least 90% of the firm’s total assets. (Yes/No) \_\_\_

Test Worksheet:

1. The total of all environmental obligations the firm is covering with a financial test or for which it issued a

corporate guarantee [enter the sum from paragraph 4 above] \_\_\_\_\_.

2. The firm represents that it holds the following long term credit ratings: [list all ratings and their dates that apply including but not limited to Long-Term Issuer Credit Ratings from Standard and Poor's, Long-Term Corporate Family Ratings from Moody's Investor Services, Long-Term Issuer Default Ratings from Fitch Ratings, and any other long-term credit rating from a Nationally Recognized Statistical Rating Organization (NRSRO)]

\*3. Tangible Net Worth \$ \_\_\_\_\_

4. Is line 3 at least 6 times line 1? (Yes/No) \_\_\_\_\_

\*5. Total assets in U.S. [required only if the answer in paragraph 8 above is "No"] \$ \_\_\_\_\_

6. Is line 5 at least 6 times line 1? (Yes/No) \_\_\_\_\_

I hereby certify that the information included in this letter, including all attachments and exhibits, is true and accurate. I further certify that the wording of this letter is identical to the wording specified in 40 CFR 320.50(e) as such regulations were constituted on the date shown immediately below.

[Signature] \_\_\_\_\_  
[Name] \_\_\_\_\_  
[Title] \_\_\_\_\_  
[Date] \_\_\_\_\_

(f) A corporate guarantee, as specified in § 320.44 must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

Corporate Guarantee for CERCLA 108(b) Financial Responsibility

Guarantee made this [date] by [name of guaranteeing entity], a business corporation organized under the laws of [if incorporated within the United States insert "the State of \_\_\_\_\_" and insert name of state; if incorporated outside the United States insert the name of the country in which incorporated, the principal place of business within the United States, and the name and address of the registered agent in the state of the principal place of business], herein referred to as guarantor. This guarantee is made on behalf of the [owner or operator] of [business address], which is [one of the following: "our subsidiary"; "a subsidiary of [name and address of common parent corporation], of which guarantor is a subsidiary"; or "an entity with which guarantor has a substantial business relationship, as defined in 40 CFR 320.3" to any and all third-party CERCLA claimants.

#### Recitals

1. Guarantor meets or exceeds the financial test criteria and agrees to comply with the reporting requirements for guarantors as specified in 40 CFR 320.44 and will report the full amount of CERCLA 108(b) financial responsibility for which it is eligible to cover as determined by the financial test criteria at 40 CFR 320.43 for each facility covered by the guarantee in the letter from its chief financial officer.

2. [Owner or operator] owns or operates the following facilities subject to CERCLA 108(b) financial responsibility requirements covered by this guarantee: [List for each facility: EPA Identification Number, name, address and if guarantor is incorporated outside the United States list the name and address of the guarantor's registered agent in each state.]

3. For value received from [owner or operator], and up to the most current § 108(b) financial responsibility amount required at each facility covered by the guarantee as identified in paragraph 2 of the guarantor's most recent CFO letter submission required under 40 CFR 320.44, and exclusive of any legal defense costs incurred by the guarantor, guarantor guarantees to any and all third-party CERCLA claimants that:

a) in the event that payment for CERCLA response costs, health assessment costs, and/or natural resource damages associated with a facility identified above as required in a final court judgment from a Federal court against one of the current owners or operators is not made within 30 days, the guarantor shall do so;

b) in the event payment is not made as required in a CERCLA settlement associated with a facility identified above between a current owner or operator and EPA or another Federal government agency, the guarantor shall do so; and

c) in the event that performance at a facility covered by the guarantee does not occur as required under a CERCLA unilateral administrative order issued to a current owner or operator by EPA or another Federal agency and for which the owner or operator provides a written statement allowing the guarantee to serve as financial responsibility assuring the work in the order, the guarantor shall make payment into a trust fund established pursuant to the order.

4. The guarantor shall satisfy a third-party CERCLA claim only on receipt of one of the following documents plus the additional signed statement specified below:

(a) A final court judgment dated at least 30 days earlier from a Federal

court, in favor of the claimant, awarding CERCLA response costs, health assessment costs, and/or natural resource damages associated with a facility covered by this guarantee against any of the current owners or operators at a facility covered by this guarantee;

(b) A written signed statement from an EPA Administrator or another Federal government agency requesting payment from the Guarantor on the grounds that payment has not been made as required by a CERCLA settlement associated with a facility covered by this guarantee and with any of the current owners or operators; or

(c) A written signed statement from the EPA Administrator or other Federal government agency requesting payment from the Guarantor into a trust fund established pursuant to a CERCLA unilateral administrative order on the grounds that performance at a facility covered by this guarantee has not occurred as required by a CERCLA administrative order issued to a current owner or operator.

AND

A signed statement from the claimant certifying that these amounts have not been recovered or paid from any other source, including, but not limited to, the owner operator, insurance, judgments, agreements, and other financial responsibility instruments.

5. In addition to the payment provisions in paragraph 4 of this agreement, in the case of a release or threatened release of (a) hazardous substance(s) from a facility covered by the guarantee, guarantor acknowledges that any claim authorized by section 107 or 111 of CERCLA may be asserted directly against the guarantor as provided by CERCLA section 108(c). Guarantor consents to suit with respect to these claims subject to the limitations in CERCLA section 108(d). Guarantor will be entitled to all defenses provided to guarantors by CERCLA section 108(c). Guarantor agrees to provide notice of any such resulting claims and payments to the EPA Administrator.

6. The guarantor agrees that if, at any time before the termination of this guarantee, the guarantor fails to meet the financial test criteria, guarantor shall send within 90 days, by certified mail, notice to the EPA Administrator and to [owner or operator] of its intent to provide alternate financial responsibility as specified in subpart C of 40 CFR part 320 in the name of [owner or operator]. Within 120 days after the guarantor fails to meet the financial test criteria, the guarantor shall establish such financial responsibility unless [owner or operator] has done so.

7. The guarantor agrees to notify the EPA Administrator by certified mail, of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming guarantor as debtor, within 10 days after commencement of the proceeding.

8. Guarantor agrees that within 30 days after being notified by an EPA Administrator of a determination that guarantor no longer meets the financial test criteria or that he is disallowed from continuing as a guarantor, he shall establish alternate financial responsibility as specified in subpart C of 40 CFR part 320, as applicable, in the name of [owner or operator] unless [owner or operator] has done so.

9. Guarantor agrees to remain bound under this guarantee notwithstanding any or all of the following: enforcement action taken under CERCLA at a covered facility, or any modification or alteration of an obligation of owner or operator pursuant to 40 CFR part 320, or the bankruptcy of an owner or operator at a facility covered by the agreement.

10. Guarantor agrees to remain bound under this guarantee for as long as [owner or operator] must comply with the applicable financial assurance requirements of subpart C of 40 CFR part 320 for the above-listed facilities, except as provided in paragraph 11 of this agreement.

11. Guarantor may terminate this guarantee by sending notice by certified mail to the EPA Administrator and to [owner or operator], provided that this guarantee may not be terminated unless and until [the owner or operator] obtains, and the EPA Administrator approves, alternate financial responsibility complying with subpart C of 40 CFR part 320.

12. Guarantor agrees that if [owner or operator] fails to provide alternate financial assurance as specified in subpart C of 40 CFR part 320 and obtain written approval of such assurance from the EPA Administrator within 90 days after a notice of cancellation by the guarantor is received by the EPA Administrator from guarantor, guarantor shall provide such alternate financial assurance in the name of [owner or operator].

13. Guarantor expressly waives notice of acceptance of this guarantee by the EPA or by [owner or operator]. Guarantor also expressly waives notice of any modification or alteration of an obligation of owner or operator pursuant to 40 CFR part 320.

I hereby certify that the wording of this guarantee is identical to the wording specified in 40 CFR part 320.50(f) as such regulations were

constituted on the date first above written.

Effective date: \_\_\_\_\_  
 [Name of guarantor] \_\_\_\_\_  
 [Authorized signature for guarantor] \_\_\_\_\_  
 [Name of person signing] \_\_\_\_\_  
 [Title of person signing] \_\_\_\_\_  
 Signature of witness or notary: \_\_\_\_\_

#### Subpart D—G [Reserved]

#### Subpart H—Hardrock Mining Facilities

##### § 320.60 Applicability

(a)(1) The requirements of this subpart apply to owners or operators of hardrock mining facilities within the classes identified in the **Federal Register** notice issued by EPA at 74 FR 37213 (July 28, 2009) that are authorized to operate, or should be authorized to operate, on [Date 30 days after publication of Final Rule], or who become authorized to operate, or should become authorized to operate, after [Date 30 days after publication of Final Rule] except for the classes identified in paragraph (b) of this section.

(2) The requirements of this subpart do not apply to owners or operators of the following classes of hardrock mining facilities identified in the **Federal Register** notice referred to in paragraph (a) of this section:

- (i) Mines conducting only placer mining activities
- (ii) Mines conducting only exploration activities
- (iii) Mines with less than five disturbed acres that are not located within one mile of another area of mine disturbance that occurred in the prior ten-year period, and that do not employ hazardous substances in their processes, and
- (iv) Processors with less than five disturbed acres of waste pile and surface impoundment

##### § 320.61 Timeframes for compliance.

(a) Owners and operators of hardrock mining facilities that are authorized to operate, or should be authorized to operate, on [Date 30 days after publication of Final Rule] must demonstrate financial responsibility according to the following schedule:

(1) For the amount of the health assessment cost component identified in this subpart by [Date 24 months after promulgation of the final rule];

(2) For fifty percent of the response and natural resource damages cost components amount identified in this subpart by [Date 36 months after promulgation of the final rule]; and

(3) For the full response and natural resource damages component amount identified in this subpart by [Date 48

months after promulgation of the Final Rule].

(b) Owners and operators of hardrock mining facilities that are authorized to operate, or should be authorized to operate, between [Date of publication of final rule] and [Date four years after publication of the final rule] must be in compliance with the schedule in paragraph (a) and continue to comply with that schedule after beginning operations.

(c) Owners or operators of hardrock mining facilities that become authorized to operate, or should become authorized to operate, after [Date four years after the effective date of this rule] must demonstrate financial responsibility for the full financial responsibility amount required under this subpart before beginning or resuming operations.

##### § 320.62 Definitions.

When used in this subpart, the following terms are defined as follows:

*Critical structure* means a feature where a significant or high hazard potential is determined to exist. A significant hazard potential exists where failure or mis-operation is unlikely to cause loss of human life but is could cause economic loss, environmental damage, or other concerns; a high hazard potential exists where failure or mis-operation is likely to cause loss of human life.

*Disturbed acreage/acres* means the area of land or surface water that has been altered for purposes of accommodating mining and/or processing activities. The term includes the area from which the overburden, tailings, waste materials, ore, or targeted minerals have been removed or placed, and areas where tailings ponds, waste dumps, roads, conveyor systems, load-out facilities, heap leach, dump leach, ponds and impoundments, slag and other mineral processing waste, and all similar excavations or placements that result from the operation are located.

*Dump leach* means ore or mineralized material that has been stacked without a liner and has been leached, is currently being leached, or has been placed in a pile for the purpose of being leached.

*Exploration* means activities conducted to ascertain the existence, location, extent and/or quality of a deposit of ore or other mineral and does not include activities where 1000 tons or more of presumed ore have been removed for testing or where development or production has occurred. Exploration does not include activities where material is extracted for commercial use or sale.

*Extraction* means the sequence of activities intended to physically gain access to and remove ore or a mineral body.

*Feature* means open pit, underground mine, waste rock pile, tailings impoundment, tailings stack, heap leach pile, dump leach pile, process pond, impoundment, reservoir, slag pile, in-situ leach facility, or other area or feature used for mining or processing activities.

*Heap leach* means ore or mineralized material that has been stacked on a lined leach pad and has been leached, is currently being leached, or has been placed in a pile for the purpose of being leached.

*Heap/dump leach* means both heap and valley leach facilities, which are used for gold and sometimes copper processing, or run-of-mine copper leach dumps (or piles), that may have originally been intended for leaching, or originally were waste rock that was later leached in place.

*In-situ Leaching* means the removal of targeted materials by injection and extraction of an acidic or alkaline solvent solution.

*Mine* means all areas and equipment used for mining, including but not limited to injection and extraction wells used for in-situ mining or the extraction of mineral-bearing groundwater brines; surface excavations, pits, slopes, and spoil; underground passageways, shafts, stopes, tunnels, adits and workings; waste rock, slag and tailings; piles, ponds, impoundments and reservoirs; retention dams; dump, heap, or other leach facilities; mills, smelters, structures, tanks, equipment, machines, tools, and process components; private roads, ports, transmission lines, pipelines, or any other means of access owned or maintained by the operator; and any other ancillary areas or activities owned or used by the operator and resulting from the work of extracting minerals from their natural deposits. Adjacent and/or noncontiguous properties located within close proximity of the extraction site are part of the mine if those properties are managed under a unified operational control (e.g., under the same owner or operator and with oversight by a unified managerial staff and budget) provided those adjacent and/or noncontiguous properties are engaged in any of the above activities as part of the

sequential management of ore, beneficiated ore, mineral concentrate, waste rock or tailings.

*Mineral processing* means the sequence of activities following extraction of metallic or non-fuel non-metallic minerals to: (1) Separate and concentrate a target metallic or non-fuel non-metallic mineral from the ore, and/or (2) to refine ores or mineral concentrates to extract a target metallic or non-fuel non-metallic material. Mineral processing includes the mechanical, thermal, and/or chemical treatment of naturally occurring earthen materials, either solid or liquid (e.g., rock, ore, mineral or extracted subsurface brine) to recover, purify or create a final mineral product (e.g., dimension stone, expanded vermiculite, or refractory clay) or a feedstock of sufficient purity that it can then be used in further industrial or manufacturing operations.

*Mineral processor* means all areas and equipment used for mineral processing.

*Mining* means the extraction of rock and other materials that contain a target ore or mineral deposit from the earth. Mining includes, but is not limited to, in-situ solution mining, extraction of mineral-bearing groundwater brines, and surface or underground excavation of solid earthen materials.

*Net precipitation* means annual precipitation minus annual pan evaporation, or gross precipitation minus pan evaporation loss. Net precipitation is in inches.

*Open pit* means any open pits, cuts, or other surface features from which ore was extracted. It does not include borrow pits, sand boxes, or other surface features used for extracting soil, gravel, or sand for any purposes other than ore extraction.

*Pile* is as defined in 40 CFR 260.10

*Placer mining* is the extraction or prospecting of materials in unconsolidated deposits using water to excavate, transport, concentrate and recover heavy minerals using beneficiation methods such as screening, hand-panning, sluicing or dredging provided they are otherwise in compliance with applicable state and Federal regulations and do not use CERCLA hazardous substances (e.g., mercury, cyanide) in the concentration or processing of materials.

*Pressurized hydraulic head* means a discharge from underground mine workings at greater than 100 kPa.

*Process pond/reservoir* means process ponds, reservoirs, impoundments, ditches, channels or other wet acreage that were used in heap leach, dump leach, metals or minerals processing and other activities that have resulted in deposits of sludge and other potentially toxic and/or hazardous materials within those features.

*Qualified professional engineer* means an individual who is licensed by a state as a Professional Engineer to practice one or more disciplines of engineering and who is qualified by education, technical knowledge, and experience to make the specific technical certifications required under this subpart. Professional engineers making these certifications must be currently licensed in the state where the hardrock mining facility is located.

*Slag pile* means the storage location of glass-like particles generated when molten materials produced by a smelter are quenched.

*Surface impoundment* is as defined in 40 CFR 260.10.

*Surface mine* means the open pits, adits, general workings, and other features associated with surface extraction of ore.

*Tailings* means the remaining waste material following the removal of valuable minerals from ore.

*Tailings facility* means ponds, dams, and other facilities including spillways and associated features used for the deposition of process/beneficiation waste or tailings from either pulp or vat leaching, flotation, or gravity processing facilities. This also includes paste and dry stacks.

*Underground mine* means adits, portals, shafts, raises, drifts, and general workings (stopes, rooms or caving areas), vents and other features associated with underground extraction of ore.

*Waste rock* means waste rock and overburden piles, dumps, and other features associated with run-of-mine disposal of waste on the surface whether from open pit or underground mines.

### **§ 320.63 Determining the financial responsibility amount.**

(a) Owners and operators subject to the requirements of this subpart must calculate the financial responsibility amount for their facilities in accordance with this section.

$$TotalFinancialResponsibility_y = \frac{Deflator_{y*}}{Deflator_{2014}} \times \left( \sum_{i=1}^n ResponseCost_i \right) \times [1 + OverheadOversight_r] \times StateAdjustmentFactor_s \times 1.134 + \$550,000$$

Where:

$Deflator_y$  = the most recent available GDP Implicit Price Deflator for year  $y$ ; and  
 $Deflator_{2014}$  = the GDP Implicit Price Deflator for 2014

$i$  = the  $i$ th response category (e.g., water treatment costs);  
 $n$  = the total number of relevant response categories;  
 $r$  = EPA region  $r$  (e.g., EPA Region 3); and

$s$  = state  $s$  (e.g., Montana).

(b)(1) Response component—

### (b)(1) Response component -- $\sum_{i=1}^n ResponseCost_i$

Determine the response component of the financial responsibility amount for the facility by totaling the response category amounts in paragraphs (i) through (xii) for all applicable response categories. Include in the calculation all site features that are authorized to operate, or should have been authorized to operate on [Effective Date of the Final Rule], or on the date the facility first becomes subject to requirements of this part, and have not been released from financial responsibility obligations under § 320.27.

(i) *Open pit category*. The open pit category amount equals:  $5.07 \times 10^{\wedge} (4.24 + 1.08 \times \text{Log}_{10}[\text{Open Pit Disturbed Acres}])$

(ii) *Underground mine category*. The underground mine category amount for an underground mine with a hydraulic head is \$4,500,000. The amount for an underground mine without a hydraulic head is \$200,000.

(iii) *Waste rock category*. The waste rock category amount equals:  $1.85 \times 10^{\wedge} (5.18 + .75 \times \text{Log}_{10}[\text{Waste Rock Disturbed Acres}])$

(iv) *Heap and dump leach category*. The heap and dump leach category amount equals:  $2.29 \times 10^{\wedge} (4.57 + 1.01 \times \text{Log}_{10}[\text{Heap and Dump Leach Disturbed Acres}])$

(v) *Tailings category*. The tailings category amount equals:  $1.71 \times 10^{\wedge} (5.32 + .68 \times \text{Log}_{10}[\text{Tailings Disturbed Acres}])$

(vi) *Process pond and reservoir category*. The process pond and reservoir category amount equals:  $1.64 \times 10^{\wedge} (4.29 + 1.03 \times \text{Log}_{10}[\text{Process Pond and Reservoir Disturbed Acres}])$

(vii) *Slag pile category*. The slag pile category amount equals:  $\$64,000 \times [\text{Slag Pile Disturbed Acres}]$ .

(viii) *Solid and hazardous waste disposal category*. The solid and hazardous waste disposal category amount is \$2,600,000.

(ix) *Drainage category*. The drainage category amount equals:  $9.56 \times 10^{\wedge} (3.42 + .57 \times \text{Log}_{10}[\text{Total Disturbed Acres} + 1])$

(x) *Short-term O&M and monitoring category*. The short-term O&M and monitoring category amount equals:  $\{1.82 \times 10^{\wedge} (4.01 + 0.38 \times \text{Log}_{10}[\text{Total Disturbed Acres} + 1])\} \times \{1/0.0263\} \times \{1 - (1/[1.0263^{\wedge} 10])\}$

(xi) *Interim O&M category*. The interim O&M category amount equals:  $\{1.46 \times 10^{\wedge} (6.04 + 0.01 \times [\text{Net Precipitation}] + 0.34 \times \text{Log}_{10}[\text{Heap and Dump Leach Disturbed Acres} + 1]) + 0.10 \times \text{Log}_{10}[\text{Tailings Impoundment Disturbed Acres} + 1])\} \times \{1/0.0263\} \times \{1 - (1/[1.0263^{\wedge} 10])\}$

(xii) *Long-term O&M category*. The long-term O&M amount equals:  $\{1.64 \times 10^{\wedge} (3.12 + 0.58 \times \text{Log}_{10}[\text{Total Disturbed Acres} + 1])\} / 0.0263$

(xiii) *Water treatment category*. The water treatment category amount is:  $\{1.16 \times 10^{\wedge} (3.22 + 1.10 \times \text{Log}_{10}[\text{flow}] + .70 \times [\text{In-Situ leach}])\} / .0263$

Where:

Flow = flow in gallons/minute through in-situ leach features + flow in gallons/minute through underground mine features +  $0.05 \times \text{Precipitation} \times [\text{Total Disturbed Acres}] \times 0.05166$ .

In-situ leach = 1 if present; 0 if not present.

(2) Multiply the response cost amount calculated under paragraph (b)(1) of this section by the following:

(i) Overhead and oversight percentage ( $[1 + \text{OverheadOversight}_r]$ ). The applicable  $\text{OverheadOversight}_r$  value is the value in Appendix II for the Region in which the largest disturbed acreage of the facility is located.

(ii) State adjustment factor ( $\text{StateAdjustmentFactor}_s$ ). The applicable state adjustment factor is the factor in Appendix III for the state in which the largest disturbed acreage at the facility is located.

(iii) Natural resource damage component. The financial responsibility amount for natural resource damages at a facility is 13.4 percent of the total response component.

(3) Add the health assessment component to the amount calculated under paragraph (b)(2) of this section. The financial responsibility amount for the health assessment component is \$550,000.

(c) Owners and operators may satisfy requirements of paragraph (b)(i) through (xiii), in whole or in part, by demonstrating that they are subject to, and in compliance with, requirements that will result in a minimum degree and duration of risk associated with the production, transportation, treatment, storage, or disposal, as applicable, of all hazardous substances present at that site feature. A demonstration under this paragraph will reduce the amount of financial responsibility that an owner and operator must demonstrate under this part.

(1) The demonstration must be made individually for each site feature that must be included in the calculation as required by paragraph (b)(1) of this section, and must include, at a minimum:

(i) Evidence that the owner or operator is subject to the requirements described in paragraph (d) of this section,

(ii) Evidence that the owner's or operator's obligation to implement such requirements are imposed in an enforceable document as defined in § 320.61,

(iii) Evidence that the owner or operator has demonstrated, and is required to demonstrate, adequate financial responsibility to assure implementation of the required activities, and

(iv) Certification by the owner or operator that the facility is in

compliance with the requirements described in paragraph (d) of this section.

(2) Information provided to make the demonstration in paragraph (c)(1) of this section must provide sufficient and detailed supporting information adequate to allow EPA to evaluate the adequacy of the financial responsibility and the underlying requirements.

(3) In the event that an owner or operator that reduces the maximum financial responsibility at its facility based on a reduction under paragraph (d) of this section becomes ineligible for that reduction because the facility no longer meets the requirements in paragraph (c)(1)(i) through (iii) of this section, it must recalculate the financial responsibility level at its facility and submit evidence of financial responsibility for the increased amount within thirty days of the date it no longer is eligible. The requirement to recalculate a financial responsibility level and submit evidence of financial responsibility under this paragraph does not affect the owner's or operator's obligations for instrument maintenance under § 320.22.

(d) Reductions to the response component amount.

(1) To satisfy the open pit category component in paragraph (b)(1)(i) of this section:

(i) A plan to address safety by prevention of public access by means of security fencing, or other effective methods.

(ii) Where ponding will occur, a plan that requires:

(A) regrading the bottom surface during closure to a stable configuration that prevents ponding and promotes the conveyance of surface water off the unit

(B) closure of all open pits where public access is not restricted

(C) structures that are considered to be critical structures to be designed for a long-term static factor of safety of 1.5 or greater

(D) structures that are considered to be non-critical structures to be designed for a long-term static factor of safety of 1.3 or greater

(E) units being closed be designed for a factor of safety of 1.1 or greater under pseudostatic analysis, and

(F) a stability analysis to be conducted for the unit and include evaluation for static and seismic induced liquefaction.

(iii) A plan for the management of all stormwater and sediment generated during reclamation and following closure that includes permanent stormwater conveyances, ditches, channels, and diversions, as necessary, designed to convey the peak flow and ponds and other collection devices, and

that provides for controls designed to store the volume generated during a 24-hour period by a 200-year return interval storm event.

(iv) Where conditions at the open pit may allow a pit lake to form, or where meteoric water may percolate through the pit rock into groundwater below, and pit lake or any discharges may not meet water quality standards, a plan for the minimization, prevention, or collection and treatment of water in the pit lakes, discharges, and/or seepage, that factors in information on site hydrology, water quality characterization information, and pit lake ecological risk assessment information. The plan must address and provide for capture and treatment at closure consisting of a capture and treatment system that meets a minimum 200-yr life design criteria, and that is designed to either prevent pit lake formation or groundwater contamination exceeding applicable water quality standards to achieve at least a 95 percent capture efficiency of the affected groundwater, and to meet applicable water quality standards.

(v) If prevention/avoidance is relied on, a management plan that demonstrates geochemically active materials will effectively be avoided, and that includes provisions for sampling and monitoring documentation.

(vi) Requirements for concurrent or sequential reclamation of mined areas as they become available prior to final cessation of operations and closure.

(2) To satisfy the underground mine category component in paragraph (b)(1)(ii) of this section:

(i) A plan to address public safety by prevention of public access by means of security fencing, or other effective methods.

(ii) A plan for the minimization, prevention or collection and treatment of discharges and or seepage based on site hydrology and water quality characterization information that provides for necessary additional source controls and/or capture and treatment at closure, all of which meet a minimum 200-year life design criteria, and includes:

(A) If seepage and/or discharge water quality is not expected to meet applicable water quality standards, requirements for a capture and treatment system designed to achieve at least a 95 percent capture efficiency and to meet applicable water quality standards, and

(B) If there will be a pressurized plug as a permanent feature controlling a discharge from underground mine workings at moderate to high heads

(100–1,000+ kPa), a requirement to maintain the plug as a permanent feature.

(iii) If prevention/avoidance is relied on, a management plan that demonstrates geochemically active materials will effectively be avoided, and that includes provisions for sampling and monitoring documentation.

(iv) Requirements for concurrent or sequential reclamation of mined areas as they become available prior to final cessation of operations and closure.

(3) To satisfy the waste rock category component in paragraph (b)(1)(iii) of this section:

(i) A plan to address public safety by prevention of public access by means of security fencing, or other effective methods.

(ii) If prevention/avoidance is relied on, a management plan that demonstrates geochemically active materials will effectively be avoided, and that includes provisions for sampling and monitoring documentation.

(iii) Requirements for concurrent or sequential reclamation of mined areas as they become available prior to final cessation of operations and closure.

(iv) Requirements to regrade the surface during closure to a stable configuration that prevents ponding and promotes the conveyance of surface water off the unit, that requires closure of all waste rock piles considered to be critical structures to be designed for a long-term static factor of safety of 1.5 or greater, that requires all non-critical structures to be designed for a long-term static factor of safety of 1.3 or greater; and that requires that the units being closed be designed for a factor of safety of 1.1 or greater under pseudostatic analysis.

(v) Requirements to provide for a stability analysis to be conducted for the unit as part of the original design, and as part of mine modifications during the active life of the mine.

(vi) A plan for the management of all stormwater and sediment generated during operations and during and following closure. For existing units, the plan must provide for permanent stormwater conveyances, ditches, channels and diversions designed to convey the peak flow and ponds and other collection devices designed to store the volume generated during a 24-hour period by a 100-year return interval storm event. For unit that become authorized to operate after [Date of the Final Rule], the plan must provide for controls designed to store the volume generated during a 24-hour

period by a 200-year return interval storm event.

(vii) A plan for the minimization, prevention, or collection and treatment of discharges and/or seepage, based on site hydrology and water quality characterization information, that provides for a cover system of, at a minimum, a store and release earthen cover system with a thickness of at least twelve inches and, if necessary, additional source controls or capture and treatment at closure, all of which meet a minimum 200-year life design criteria. If seepage water quality is not expected to meet applicable Federal and state groundwater and surface water quality standards at the point of compliance, the plan must provide for:

(A) Implementation of a containment system that immobilizes hazardous substances to meet applicable water quality standards (e.g., an engineered cover system designed to achieve, at a minimum, a 95 percent reduction in annual net-percolation based on the long-term average to reduce seepage discharges to meet applicable water quality standards;

(B) A capture and treatment system designed to achieve at least a 95 percent capture efficiency and meet applicable water quality standards; or a combination of an engineered cover system and a capture and treatment system to achieve at least a 95 percent reduction in discharged load and meet applicable water quality standards at the point of compliance, or

(C) A solution containment system to assure seepage flows are collected, contained, conveyed, and treated to achieve at least a 95 percent reduction to meet applicable water quality standards.

(4) To satisfy the heap and dump leach category component in paragraph (b)(1)(v) of this section:

(i) A plan to address public safety by prevention of public access by means of security fencing, or other effective methods.

(ii) A plan to regrade surface during closure to a stable configuration that prevents ponding and promotes the conveyance of surface water off the unit, and that requires closure of all heap leach and dump leach piles considered to be critical structures to be designed for a long-term static factor of safety of 1.5 or greater and all non-critical structures to be designed for a long-term static factor of safety of 1.3 or greater; and requires that the units being closed be designed for a factor of safety of 1.1 or greater under pseudostatic analysis. The plan must also provide for a stability analysis to be conducted for the

unit and include evaluation for static and seismic induced liquefaction.

(iii) A plan for the management of all stormwater and sediment generated during operations and during and following closure. For existing units, the plan must provide for permanent stormwater conveyances, ditches, channels and diversions designed to convey the peak flow and ponds and other collection devices designed to store the volume generated during a 24-hour period by a 100-year return interval storm event. For unit that become authorized to operate after [Date of the Final Rule], the plan must provide for controls designed to store the volume generated during a 24-hour period by a 200-year return interval storm event.

(iv) A plan for the minimization, prevention, or collection and treatment of discharges and/or seepage, based on site hydrology and water quality characterization information, that provides for a cover system of, at a minimum, a store and release earthen cover system with a thickness of at least twelve inches and, if necessary, additional source controls or capture and treatment at closure, all of which meet a minimum 200-year life design criteria. If seepage water quality is not expected to meet applicable water quality standards, the plan must provide for:

(A) Implementation of an engineered cover system designed to achieve at least a 95 percent reduction in annual net-percolation based on the long-term average and reduce seepage discharges to meet applicable water quality standards;

(B) A capture and treatment system designed to achieve at least a 95 percent capture efficiency and meet applicable water quality standards; or combination of an engineered cover system and a capture and treatment system to achieve at least a 95 percent reduction in discharged load and meet applicable water quality standards; or

(C) A solution containment system to assure seepage flows are collected, contained, conveyed, and treated to achieve at least a percent reduction to meet applicable water quality standards.

(v) (For heap leach) A liner designed to minimize/eliminate releases from the unit based on site specific conditions.

(vi) Requirements for concurrent or sequential reclamation of mined areas as they become available prior to final cessation of operations and closure.

(5) To satisfy the tailings category component in paragraph (b)(1)(v) of this section:

(i) A plan to address public safety by prevention of public access by means of

security fencing, or other effective methods.

(ii) A plan to regrade surface during closure to a stable configuration that prevents ponding and promotes the conveyance of surface water off the unit, and that requires closure of all tailings impoundments and stacks considered to be critical structures to be designed for a long-term static factor of safety of 1.5 or greater and all non-critical structures to be designed for a long-term static factor of safety of 1.3 or greater; and requires that the units being closed be designed for a factor of safety of 1.1 or greater under pseudostatic analysis. The plan must also provide for a stability analysis to be conducted for the unit and include evaluation for static and seismic induced liquefaction.

(iii) A plan for the management of all stormwater and sediment generated during operations and during and following closure. For existing units, the plan must provide for permanent stormwater conveyances, ditches, channels and diversions designed to convey the peak flow and ponds and other collection devices designed to store the volume generated during a 24-hour period by a 100-year return interval storm event. For unit that become authorized to operate after [Date of the Final Rule], the plan must provide for controls designed to store the volume generated during a 24-hour period by a 200-year return interval storm event.

(iv) A plan for the minimization, prevention, or collection and treatment of discharges and/or seepage, based on site hydrology and water quality characterization information, that provides for a cover system of, at a minimum, a store and release earthen cover system with a thickness of at least twelve inches and, if necessary, additional source controls or capture and treatment at closure, all of which meet a minimum 200-year life design criteria. If seepage water quality is not expected to meet applicable water quality standards, the plan must provide for:

(A) Implementation of an engineered cover system designed to achieve at least a 95 percent reduction in annual net-percolation based on the long-term average and reduce seepage discharges to meet applicable water quality standards;

(B) A capture and treatment system designed to achieve at least a 95 percent capture efficiency and meet applicable water quality standards; or combination of an engineered cover system and a capture and treatment system to achieve at least a 95 percent reduction in



discharged load and meet applicable water quality standards, or

(C) A solution containment system to assure seepage flows are collected, contained, conveyed, and treated to achieve at least a percent reduction to meet applicable water quality standards.

(v) A liner designed to minimize/eliminate releases from the unit based on site specific conditions.

(vi) If prevention/avoidance is relied on, a management plan that demonstrates geochemically active materials will effectively be avoided, and that includes provisions for sampling and monitoring documentation.

(vii) If a wet tailings impoundment is present:

(A) A requirement to develop and implement a Tailings Operations, Maintenance and Surveillance (TOMS) manual, or similar plan, that defines and describes roles and responsibilities of personnel assigned to the facility; procedures and processes for managing change; the key components of the facility; procedures required to operate, monitor the performance of, and maintain a facility to ensure that it functions in accordance with its design, meets regulatory and corporate policy obligations, and links to emergency planning and response; downstream notification; and, requirements for analysis and documentation of the performance of the facility.

(B) Annual tailings inspection reports by a qualified engineer, and an inspection report by an independent qualified engineer at least every five years.

(viii) Requirements for concurrent or sequential reclamation of mined areas as they become available prior to final cessation of operations and closure.

(6) To satisfy the process pond and reservoir category component in paragraph (b)(1)(vi) of this section:

(i) A plan to address public safety by prevention of public access by means of security fencing, or other effective methods.

(ii) A plan for the design and operation of such ponds and reservoirs to ensure they have adequate freeboard and are designed to prevent discharges of hazardous substances.

(iii) A liner and collection system designed to minimize/eliminate releases from the unit based on site specific conditions.

(iv) A requirement that sludge and the sub-base below the liner be sampled and addressed in a manner that is protective of human health and the environment as part of closure.

(v) Requirements for concurrent or sequential reclamation of mined areas as

they become available prior to final cessation of operations and closure.

(vi) A plan for the management of all stormwater and sediment generated during operations and during and following closure. For existing units, the plan must provide for permanent stormwater conveyances, ditches, channels and diversions designed to convey the peak flow and ponds and other collection devices designed to store the volume generated during a 24-hour period by a 100-year return interval storm event. For unit that become authorized to operate after [Date of the Final Rule], the plan must provide for controls designed to store the volume generated during a 24-hour period by a 200-year return interval storm event.

(7) To satisfy the slag pile category component in paragraph (b)(1)(iv) of this section:

(i) A plan to address public safety by prevention of public access by means of security fencing, or other effective methods.

(ii) If prevention/avoidance is relied on, a management plan that demonstrates geochemically active materials will effectively be avoided, and that includes provisions for sampling and monitoring documentation.

(iii) Requirements for concurrent or sequential reclamation of mined areas as they become available prior to final cessation of operations and closure.

(iv) Requirements to regrade surface during closure to a stable configuration that prevents ponding and promotes the conveyance of surface water off the unit, and that requires closure of all waste rock piles considered to be critical structures to be designed for a long-term static factor of safety of 1.5 or greater and all non-critical structures to be designed for a long-term static factor of safety of 1.3 or greater; and requires that the units being closed be designed for a factor of safety of 1.1 or greater under pseudostatic analysis.

(v) Requirements to provide for a stability analysis to be conducted for the unit as part of the original design, and as part of mine modifications during the active life of the mine.

(vi) A plan for the management of all stormwater and sediment generated during operations and during and following closure. For existing units, the plan must provide for permanent stormwater conveyances, ditches, channels and diversions designed to convey the peak flow and ponds and other collection devices designed to store the volume generated during a 24-hour period by a 100-year return interval storm event. For unit that

become authorized to operate after [Date of the Final Rule], the plan must provide for controls designed to store the volume generated during a 24-hour period by a 200-year return interval storm event.

(vii) A plan for the minimization, prevention, or collection and treatment of discharges and/or seepage, based on site hydrology and water quality characterization information, that provides for a cover system of, at a minimum, a store and release earthen cover system with a thickness of at least twelve inches and, if necessary, additional source controls or capture and treatment at closure, all of which meet a minimum 200-year life design criteria. If seepage water quality is not expected to meet applicable Federal and state groundwater and surface water quality standards at the point of compliance, the plan must provide for:

(A) Implementation of a containment system that immobilizes hazardous substances to meet applicable water quality standards (e.g., an engineered cover system designed to achieve, at a minimum, a 95 percent reduction in annual net-percolation based on the long-term average to reduce seepage discharges to meet applicable water quality standards;

(B) A capture and treatment system designed to achieve at least a 95 percent capture efficiency and meet applicable water quality standards; or combination of an engineered cover system and a capture and treatment system to achieve at least a 95 percent reduction in discharged load and meet applicable water quality standards at the point of compliance, or

(C) A solution containment system to assure seepage flows are collected, contained, conveyed, and treated to achieve at least a 95 percent reduction to meet applicable water quality standards.

(8) To satisfy the solid and hazardous waste disposal component in paragraph (b)(1)(viii):

(i) Requirements for disposal of all solid and hazardous wastes in a manner that is protective of human health and the environment and that is compliance with all applicable Federal, state, and local requirements.

(ii) Requirements for contaminated soil disposal in a manner that is protective of human health and the environment and that is in compliance with all applicable Federal, state, and local requirements.

(iii) Requirements to decontaminate buildings and structures to remove and safely dispose of hazardous substances.

(9) To satisfy the drainage category component in paragraph (b)(1)(ix) of

this section, a plan for the management of all stormwater and sediment generated during operations and during and following closure. For existing units, the plan must provide for permanent stormwater conveyances, ditches, channels and diversions designed to convey the peak flow and ponds and other collection devices designed to store the volume generated during a 24-hour period by a 100-year return interval storm event. For unit that become authorized to operate after [Date of the Final Rule], the plan must provide for controls designed to store the volume generated during a 24-hour period by a 200-year return interval storm event.

(10) To satisfy the short-term O&M category component in paragraph (b)(1)(x) of this section:

(i) A plan for groundwater and surface water monitoring to assure that monitoring wells are located to detect an exceedance(s) or trends towards exceedance(s) of the applicable standards, and are detected at the earliest possible occurrence, so that investigation of the extent of contamination and actions to address the source of contamination may be implemented as soon as possible. The plan must be currently in effect and must cover a period of at least five years.

(ii) A plan for inspection and monitoring of erosion and revegetation to ensure reclamation success.

(iii) A plan for routine maintenance and repairs to roads, stormwater conveyances and collection devices and revegetation maintenance (*e.g.* weed controls) and repairs (*e.g.* areas of revegetation failure).

(11) To satisfy the interim O&M category component in paragraph (b)(1)(xi) of this section:

(i) A plan for the purpose of interim emergency water management to provide information on how process water systems, interceptor wells, seepage collection systems and storm water management systems are operated and maintained to prevent discharges in the event the regulator assumes management of the mine facility. The plan must include process water flow charts showing electrical system requirements, pump operations, seepage collection and interceptor well operations and applicable operation and maintenance requirements. The plan must be updated as major process water system changes occur that would affect the interim emergency water management plan.

(ii) A conceptual engineering document that describes the processes and methods that are expected to be used to reduce the quantities of process water in storage and circulation inventory at the end of mine production until all process solutions are eliminated and steady-state discharge is reached, in preparation for long-term water management or treatment. The document must include:

(A) A description and list of the current or proposed process water management units and inventories of process water;

(B) A description of the modifications to the process water management system required to create an efficient process water reduction system;

(C) The operation and maintenance requirements for the system with material take-offs of sufficient detail to prepare an engineering-level cost estimate; and

(D) An estimate of the required water reduction period based on the water reduction calculations provided in the plan to be used for planning and operation and maintenance cost calculations.

(12) To satisfy the long-term O&M category component in paragraph (b)(1)(xii) of this section:

(i) A plan for groundwater and surface water monitoring to assure that additional monitoring wells are located to detect an exceedance(s) or trends towards exceedance(s) of the applicable standards and that they are detected at the earliest possible occurrence, so that investigation of the extent of contamination and actions to address the source of contamination may be implemented as soon as possible. The plan must be currently in effect, and must cover a period of at least 200 years.

(ii) A plan for inspection and monitoring of mass stability, erosion and revegetation certified by a professional engineer to ensure reclamation success.

(iii) A plan for routine maintenance and repairs to roads, stormwater conveyances and collection devices, cover systems, and revegetation maintenance (*e.g.* weed controls) and repairs (*e.g.* areas of revegetation failure) and monitoring wells.

(13) To satisfy the water treatment category component in paragraph (b)(1)(xiii) of this section:

(i) A plan for closure water management and water treatment consisting of a conceptual engineering document that describes the processes and methods that are expected to be used for long-term management or

treatment of seepage and includes an analysis of the expected operational life of each long-term water management or water treatment system, including collection/interceptor systems, until each system is no longer needed to protect water quality and applicable standards are met. The plan must describe whether active or passive treatment is proposed and include all operations and maintenance activities required to support all collection and treatment systems. The plan must describe the long-term water management and water treatment systems with sufficient detail, including locations of key components, expected operational life, material take-offs, and capital, operational and maintenance costs to prepare an engineering-level cost estimate. The plan must be currently in effect and must cover a period of at least 200 years.

(ii) A plan for disposal of wastes produced from water treatment that is protective of human health and the environment and meets applicable Federal, state, and local requirements.

#### **§ 320.64 Information submission and recordkeeping requirements**

(a) Owners or operators must submit to EPA information that supports the cost calculation including the maximum financial responsibility amount, final financial responsibility amount, information to support all inputs to the formula, and information to support reductions to the maximum financial responsibility amount in accordance with paragraph (c), including necessary components of applicable enforceable documents. Such information must provide sufficient detail about facility conditions to allow the Administrator to review the formula calculation and determine if the inputs to the formula were accurate, and should include site characterization information and evaluations that support the enforceable documents provided to support reductions.

(b) Owners or operators must retain the calculation of the financial responsibility amount and the information supporting it for a period of three years following submission to EPA.

#### **§ 320.65 Third-Party Certification**

The financial responsibility amount submitted by owners or operators in compliance with § 320.63 must be certified by an independent qualified professional engineer as defined in § 320.62.

**BILLING CODE 6560-50-P**

Appendix I

OMB# \_\_\_\_\_; Expires \_\_\_\_\_

<p><u>SEND COMPLETED FORM to the EPA Regional Office in which the facility is located.</u></p>	<p style="text-align: center;">United States Environmental Protection Agency CERCLA § 108(b) NOTIFICATION FORM</p>			
<p>1. Reason for Submittal</p>	<p>Reason for Submittal:</p> <p><input type="checkbox"/> To provide an Initial Notification that the owner or operator of the facility is subject to CERCLA § 108(b) requirements (first time submitting facility identification information / to obtain an EPA ID number for this location)</p> <p><input type="checkbox"/> To provide a Subsequent Notification (to update facility information for this location)</p>			
<p>2. EPA ID Number</p>	<p>EPA ID Number <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/></p>			
<p>3. Facility Name</p>	<p>Name:</p>			
<p>4. Facility Location Information</p>	<p>Street Address:</p>			
<p>1.</p>	<p>City, Town, or Village:</p>		<p>County:</p>	
<p>1.</p>	<p>State:</p>	<p>Country:</p>	<p>Zip Code:</p>	
<p>5. Facility Land Type</p>	<p>Private      County      District      Federal      Tribal      Municipal      State      Other</p>			
<p>6. Facility Mailing Address</p>	<p>Street or P.O. Box:</p>			
<p>1.</p>	<p>City, Town, or Village:</p>			
<p>1.</p>	<p>State:</p>	<p>Country:</p>	<p>Zip Code:</p>	
<p>7. Facility Contact Person</p>	<p>First Name:</p>	<p>MI:</p>	<p>Last:</p>	

8.	Title:		
8.	Street or P.O. Box:		
8.	City, Town or Village:		
8.	State:	Country:	Zip Code:
8.	Email:		
8.	Phone:	Ext.:	Fax:
8. Legal Owner(s) and Operator(s) of the Facility	A. Name of Facility's Legal Owner(s) (include all names under which you do business):		Date Became Owner:
8.	Owner Type:	Private    County    District    Federal    Tribal    Municipal    State    Other	
8.	Street or P.O. Box:		
8.	City, Town, or Village:		Phone:
8.	State:	Country:	Zip Code:
8.	B. Name of Facility Operator(s) (include all names under which you do business):		Date Became Operator:
8.	Operator Type:	Private    County    District    Federal    Tribal    Municipal    State    Other	

9. Type of activity requiring CERCLA § 108(b) financial responsibility at your facility:

10. Certification. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Signature of legal owner, operator, or an authorized representative	Name and Official Title (type or print)	Date Signed (mm/dd/yyyy)

BILLING CODE 6560-50-C

**Appendix II**

**REGION-SPECIFIC OVERHEAD AND OVERSIGHT PERCENTAGES**

Region	Total OC percentage
1	48.64
2	47.60
3	51.42
4	49.57
5	50.13
6	48.66
7	47.63
8	48.19
9	48.73
10	48.14

**Appendix III**

**STATE ADJUSTMENT FACTORS**

State	State adjustment factor
AK	1.19
AL	0.91
AR	0.87
AZ	0.96
CA	1.17
CO	0.97
CT	1.18
DE	1.10
FL	0.92
GA	0.89
HI	1.19
IA	0.98
ID	0.97
IL	1.15
IN	1.00
KS	0.94
KY	0.99
LA	0.89
MA	1.20
MD	0.99
ME	1.03
MI	1.04
MN	1.12
MO	1.04
MS	0.89
MT	0.97
NC	0.87
ND	0.92
NE	0.97
NH	1.06

**STATE ADJUSTMENT FACTORS—Continued**

State	State adjustment factor
NJ	1.20
NM	0.92
NV	1.08
NY	1.17
OH	1.02
OK	0.88
OR	1.06
PA	1.09
RI	1.16
SC	0.87
SD	0.87
TN	0.91
TX	0.89
UT	0.95
VA	0.94
VT	1.01
WA	1.05
WI	1.06
WV	1.04
WY	0.92

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**BILLING CODE 6560-50-P**

**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Part 320**

[EPA-HQ-OLEM-2016-0212; FRL-9956-56-OLEM]

**RIN 2050-AG56**

**Financial Responsibility Requirements for Facilities in the Chemical, Petroleum and Electric Power Industries**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Notice of intent to proceed with rulemakings.

**SUMMARY:** Section 108(b) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) establishes certain regulatory authorities concerning financial responsibility requirements.

Specifically, the statutory language 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. On January 6, 2010, the Environmental Protection Agency (EPA) published an Advance Notice of Proposed Rulemaking (ANPRM) that identified additional classes of facilities within three industry sectors that may warrant the development of financial responsibility requirements under CERCLA section 108(b)—the Chemical Manufacturing industry (NAICS 325), the Petroleum and Coal Products Manufacturing industry (NAICS 324), and the Electric Power Generation, Transmission, and Distribution industry (NAICS 2211). This document formally announces EPA’s intention to publish a notice for proposed rulemaking for classes of facilities within the three industries identified in the 2010 ANPRM, as well as gives an overview of some of the comments received on the ANPRM and initial responses to those comments. The announcement in this action is not a determination that requirements are necessary for any or all of the classes of facilities within the three industries, or that EPA will propose such requirements—rather, it is an announcement that EPA intends to move forward with the regulatory process. After that process, EPA will determine whether proposal of requirements for any or all of the classes of facilities within the three industries is necessary.

**DATES:** January 11, 2017.

**FOR FURTHER INFORMATION CONTACT:** For more information on this action, contact Peggy Vyas, U.S. Environmental Protection Agency, Office of Resource Conservation and Recovery, Mail Code 5303P, 1200 Pennsylvania Ave. NW., Washington, DC 20460; telephone (703)