Final Report

of the

Small Business Advocacy Review Panel on

EPA's Planned Proposed Rule
Financial Responsibility Requirements
For the Hardrock Mining Industry
under CERCLA § 108(b)

December 1, 2016

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1. INTRODUCTION

This report is presented by the Small Business Advocacy Review Panel (SBAR Panel or Panel) convened to review the planned proposed rulemaking on CERCLA § 108(b) Financial Responsibility Requirements for the Hardrock Mining Industry. Under section 609(b) of the Regulatory Flexibility Act (RFA), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), a Panel must be convened prior to publication of the initial regulatory flexibility analysis (IRFA) that an agency may be required to prepare under the RFA. In addition to EPA's Small Business Advocacy Chairperson, the Panel consisted of the Director of the Office of Resource Conservation and Recovery within the EPA's Office of Land and Emergency Management, the Administrator of the Office of Information and Regulatory Affairs within the Office of Management and Budget (OMB), and the Chief Counsel for Advocacy of the Small Business Administration (SBA Advocacy or Advocacy). This report includes the following:

- Background information on the proposed rule being developed;
- Information on the types of small entities that may be subject to the proposed rule;
- A description of efforts made to obtain the advice and recommendations of representatives of those small entities; and
- A summary of the comments that have been received to date from those representatives.

Section 609(b) of the RFA directs the Panel to consult with, and to report on the comments of, small entity representatives (SERs), and to make findings on issues related to elements of an IRFA under section 603 of the RFA.

Those elements of an IRFA are:

- A description of, and where feasible, an estimate of the number of small entities to which the proposed rule will apply;
- A description of projected reporting, record keeping, and other compliance requirements of the
 proposed rule, including an estimate of the classes of small entities which will be subject to the
 requirement and the type of professional skills necessary for preparation of the report or
 record;
- An identification, to the extent practicable, of all relevant Federal rules which may duplicate, overlap, or conflict with the proposed rule and a description of any significant alternatives to the proposed rule which accomplish the stated objectives of applicable statutes and which minimize any significant economic impact of the proposed rule on small entities. This analysis shall discuss any significant alternatives such as:
 - the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities;
 - the clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities:

- o the use of performance rather than design standards; and
- o an exemption from coverage of the rule, or any part thereof, for such small entities.

Once completed, the Panel Report is provided to the agency issuing the proposed rule and is included in the rulemaking record. The agency is to consider the Panel's findings when completing the draft of the proposed rule. In light of the Panel Report, and where appropriate, the agency is also to consider whether changes are needed to the IRFA for the proposed rule or to the decision on whether an IRFA is required.

The Panel's findings and discussion will be based on the information available at the time the final Panel Report is drafted. EPA will continue to conduct analyses relevant to the proposed rule, and additional information may be developed or obtained during the remainder of the rule development process.

Any options identified by the Panel for reducing the rule's regulatory impact on small entities may require further analysis and/or data collection to ensure that the options are practicable, enforceable, environmentally sound, and consistent with the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended.

2. BACKGROUND AND DESCRIPTION OF RULEMAKING

2.1 Regulatory History

Section 108(b) of CERCLA requires the promulgation of requirements that classes of facilities 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 March 11, 2008, the Sierra Club, Great Basin Resource Watch, Amigos Bravos, and Idaho Conservation League filed a suit in Federal district court, against the EPA Administrator, for failure to take timely action and develop regulations under CERCLA §108(b).¹ On February 25, 2009, the court ordered EPA to publish the *Priority Notice* required by CERCLA §108(b)(1), which EPA issued on July 28, 2009. In the notice, EPA identified the classes of facilities within the hardrock mining industry as those for which it would first develop requirements under CERCLA § 108(b). For purposes of the notice, EPA defined hardrock mining as the extraction, beneficiation, or processing of metals (e.g., copper, gold, iron, lead, magnesium, molybdenum, silver, uranium, and zinc) and nonmetallic, non-fuel minerals (e.g., asbestos, phosphate rock, and sulfur). The definition includes mineral processing, but does not include coal mining. EPA also identified some classes of facilities that were not considered for rulemaking during the development of this proposed rule, even though they fell within the definition of "hardrock mining."²

¹ Sierra Club, et al. v. Johnson, No. 08-01409 (N. D. Cal.).

² See *Memorandum to The Record* entitled "Mining Classes not Included in Identified Hardrock Mining Classes of Facilities", Dated June 29, 2009, EPA-HQ-SFUND-2009-0265-0033.

In August 2014, dissatisfied with the pace of EPA's progress in developing the proposed rule, the same groups, joined by Earthworks and Communities for a Better Environment, filed new a lawsuit in the U.S. Court of Appeals for the District of Columbia Circuit, petitioning for a writ of mandamus requiring issuance of regulations under CERCLA §108(b).³ After oral argument, the petitioners and EPA entered into discussions on rulemaking schedules and reached agreement. The parties then filed a Joint Motion for an Order on Consent with the court. On January 29, 2016, the U.S. Court of Appeals for the District of Columbia Circuit issued an order (Order) establishing the agreed-upon schedule for EPA proceedings under CERCLA §108(b). In addition, the Order requires the EPA to sign for publication in the Federal Register a notice of its final action on such regulations by December 1, 2017.

2.2 Description and Scope of Rulemaking

EPA is considering proposing financial responsibility requirements for CERCLA liabilities under CERCLA § 108(b). EPA also intends for the rule to create financial incentives for mining practices that reduce risk at a facility.

EPA is considering a proposed rule that may require owners and operators to identify a financial responsibility amount for their facility, to demonstrate evidence of financial responsibility, and to maintain the required amount of financial responsibility until released from the requirements of the rule by EPA.

Universe of facilities

EPA is considering proposing that the rule would apply to owners and operators of mines that are authorized to operate, or should be authorized to operate.

EPA is considering an approach that would identify classes of hardrock mines that the Agency finds present a lower level of risk of injury and would not, therefore, be included in the rulemaking. Under this approach, the remainder of the hardrock mines identified in the *Priority Notice* would be included in the rulemaking.

It should be noted that EPA's thinking on these lower level of risk of injury classes evolved over the time of the Panel. The potential lower level of risk of injury classes communicated to the SERs were placer mines that do not use hazardous substances, exploration mines, and small mines (less than five acres). At the time of the SER discussions, processors proximate to and under the operational control of the mine were included in the rule. After the SER discussions, EPA modified the approach to identify a fourth class of facilities that presents a lower level of risk of injury – processors with less than five acres of surface impoundment and waste pile disturbance. This new approach replaced the former method to identify which processors would be included in the proposed rule and now includes processors without respect to proximity to a mine.

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³ In re: Idaho Conservation League, et al., No. 14-1149 (D.C. Cir.).

Based on preliminary analyses, EPA estimates a potential total universe of 221 facilities would be subject to the rule. Of those 221, EPA's preliminary analysis indicates that 57 to 69 facilities are owned by 48 to 59 parent corporations who are considered small or whose classification is unknown and are potentially small. EPA continues to evaluate the hardrock mining universe.

Financial responsibility instruments

EPA has developed financial responsibility instruments that are designed to complement the current CERCLA framework for obtaining cleanup and reimbursement from those parties responsible for contamination. EPA anticipates consideration in the proposed rule of at least the following financial responsibility instruments – surety bond, letter of credit, insurance, trust fund, and financial test and corporate guarantee.

The EPA is considering a proposed rule that may provide for payment of funds from the financial responsibility instruments to pay: (1) any party with an unsatisfied court judgment for CERCLA response costs, health assessment costs, or natural resource damages; (2) as specified in a settlement with the federal Government; or (3) into a trust fund established by the owner or operator pursuant to a federal Government administrative order under CERCLA § 106(a). Under CERCLA § 108(c), parties (including EPA) could also bring a "direct action" claim against the instrument provider.

Calculation of the financial responsibility amount

EPA has developed a formula that owners and operators would use to calculate an amount of financial responsibility at their facilities. The formula employs an aggregation of individual costs to obtain an overall amount for the facility, but 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 response costs, health assessment costs, or natural resource damages.

EPA is considering allowing owners or operators to reduce the financial responsibility amount required at their facilities by taking into account enforceable requirements at the facility where the facility is in compliance with the requirements and the requirements are backed by adequate financial assurance that would assure their implementation.

EPA intends this approach to create incentives for implementation of environmentally sound practices. This approach is thus 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.

Recordkeeping and reporting

EPA is considering requiring electronic submission of information once an electronic system becomes available. EPA seeks information on alternative approaches to an electronic information management system to reduce the recordkeeping and reporting burden, including to small businesses, prior to its availability.

2.3 Regulatory Options Likely to be Proposed

Agency review and stakeholder input have suggested a range of program approaches. The following is a listing of regulatory approaches currently being presented as options in the proposed rule.

Financial Responsibility Instruments

As was discussed above, EPA anticipates consideration in the proposed rule of at least the following financial responsibility instruments -- surety bond, letter of credit, insurance, trust fund, and financial test and corporate guarantee.

The Agency is considering proposing two options for use of a financial test. Under Option 1, the proposed rule would not provide a financial test or corporate guarantee mechanism for use by owners and operators. Under Option 2, a credit rating based financial test and a corporate guarantee mechanism would be available for use by owners and operators.

Public Notice

The Agency is considering proposing two options for notifying the public about the CERCLA § 108(b) requirements applicable at a facility. Under the first approach, owners and operators would be required to maintain a web site to convey information regarding its compliance with CERCLA § 108(b) requirements. Under the second, EPA would provide information to the public on the Agency's website.

2.4 Related Federal Rules

Section 108(b) requirements are financial responsibility requirements to support CERCLA response actions, and to further the role of CERCLA's response scheme. As far as EPA is aware, there are no federal rules that provide financial responsibility to support CERCLA response actions.

EPA recognizes that existing closure and reclamation requirements that are supported by adequate financial assurance can reduce the level of risk at a facility, and that there may be confusion regarding the relationship of those requirements with the requirements of CERCLA § 108(b).

For example, the Bureau of Land Management (BLM) regulations at 43 CFR 3809, U. S. Forest Service (USFS) requirements at 36 CFR 228, and Nuclear Regulatory Commission (NRC) requirements at 10 CFR 40 provide financial assurance for reclamation and closure at hardrock mining facilities. Those regulations, however, do not require owners and operators to obtain instruments that are available to pay for CERCLA liabilities. The reduction in risk at facilities that is due to those federal requirements is appropriately accounted for under EPA's approach in the calculation of the financial responsibility amount.

In Advocacy's view, although the financial responsibility requirements under CERCLA are distinct from other Federal and state authorities, there is a large potential overlap between the 108(b) requirements and other comprehensive mining programs because those programs also address releases of hazardous substances into the environment. For example, a review of two mines in Alaska permitted by the USFS found that all 13 response categories being considered by EPA were addressed by the USFS through bonding and enforceable agreements. In Advocacy's view, the availability of these bonding

requirements for the same response categories could obviate the need for duplicate bonding under 108(b).

Advocacy notes that the final results of the formula before reductions lead to financial responsibility totals that are an order of magnitude, or more, higher than the reclamation and closure plans of some mines, as shown in Table 1 below.

Table 1
Six Mines - State and Federal Closure and Reclamation Estimates and CERCLA §108(b) Formula Financial Assurance Amounts

Mine !	5 Nixon Fork Alaska	
Category	Closure/Reclam.	Formula
Waste Rock	100,000	1,320,000
Tailings	420,000	1,690,000
Underground Mine	56,000	200,000
Drainage	Missing	130,000
Interim O&M	501,000	19,540,000
Water Treatment	Missing	67,000
Short Term O&M	7,000	500,000
Long Term O&M	Missing	46,000

Mine 6	60 Lisbon Valley Ut	ah
Category	Closure/Reclam.	Formula
Open Pit	156,000	12,610,000
Waste Rock	1,130,000	26,080,000
Drainage	21,000	1,040,000
Interim O&M	530,000	44,600,000
Water Treatment	Missing	2,700,000
Short Term O&M	86,000	1,970,000
Long Term O&M	Missing	3,840,000

Mine 12 Johnson Camp Arizona						
Category	Closure/Reclam.	Formula				
Open Pit	30,000	18,830,000				
Waste Rock	339,000	13,100,000				
Heap Dump Leach	812,000	31,570,000				
Drainage	Missing	1,020,000				
Interim O&M	Missing	24,630,000				
Water Treatment	Missing	2,690,000				
Short Term O&M	Missing	1,940,000				
Long Term O&M	Missing	3,740,000				

Mil	ne 27 Cobalt Idaho	
Category	Closure/Reclam.	Formula
Process Pond	235,000	240,000
Tailings	5,400,000	4,030,000
Drainage	Missing	210,000
Interim O&M	2,700,000	11,380,000
Water Treatment	17,000	130,000
Short Term O&M	316,000	680,000
Long Term O&M	Missing	750,000

Mine	42 Hycroft Nevada	
Category	Closure/Reclam.	Formula
Open Pit	77,000	197,900,000
Waste Rock	3,567,000	76,790,000
Heap Dump Leach	4,128,000	118,200,000
Process Pond	1,000,000	1,890,000
Drainage	331,000	2,900,000
Interim O&M	11,000,000	69,130,000
Water Treatment	Missing	14,050,000
Short Term O&M	277,000	3,930,000
Long Term O&M	Missing	11,050,000

Mine 53 Standard Mine Nevada					
Category	Closure/Reclam.	Formula			
Open Pit	27,000	4,440,000			
Waste Rock	524,000	12,390,000			
Heap Dump Leach	2,800,000	11,180,000			
Process Pond	228,000	170,000			
Drainage	3,000	670,000			
Interim O&M	1,900,000	35,790,000			
Water Treatment	Missing	1,090,000			
Short Term O&M	83,000	1,460,000			
Long Term O&M	Missing	2,420,000			

EPA notes that these costs are not duplicative, nor can they be compared -- they are for fundamentally different things. The EPA formula is trying to estimate potential future CERCLA liabilities in the absence of an explicit remedy, while the reported closure/reclamation costs are for site specific closure and reclamation. In addition, the reported closure/reclamation values are presented as annualized costs, while the formula number is the net present value of costs for O&M and water treatment categories. Given the differences in what the estimates are for and how they are presented, it is not surprising that the numbers do not match.

In short, Advocacy believes the formula EPA intends to propose over-predicts actual costs for each response category and is concerned that the proposed rule could unnecessarily threaten the viability of small mines. EPA believes that provided small mines are employing appropriate CERCLA risk reducing activities, their financial responsibility amounts should be minimal.

EPA also disagrees with Advocacy's general characterization of the proposed rule. Section 108(b) requirements are financial responsibility requirements to support CERCLA response actions, and to further the role of CERCLA's response scheme. Therefore, like the CERCLA responses they are designed to support, CERCLA § 108(b) requirements are complementary to, and not duplicative of, existing reclamation and closure requirements. CERCLA fills the gap where other regulations fail to prevent releases or threatened releases of hazardous substances, and it addresses environmental problems as they are identified. CERCLA liability can arise regardless of whether a facility is regulated under other programs. In fact, the CERCLA statute and the National Contingency Plan expressly contemplate that CERCLA responses can incorporate other standards by considering Applicable or Relevant and Appropriate Requirements (ARARs) as part of a CERCLA response. At the same time, and as just described, EPA recognizes that existing closure and reclamation requirements that are supported by adequate financial assurance can reduce the level of risk at a facility. The impact of those federal requirements on risk at the facility, however, affects not the applicability of CERCLA § 108(b) financial responsibility requirements, but the amount of financial responsibility required. Thus, the proposed rule appropriately accounts for those requirements, and the resulting reduction in risk, in the calculation of the financial responsibility amount, but does not consider them in determining whether CERCLA § 108(b) requirements apply.

3. APPLICABLE SMALL ENTITY DEFINITIONS

The RFA defines small entities as including "small businesses," "small governments," and "small organizations" (5 USC 601). EPA expects the regulatory approaches it is considering for this proposed rulemaking to affect a variety of small businesses, and does not expect them to affect any small governments or small organizations. The RFA references the definition of "small business" found in the Small Business Act, which authorizes the Small Business Administration to further define "small business" by regulation. The SBA definitions of small business by employee size standards using the North American Industry Classification System (NAICS) can be found at 13 CFR 121.201.

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 employee size standards range from 100 employees to 1,500 employees. Table 1 lists summary information on the hardrock mining industry's small entity universe.

				Table 2				
		SBA Small E	ary of Small Bu Business Size s of February	usiness Statistics	(Company Rev Average	venues) Average	Number of Small Firms	Number of Small Firms
NAICS			16)	Number of	Annual Revenues of Small Firms	Number of Employees of Small	Facing Annual Compliance Costs >1%	Facing Annual Compliance Costs >3%
Code	Industry	(\$Millions)	Employees	Small Firms	(\$Millions)	Firms	(Median)*	(Median)*
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-Van adium Ore Mining		250	2	\$15	48	1	0-1
212392	Phosphate Rock Mining		1000	1	<\$1	6	1	1
212393	Other Chemical and Fertilizer Mineral Mining		500	1	<\$1	3	1	1
	All Other Nonmetallic							
212399	Mineral Mining Support Activities for		500	3	\$329	173	2	2
213114	Metal Mining	20.5		2	<\$1	7	2	2
213115	Support Activities for Nonmetallic Minerals (except Fuels)	7.5		1	<\$1	2	1	1
	New Single-family Housing Construction (Except For-Sale							
236115	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
	Alumina Refining and Primary Aluminum Production							
331313	Nonferrous Metal (except Aluminum) Smelting and Refining		1000	1	\$2 \$13	550 83	1	0

	Table 2							
	Summary of Small Business Statistics (Company Revenues)							
		Standard (As	Business Size s of February 16)		Average Annual	Average Number of	Number of Small Firms Facing Annual	Number of Small Firms Facing Annual
NAICS Code	Industry	Revenues (\$Millions)	Employees	Number of Small Firms	Revenues of Small Firms (\$Millions)	Employees of Small Firms	Compliance Costs >1% (Median)*	Compliance Costs >3% (Median)*
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

4. LIST OF SMALL ENTITY REPRESENTATIVES

EPA consulted with Advocacy to develop the list of potential small entity representatives (SERs) in Table 2. EPA issued a news release inviting self-nominations by affected small entities to indicate their interest in serving as a potential SER via a web page. EPA launched the website on June 8, 2015 and accepted self-nominations until July 20, 2015. Additionally, through its review of the formal notification regarding the Small Business Advocacy Review Panel for the forthcoming regulatory proposed rule "CERCLA 108(b) Financial Responsibility for the Hardrock Mining Industry," the SBA suggested that EPA include Novagold Resources, Inc. as a potential SER. EPA sent OMB and Advocacy a Formal Notification with the suggested list of potential SERs on September 28, 2015 and Advocacy responded on October 13, 2015.

On June 1, 2016, the potential SERs requested to bring a 'helper' to the June 9, 2016 SBREFA Pre-Panel Outreach meeting. On June 6, 2016, the EPA approved the request. Jeff Parshley (SRK Consulting, Reno, Nevada) participated in the June 9, 2016 Pre-Panel Outreach meeting and the August 31, 2016 Panel Outreach meeting. The Agency received written comments from the SERs on September 16, 2016.

Table 3 List of Small Entity Representatives

Name	Affiliation
Eric M. Struhsacker	Renaissance Exploration Inc.
Vice President Projects	
Lucy Hill	Klondex Mines Ltd.
Environmental Manager	
Tim H. Dyhr	Nevada Copper
Vice President, Environment & External Relations	
Tim Havey	Pebble Limited Partnership
Environmental Manager	
Frank Ongaro	Mining Minnesota
Executive Director	
Debra W. Struhsacker	Pershing Gold Corporation
Senior Vice President	
Brad Moore	PolyMet Mining
Executive Vice President, Environmental & Government Affairs	
	Codia Bossanas
Matt Zietlow Director, U.S. Environmental Affairs	Carlin Resources
Richard K. Brown	Wyo-Ben, Inc.
Vice President, Resources	wyo-ben, mc.
Joe Bardswich	Golden Vertex Mining Corp.
General Manager	Golden Vertex Willing Corp.
Harold Roberts	Energy Fuels, Inc.
Executive Vice President & Chief Operating Officer	Liver By Tuess, mer
Rachel Yelderman	Comstock Mining, LLC
Allen Biaggi	Nevada Mining Association
William G. Scales	Formation Capital Corporation, U.S.
Project Manager	. ,
Laura Skaer	American Exploration & Mining Association
Executive Director	
William Paul Goranson	Uranez Energy Corporation
President and Chief Operating Officer	
Patrick Rogers	General Moly, Inc.
Vice President, Environmental and Permitting	
Ron Rimelman	Novagold Resources Inc.
Vice President, Environment, Health, Safety &	
Sustainability	

5. SUMMARY OF SMALL ENTITY OUTREACH

To help potential SERs prepare for the introductory outreach meeting/teleconference, EPA sent materials to each of the potential SERs via email on May 26, 2016. The materials shared with potential SERs during the Pre-Panel outreach meeting are listed below. The EPA held the introductory Pre-Panel Outreach meeting/teleconference with potential SERs on June 9, 2016. The EPA also invited representatives from Advocacy and OMB's Office of Information and Regulatory Affairs. A total of twelve potential SERs participated in the meeting. At their request, EPA fielded specific questions from potential SERs and did not present the prepared outreach package.

The outreach meeting was held to solicit feedback from the potential SERs on their suggestions for the upcoming rulemaking. EPA asked the potential SERs to provide written comments by June 23, 2016. This deadline was extended to June 30, 2016 following the presentation from Federal Land Management Agencies (FLMAs) and states. The deadline was further extended to July 5, 2016 after EPA provided additional information and, at the request of potential SERs, it was extended again to July 7, 2016. Comments made during the June 9, 2016 outreach meeting and written comments submitted by the potential SERS are summarized in section 6 of this document.

Following the Pre-Panel outreach meeting, an additional informational session was organized by Advocacy to have FLMAs and several states present their existing mining financial assurance requirements to potential SERs. EPA attended this additional meeting as an observer.

On August 24, 2016, the Small Business Advocacy Chair (SBAC) convened the Panel. EPA conducted a meeting/teleconference with SERs on August 31, 2016. To help SERs, the EPA sent materials to each of the SERs via email on August 24, 2016. The materials shared with SERs during the Panel outreach meeting are listed below. A total of twelve SERs participated in the meeting. EPA presented an explanation of the planned rulemaking and technical background information. This outreach meeting was held to solicit feedback from the SERs on their suggestions for the upcoming rulemaking. EPA asked the SERs to provide written comments by September 16, 2016.

Comments and discussion during the Pre-Panel and Panel outreach meetings and written comments submitted by the SERs are summarized in section 6, and included in their entirety in Appendix B.

Discussion of the financial responsibility formula

EPA continued to develop the formula and the reductions to the formula during the SBREFA process. Because they were under development, EPA did not provide the formula or the reductions to the SERs, but provided the SERs information on the formula and the process EPA was using to develop it. Materials shared with the small entities during the Pre-Panel and Panel phases of SBAR Process included:

- Small Business Advocacy Chair (SBAC) presentation on the SBAR Panel Process
- List of Potential Small Entity Representatives (SERs)
- Program Power Point presentation "CERCLA 108(b) Financial Responsibility: Small Business
 Advocacy Review Pre-Panel Outreach", drafted May 5, 2016 for June 2016 meeting, revised May
 12, 2016

- EPA response to June 9, 2016 Western Governors' Association Letter
- Mining Practices Currently Under Consideration for the Formula
- Draft Definition(s) related to the Scope of the Rule with Respect to Mine Operation Status
- List of Insurance, Surety, and Banking Companies and Organizations with which the EPA has met and dates of those meetings
- Program Power Point presentation "CERCLA 108(b) Financial Responsibility: Small Business Advocacy Review Panel Outreach", August 23, 2016 for August 2016 meeting
- Spreadsheet of CERCLIS IFMS 2011 data
- Modelled Universe Summary Statistics
- 21 draft State and three draft FLMA summary documents
- BLM Bonding Overview
- 11 Example Mines in EPA's dataset of 63 used for the development of the financial responsibility formula (Information included summary statistics, i.e., range and central tendency for some key site characteristics, distributional and statistical information as appropriate on mine locations, types of mines, various mine features used in the formula, and whether the sites already have financial responsibility programs and how those programs were accounted for)
- September 14, 2016 Panel response to September 6, 2016 AEMA email

EPA requested that the SERs consider the information provided and provide SER input on the Agency's approach.

6. SUMMARY OF COMMENTS FROM SMALL ENTITY REPRESENTATIVES

The summaries that follow reflect potential SER comments and SER comments from outreach meetings held on June 9, 2016 (Pre-Panel) and August 31, 2016 (Panel), respectively.

6.1 Oral Comments

Pre-Panel Outreach Meeting

On June 9, 2016 a Pre-Panel introductory meeting was held to present the SBREFA outreach package to potential SERs. The Pre-Panel outreach meeting was opened by the EPA's Office of Policy, which conducted a roll call and provided an overview of the SBAR Panel process. Following this, discussion moved on to SERs asking questions of the EPA and voicing concerns with the rule. The meeting concluded with brief presentations by the Bureau of Land Management and U.S. Forest Service. Oral comments from potential SERs were captured in this meeting.

Small entity access to finance

Multiple potential SERs stated that the proposed rule would have an effect on the business' ability to obtain outside financing. Small mines need to attract funding for development as they initially have no or low revenue. Potential SERs were interested in the financial test option and inquired about the EPA's meetings with the financial instrument providers.

Information to support proposed rule

A potential SER characterized the proposed rule as a "black box" and added that the example mines for which the EPA provided data do not look like any mine with which they are familiar. (The example mine data provided by EPA are from Superfund response actions and state closure plans for costs.)

Potential SERs urged EPA to undertake a peer review of the financial responsibility formula and wanted to know which experts are involved in the development of the rule. Potential SERs explained that there are some very reputable experts who are respected in the industry. Potential SERs explained that the Sulfide rule in Minnesota was peer reviewed by mining experts, non-governmental organizations (NGOs), and industry. They also urged EPA staff to visit a variety of mines to see conditions of mine operations firsthand.

Existing regulations

Potential SERs explained some of the existing state requirements with which they must comply. Nevada's requirement, it was explained, is intended to prevent releases of hazardous substances. Potential SERs explained that mines have site-specific features that would not be appreciated if other regulations were not considered.

Potential SERs argued that federal bonding requirements were sufficiently protective, and that no modern mines with approved operative status on federal land were listed on the NPL.

Multiple potential SERs requested that EPA perform a gap analysis to demonstrate gaps and weaknesses in existing requirements.

Scope of the rule

Potential SERs were concerned with the universe of mines regulated by the proposed rule. They wanted to know whether "legacy" mines would be covered by the rule, or whether the rule would be forward looking. Potential SERs offered their interpretation that the rule should be forward looking. There was also concern that the rule would apply outside of the plan of operation footprint of the mine.

Panel Outreach Meeting

On August 31, 2016, a Panel Outreach meeting was held to present the SBREFA outreach package to the SERs. The Panel Outreach meeting was opened by the EPA's Office of Policy, which conducted a roll call and provided and a brief overview of the SBAR Panel process. Following this, EPA provided a presentation of the SBAR Panel Outreach slides, and discussion moved on to SERs asking questions of EPA and voicing concerns with the rule. Oral comments from SERs were captured at this meeting.

Small entity access to finance

SERs suggested that EPA should ask more questions of the financial instrument providers. SERs requested a copy of the cost formula. SERs stated that most small entities do not have credit ratings, so they will be using cash or significant cash collateral. SERs stated that the market capacity study would not be relevant to small businesses because it does not represent the financial realities for many small entities.

SERs are concerned that CERCLA §108(b) financial responsibility requirements will clog the reviews of auditors trying to determine facility liability due to an already high level of scrutiny that auditors place on financial responsibility amounts. SERs believe that surety bonds will not be available due to the level of uncertainty provided by a lack of bond release specifications. SERs believe investors will not be interested in investing if that investment is going into the CERCLA § 108(b) instrument, thus making the U.S. mining industry less competitive in the global market.

Information to support proposed rule

SERs noted that the proposed rule is responsive to the Congressional directive to respond to the degree and duration of risk, but they want to hear what risk is still remaining. SERs want to see a list of the 184 mines that the EPA expected at that time to be regulated by the proposed rule. SERs are concerned about the scenarios that are accounted for at the mines within the context of the formula and are interested in identifying specific controls, including the performance criteria for different unit types. SERs would like to better understand how the formula addresses CERCLA liability and asked to receive a copy of the formula.

Existing regulations

SERs asked EPA to perform a gap analysis that shows weaknesses in existing programs and conflicts between the proposed rule and existing programs. Comments assert that EPA has not demonstrated a need for the rule nor deficiencies in existing programs. SERs are concerned about duplication between CERCLA § 108(b) and state and federal financial responsibility regulations, and believe that existing controls have reduced the risk to zero where the required controls are enforceable. SERs want to understand whether particular features in facility closure plans would prospectively meet the reduction criteria.

The SER helper (Jeff Parshley, SRK Consulting) stated that industry had recently completed a benchmarking exercise which ran a multivariate analysis of more than forty parameters on mines that were very similar. The SER helper stated that that exercise showed the approach did not work. Industry concluded it could not use those data to do anything more than identify the range, and whether the costs estimated for a site were within the reasonable range. The SER helper reported that his company ultimately told their client, one of the largest mining companies in the world, that no matter how sophisticated the benchmarking exercise, they could not possibly use that benchmarking approach to come up with an accurate cost to close a facility at a given mine site. They could end up with either a very large number that is unreasonable or a number that is too small.

Scope of the rule

SERs requested additional detail on the footprint of those mines that would be regulated, including closed or inactive sites and under a current or future operational footprint. SERs explained that BLM looks at the National Environmental Policy Act (NEPA) area study surface disturbances, while states have more defined areas. SERs also requested information on whether legacy mines were included in development of the formula, and if so, which response activities were considered. SERs want to look at ways to provide incentives.

6.2 Written Comments

EPA received twelve sets of comments during the Pre-Panel period - one comment set preceding the June 9, 2016 Pre-Panel outreach meeting, and eleven comment sets from potential SERs following the Pre-Panel outreach meeting. The Panel received ten sets of written comments following the Panel outreach meeting. The comments are summarized below and included in their entirety as an Appendix B.

Potential SERs were asked specifically to comment on four issue areas: (1) the number and types of entities affected; (2) potential reporting, recordkeeping, and compliance requirements; (3) related federal rules; and, (4) Regulatory Flexibility Alternatives.

In addition to these four issue areas, several Pre-Panel comments focused on justification for the rule and requests for additional information related to the components of and reductions in the financial responsibility formula. These are summarized in 6.2.e.

Number and Types of Entities Affected

Multiple SERs commented that without additional information, specifically, the ability to study the complete financial responsibility formula, they would be unable to assess the scope of affected entities.

SER comments also addressed the inclusion of leasable materials as a class of facility to be regulated in the proposed rule. Comments noted that none of the SERs represented these material classes. Another comment stated that small mines that engage in exploration and mine development are underrepresented.

Potential Reporting, Recordkeeping, and Compliance Requirements

SERs commented that more information about the financial responsibility formula was necessary for the SERs to provide comment on reporting, recordkeeping and compliance.

Some comments indirectly addressed compliance in stating that mines are already heavily regulated and an additional regulation would result in additional administrative and legal fees.

SERs also commented on the difficulty small entities experience in obtaining financial backing and financial instruments. Comments mentioned that the added obligation of the CERCLA § 108(b) regulation would hamper a small entity's ability to get financial backing for development of the mine. Other comments questioned the availability of instruments for small entities and argued that the cost would be prohibitive. Comments also questioned the willingness of the financial industry to provide instruments for the CERCLA § 108(b) obligation. The comments also requested information on bond duration and release.

Comments also questioned the credibility of the market study under development. The comments asserted that without knowing the exact amounts of financial responsibility to be required, the financial industry would be unable to indicate its ability to offer instruments.

Related Federal Rules

SER comments expressed concerns with what they anticipate will be duplication of existing financial responsibility requirements. They argued that the CERCLA § 108(b) rule would be unnecessary due to the presence of these programs and would increase economic stress on small mining entities. Comments added that existing federal and state programs have been strengthened by a close relationship with and understanding of the industry, spanning decades.

The SERs asserted that the BLM, USFS and many state programs provided comprehensive bonding and regulatory requirements that would duplicate every CERCLA response requirement to address releases of hazardous substances that EPA intends to address under CERCLA § 108(b). The SERs cited the BLM, USFS and states' June 16 presentations and provided statutory and regulatory language to affirm this proposition. The SERs challenged EPA to provide any evidence of a gap in the protection in any federal or state program requirement. According to the SERs, EPA has not identified such a gap in either federal or state coverage.

Pershing Gold provided a table (Appendix A) that in Pershing Gold's view shows the comprehensive nature of the BLM and Nevada regulations. Pershing Gold represented that the table shows that each of these programs addresses the thirteen response categories identified by EPA. The SER stated that this demonstrated that the CERCLA § 108(b) rule was not needed for mines under either BLM or Nevada jurisdiction.

Regulatory Flexibility Alternatives

SERs also stated that the industry record for modern mining operations (post 1990) show there is no need for additional regulation. The BLM and USFS both reported zero NPL listings for the thousands of modern mines for which plans have been approved post-1990. The SERs stated that this contrasts strongly with the legacy mines that are found on the NPL.

Several SERs referenced the June 16 presentations of Nevada, Utah, New Mexico, South Dakota, BLM, and USFS. SERs commented that the presentations showed robust and effective financial assurance programs that already focus on the risk that EPA intends to address in the proposed rule. SERs argued that historic performance of these programs demonstrated that financial responsibility under the proposed rule is unnecessary.

Multiple SERs offered regulatory alternatives, largely focusing on avoiding the rule by strengthening existing programs. One alternative focused on EPA conducting a gap analysis and sharing the results with states and federal land managers so that those states and agencies could fill those gaps, and which they posited would bypass the need for the proposed rule. Another suggestion was for the rule to operate only as a backstop to other state or federal programs. One alternative offered was for mining projects with existing financial assurance to be exempted from the rule requirements. Another alternative called for EPA to conclude that the proposed rule was unnecessary and publish that finding.

Multiple SERs asked EPA to perform a gap analysis that shows weaknesses in existing programs and conflicts between the proposed rule and existing programs. Comments assert that EPA has not demonstrated a need for the rule nor deficiencies in existing programs.

Several SERs advocated exempting mines by program (e.g. USFS, BLM, Nevada and Arizona) based on their conclusion that these programs comprehensively addressed the 13 response categories. Some SERs stated that if all the facilities in a given program would receive a zero cost response as a result of the credit reductions, it would be wasteful to require paperwork submissions and EPA review of each mine if the result were known in advance.

Additional comments

Many comments throughout the Pre-Panel and Panel outreach phases requested more information on the financial responsibility formula. Reductions included in the formula were of particular interest. SERs requested more information on what reductions would be offered and how these credits would be applied. Comments also sought to inform EPA of other sources of best practices that could be considered for inclusion, and asserted that due to the site-specific nature of mines, controls chosen sometimes differ from what is included in guidance. Comments also requested information on natural resource damages calculations, stating that this piece is highly subjective and subject to unrealistic assumptions. SER comments asked for information on the facilities used to develop the financial responsibility formula, including when these facilities were in operation.

One SER stated its belief that the court opinion expressly permitted EPA to decline to issue a final rule applicable to the mining industry. The section of the court opinion cited by the SER appears below:

Although more is required with respect to hardrock mining than the other identified industries, where EPA retains discretion not to conduct a rulemaking at all, EPA retains "discretion to promulgate a rule or decline to do so" even for the hardrock mining industry. *See Perciasepe*, 714 F.3d at 1325 n.7; *see also* 5 U.S.C. § 551(13)." Court opinion page 17.

Comments also called for EPA to demonstrate the need for the proposed rulemaking. The SERs stated that EPA has stated that the need for the rulemaking is based on the "degree and duration of risk associated with the production, transportation, treatment, storage, or disposal of hazardous substances." The SERs stated their view that the numerous state and federal regulations address these risks, and their belief that the industry record for modern mining operations (post 1990) show there is no need for additional regulation. The SER contention is that this rulemaking is not required by statute because the risk is minimal.

⁴ EPA stated that "Section 108(b) of CERCLA directs EPA to develop requirements that classes of facilities 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." Program Power Point presentation. "CERCLA 108(b) Financial Responsibility: Small Business Advocacy Review Pre-Panel Outreach", drafted May 5, 2016 for June 2016 meeting, revised May 12, 2016

Multiple SERs suggested that an entirely new and duplicative CERCLA § 108(b) financial responsibility program would be inconsistent with the "degree and duration" of risk associated with potential releases from current highly regulated and fully bonded hardrock mines. Multiple SERs also suggested that the alternative to a CERCLA § 108(b) rulemaking is for EPA to recognize the existing BLM, USFS, and state financial responsibility authorities and that a "gap analysis" might reveal whether any shortcomings exist in any of the states' bonding programs.

In addition, the SERs expressed concerns that EPA is utilizing what they characterized as a generic, simplified cost model. The SERs compared EPA's financial responsibility formula to what they characterized as the robust and effective site-specific set of requirements informed by mining experts and developed over the last several decades by state and federal regulators, in concert with the mining firms. Finally, the SERs asserted that the proposed rule will provide little or no added benefit, at potentially serious cost to small firms, which could cause some small mines to close.

In response to the Pre-Panel outreach package provided to the potential SERs, they requested, and were provided, summaries of twenty-one state financial assurance programs for mining, which EPA had prepared in draft form earlier in rule development. Several potential SERs commented that the summaries were out of date, showed misunderstanding of existing programs, and were misleading on some points. Some commenters provided corrections to individual summaries. Comments asked for EPA to finalize the drafts and to provide final copies to potential SERs.

7. PANEL FINDINGS AND DISCUSSIONS

7.1 Number and Types of Entities Affected

As discussed in Section 2.2 above, in its July 28, 2009 *Priority Notice*⁵ the EPA identified hardrock mining as the classes for which it would first develop financial responsibility requirements and provided a general definition of "hardrock mining"⁶. EPA refined that general definition for purposes of the proposal, as discussed above in Section 2.2.

The EPA identified approximately 221 mines and mineral 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 employee size standards range from 100 employees to 1,500 employees. The population of mines and mineral processors that are operating at

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⁵ <u>See:</u> Identification of Priority Classes of Facilities for Development of CERCLA Section 108(b) Financial Responsibility Requirements, 74 FR 37213, July 27, 2009.

⁶ Id at 37213.

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.

The most common activities at these facilities are surface mining (88), underground mining (56), and processing (68). Geographically, the potentially regulated universe spans more than 38 states, mostly concentrated in the western states. The states with the highest numbers of potentially regulated facilities are Nevada (70), Arizona (23), and Minnesota (14). The potentially regulated universe currently includes 33 mined 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, as noted above, there were 12 owners for which no NAICS code could be identified.

See section 3 for information on the hardrock mining industry's small entity universe.

7.2 Potential Reporting, Recordkeeping, and Compliance Requirements

The EPA is considering requiring that owners or operators develop and maintain a facility record that includes information documenting compliance with the financial responsibility requirements. The facility record must include at least all information required to be submitted to the EPA, and all notifications received from the EPA related to the financial responsibility obligations of the facility.

The EPA estimates industry costs for the owner/operator companies that are unable to utilize a self-insurance option, as the resources expended and/or foregone to obtain a third-party financial responsibility instrument. Additional administrative and recordkeeping costs to industry may include reading the regulations, submitting initial facility information to the 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.

If EPA were to defer or exempt facilities covered by certain programs, some portion of these paperwork requirements may be able to be eliminated for a large number of mining facilities.

7.3 Related Federal Rules

EPA is considering developing a proposed rule that, if finalized, would constitute the only financial responsibility regulations for non-transportation related facilities pursuant to CERCLA. As far as the EPA is aware, BLM, USFS, and NRC's financial responsibility regulations for reclamation bonding do not require owners and operators to obtain instruments that are available to pay for CERCLA liabilities. See

⁷ Many of the 221 facilities conduct multiple activities, causing the total number of facilities to be less than the summationsum of all activities practiced.

the discussion in Section 2.4 above which explains the divergent views among the panel members with respect to the role played by the related Federal Rules.

7.4 Regulatory Flexibility Alternatives

Pursuant to section 603 of the RFA, the EPA is preparing an initial regulatory flexibility analysis (IRFA) that examines the impact of the proposed rule on small entities along with regulatory alternatives that could minimize that impact. The intent of the proposed rule is to 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, the rule is intended to provide an incentive for implementation of sound practices at hardrock mining facilities that would decrease the need for future CERCLA actions.

In developing recommendations, the Panel has taken into consideration both SER comments and Panel discussion throughout the SBAR Panel process. The EPA explained that the proposed rule is intended to ensure that sufficient funds are available to pay for CERCLA response actions, and is intended to provide an incentive for implementation of sound practices that would decrease the need for future CERCLA actions. The EPA stated throughout the SBAR Panel process that the proposed CERCLA 108(b) rules should not be duplicative of existing reclamation and closure bonding requirements. Further, the EPA stated that financial responsibility requirements under section 108(b) are distinct from financial responsibility requirements for reclamation and closure under state programs, and thus are not intended to preempt those state requirements.

The EPA stated during the SBAR Panel process that, generally, the mere fact that a site is not included on the NPL does not mean the site poses no risk to human health and/or the environment, nor does it indicate that there is no potential for CERCLA liability to arise. The EPA stated that listing a site on the NPL is a discretionary action by EPA, and that many sites that may qualify for NPL listing are never listed, for example, because they are being addressed by a responsible party or under another cleanup program. The NPL is simply a planning tool, a list of priority releases for long-term remedial evaluation and response. 40 CFR 300.425(b). CERCLA liabilities can arise regardless of whether a site is on the NPL. The act of listing does not create or alter any CERCLA liability. The EPA further stated that the agency and other entities routinely take CERCLA response actions at non-NPL sites – indeed, NPL listing is only a prerequisite to "Fund-financed remedial action" and many other CERCLA activities are not limited to NPL sites. 40 CFR 300.425(b)(1).

During SBAR Panel discussions, the EPA pointed out that, as far as it is aware, BLM, USFS and states' financial responsibility regulations for reclamation bonding do not require owners and operators to obtain instruments that are available to pay for CERCLA liabilities. The intention for the proposed CERCLA 108(b) regulation under development is to provide assurance that CERCLA liabilities are paid for, if CERCLA claims are made. The agency stated that, unlike state or federal programs that currently exist, the section 108(b) regulation will not impose design, construction, or operating standards for hardrock mines. However, EPA is considering how to reflect the reductions in risk associated with such standards imposed by states and other federal agencies, in the calculation of the financial responsibility amount. (See Panel recommendation #6 for alternative approaches on the engineering standards.) Advocacy

believes that such a condition effectively makes these new standards requirements for the mines, and is concerned about their retroactive application to existing mines.

Because EPA's forthcoming CERCLA section 108(b) rules are not a financial responsibility requirement for reclamation and closure, direct comparisons of 108(b) financial responsibility levels with levels of financial responsibility provided for reclamation and closure programs are not appropriate. The CERCLA section 108(b) financial responsibility formula is intended to produce a financial responsibility level that is consistent with degree and duration of risks at the facility. Thus, if practices at the facility reduce risks, including practices that result from compliance with state or federal reclamation and closure financial responsibility requirements, the Agency believes it is appropriate to adjust the 108(b) financial responsibility level to reflect those reduced risks.

Financial responsibility requirements under section 108(b) are distinct from financial responsibility requirements for reclamation and closure under state programs, and thus are not intended to preempt those state requirements. Section 108(b) financial responsibility is designed to assure that funds are available to pay for CERCLA liabilities, and therefore unlike state financial responsibility requirements designed to assure compliance with state regulatory requirements. State Attorneys General also suggested a similar approach in letters to the EPA addressing the potential for section 114(d) to impact state programs.

In developing recommendations, the Panel recognizes that compliance with other regulatory programs may result in site controls and/or practices that can reduce the degree and duration of risks associated with the production, transportation, treatment, storage and disposal of hazardous substances. The EPA is working to reflect the reductions in risk associated with such controls and practices in the level of financial responsibility required by proposing to allow reductions in the financial responsibility amount where risk-reducing practices are in the form of requirements that are enforceable against the owner or operator, the owner or operator is in compliance with the relevant requirements, and the requirements are supported by adequate financial assurance. This approach should not only take these controls into account in the financial responsibility calculation, but also should provide an incentive for owners and operators to implement practices that would reduce risk and, thereby, reduce financial responsibility costs.

The determination of the level of financial responsibility will include a consideration of health assessment costs and natural resource damages. As currently envisioned these are not generally likely to be major components of the overall financial responsibility level. The Health Assessment (HA) cost amount is based on information the agency has on the average cost of doing an HA. The Natural Resource Damages (NRD) amount is a fixed percentage of the response cost component of the formula. Additionally, in response to requests from other members of the Panel, the EPA provided additional information pertaining to the 60+ sites that was used to calculate the financial responsibility level. Information provided to the Panel included summary statistics (i.e., range and central tendency for some key site characteristics, distributional and statistical information as appropriate on mine locations, types of mines, various mine features used in the formula, and whether the sites already have financial responsibility programs and how those programs were accounted for).

Regarding the possibility for multiple potential claimants, the financial responsibility requirements under CERCLA 108(b) are different from those in other financial responsibility programs including mine reclamation bonding programs. Moreover, the EPA's forthcoming proposed rule and instruments will reflect and not alter the existing broader CERCLA scheme. Any number of entities may make claims under the statute, including the Federal, state, or tribal governments or private parties. The statute also provides for a party to assert a claim in direct action in CERCLA 108(c). As such, certain features of instruments common in other financial responsibility programs (e.g. a single named obligee) may not be workable under the EPA's forthcoming CERCLA 108(b) proposed rule.

The EPA appreciates that mining is an important part of the economies of many states. The agency has interacted with states and other federal agencies that regulate the mining industry on numerous occasions during our work on the proposal. The EPA engaged with ASTSWMO's Hazardous Waste Subcommittee, Hazardous Waste Managers Conference and Training, and Financial Assurance Subgroup early in the process, presenting information and seeking input into the development of the proposed rule framework. The EPA convened multiple meetings and conference calls with Western Governors' Association (WGA), National Association of Attorneys General (NAAG), and Interstate Mining Compact Commission (IMCC) to better understand existing state programs requiring financial responsibility. These interactions have been helpful and have provided useful information to inform our rulemaking process.

7.5 Recommendations

Based on discussions with the SBAR Panel as noted above, and considering SER comments, the Panel recommends the following to lessen impacts to small entities as well as entities not classified as small. Advocacy-only recommendations follow.

Panel Recommendations

1. The Panel acknowledges that the existence of regulatory mining programs and the resulting reduction in risk should be accounted for in the amount of financial responsibility required at a facility. The Panel recommends that EPA solicit comment on whether to provide for a 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.

EPA believes that this programmatic deferral recommendation addresses the underlying policy concerns of SER requests for programmatic exemptions, while maintaining consistency with the CERCLA § 108(b) rule structure.

2. The Panel recommends that EPA propose to allow reductions to the financial responsibility amount applicable at a 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. The Panel further recommends that EPA 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. The Panel recommends that EPA 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. The Panel recommends that EPA solicit comment on all aspects of the proposed financial responsibility formula. The Panel recommends EPA solicit comment and data to inform this issue, 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. The Panel acknowledges that EPA's approach may define specific classes of mines as presenting a lower level of risk of injury, and does not impose requirements on those classes. The Panel recommends that EPA 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. The panel also recommends that EPA solicit comment on whether such classes of mines, defined based on facility characteristics, could potentially encompass iron ore, phosphate, and uranium mines. The panel recommends that EPA consider submissions from states and regulated entities with regard to low risk substances in its evaluations.
- 6. The Panel recommends that EPA 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). The Panel recommends that EPA request 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. The Panel also recommends that EPA request comment on whether other regulatory programs already impose the requirements that would satisfy the reduction criteria.

Advocacy Recommendations

Advocacy believes the final results of the formula before reductions lead to financial responsibility totals that are an order of magnitude, or more, higher for small mines than the reclamation and closure plans of those mines. See discussion in Section 2.4 comparing the formula and the closure/reclamation costs. Advocacy believes that the current approach could unnecessarily threaten the viability of small mines by use of these inflated estimates. Advocacy recommends that EPA should modify the formula (in final rule) to more closely reflect the probable costs for each response category.

Advocacy recommends EPA reevaluate the formula and account for the costs for small versus large facilities, which are used to calculate the financial assurance amounts. Since the formula is based on an average of the costs for all facilities, it could calculate a higher financial assurance amount for smaller facilities. The agency could explore developing two separate formulas, one for small facilities and the other for large facilities. Further, Advocacy recommends EPA explain why there is a higher figure for financial assurance than State and FLMA program's financial assurance amounts (i.e., the additional cost expected for a CERCLA response as compared to a closure/reclamation plan). Advocacy further recommends that EPA provide additional information to enable comparisons between the reported and formula amounts because some of the formula amounts are provided as annual amounts, and four are provided as net present values.

With respect to credit reductions, Advocacy recommends that EPA also consider exempting a response measure where the mining agency or an independent third party has determined that the response is unnecessary to protect the environment.

7.6 Panel Process

Many of the SERs commented on their perceptions of the adequacy of the SBREFA panel process, and expressed frustration about not being provided a draft version of EPA's financial responsibility formula. SERs expressed concerns with the regulatory approach, particularly regarding the potential costs of complying with requirements for financial assurance for closure and reclamation as well as CERCLA 108(b) financial responsibility. SERs were not able to provide information to the Panel about how significant those potential costs would have been for their specific facilities. Under the RFA, EPA provides "information on the potential impacts of the proposed rule on small entities and the type of small entities that might be affected" § 609(b)(1). Then SERs are selected, and the Panel collects "advice and recommendations" from each SER § 609(b)(4). The Panel reviews the SERs' comments, and "any material the agency has prepared in connection with [the RFA]," and "report[s] on the comments of the [SERs] and its findings as to issues related to" preparation of an IRFA § 609(b)(5). EPA solicited SERs comments during the course of, and after holding, two outreach meetings. EPA provided an outline of the structure of the formula, and the formula results for 11 example mines. EPA also identified specific issues for which SER input would be particularly helpful for the rulemaking.

Advocacy shares the concerns raised by the SERs. Advocacy believes SERs were not provided the selection criteria for choosing the input mines, the input data used to develop the formula, nor the key elements of the formula. SERs could not estimate the costs of such an approach on their own facilities. Advocacy needed to evaluate these highly technical data and statistical analysis with the aid of the mining experts who had considerable knowledge in this area. In Advocacy's view, the Panel did not get the full opportunity to receive valuable advice and was handicapped in developing the Panel recommendations. Advocacy regrets that the Panel is not able to make more specific recommendations for flexibilities to minimize the impacts on small entities, and particularly on the formula used to calculate financial assurance amounts. In the view of Advocacy, SERs on other panels received more robust information, and those Panel reports reflect more informed advice.

While not all members of the Panel agree with all of these concerns, the concerns of the SERs regarding the panel process have been noted. EPA is committed to ensuring that it meets the requirements of the RFA and intends to fully consider the advice and recommendations of the SERs and the Panel in development of the proposed rule. The EPA intends to continue working on issues regarding small businesses, and to consider appropriate flexibilities, throughout this rulemaking process.

APPENDIX A:

Table 1 from Pershing Gold's September 16, 2016 written comments

Pershing Gold's September 16, 2016 written comments can be found in their entirety in Appendix B



Table 1

CERCLA 108(b) Response Category Equivalents in BLM's and Nevada's Regulations for Hardrock Mining

CERCLA 108(b) Response Category	BLM Regulations 43 CFR §3809	Nevada Regulations and SRCE Worksheet Tabs
Solid/Hazardous Waste Disposal	\$3809.420(b)(6) \$3809.421 ¹	NAC 519A.270.14(e) NAC 519A.345.8(a) NAC 445A.424 NAC 459.953471 SRCE Waste Disposal Tab SRCE Landfills Tab
Open Pit	§3809.401(b)(2)(i), (ii) §3809.401(b)(3)(iii) §3809.421 ¹	NAC 519A.345.9 NAC 445A.424 NAC 445A.429 NAC 519A.250 NAC 519A.260 NAC 519.270 NAC 519A.295 SRCE Pits Tab
Waste Rock	§3809.401(b)(2)(i), (ii) §3809.420(a)(2), (4), (5), (6) §3809.420(b)(2), 3(i) (A-D), (4), (5), (7), (11)(i), (ii), (iii) §3809.421 ¹ §3809.592 ⁶ §3809.595 ⁷	NAC 519A.345.3 NAC 519A.270 generally and specifically NAC 519A.270 (d)(3) NAC 519A.295 NAC 445A.424 NAC 445.433.1 SRCE Waste Rock Dump Tab
Heap/Dump Leach	\$3809.401(b)(2)(i), (ii) \$3809.420(a)(2), (4), (5), (6) \$3809.420(b) 3(i) (A-D), (4), (5), (7), (11)(i), (ii), (iii), (12)(i-vii) \$3809.421 ¹ \$3809.431(c)(1-7) ⁴ \$3809.592 ⁵ \$3809.595 ⁷	NAC 519.345.6 519A.270 generally and specifically NAC 519A. 270(d)(2) NAC 519A.295 NAC 445A.424 NAC 445A.430 NAC445A.436 NAC 445A.436 NAC 445A.436 NAC 445A.438



CERCLA 108(b) Response Category	BLM Regulations 43 CFR §3809	Nevada Regulations and SRCE Worksheet Tabs
Category		NAC 445A.440
		NAC 445A.442
		SRCE Heap Leach Tab
		Heap Leach Draindown
		Estimator
		Interim Fluid Management
Tailings Facility	§3809.401(b)(2)(i), (ii)	NAC 519A.345.4
g	§3809.420(a)(2), (4), (5), (6)	NAC 519A.345.5
	§3809.420(b) 3(i) (A-D), (4), (5),	NAC 519A.270 generally
	(7), (11)(i), (ii), (iii), (12)(i-vii)	and specifically NAC 519A.
	§3809.421 ¹	270 (d)(1)
	§3809.431(c)(1-7) ⁴	NAC 445A.424
	§3809.592 ⁶	NAC 445A.431
	§3809.595 ⁷	NAC 445A.433.1
		NAC 445A.437
		NAC 445A.438
		NAC 445A.442
		SRCE Tailings Tab
		Tailings Draindown
		Estimator (in preparation)
		Interim Fluid Management
Process	§3809.401(b)(2)(i), (ii)	NAC 519A.345.7
Pond/Reservoir	§3809.420(a)(2), (4), (5), (6)	NAC 445A.433.1
	§3809.420(b) 3(i) (A-D), (4), (5),	NAC 519A.260
	(7), (11)(i), (ii), (iii), (12)(i-vii)	NAC 519A.270 generally
	$\S 3809.421^1$	and specifically NAC 519A.
	§3809.431(c)(1-7) ⁴	270 (d)(1), (2)
	$\S 3809.592^6$	NAC 519A.295
	$\S 3809.595^7$	NAC 445A.424
		NAC 445A.433.1
		NAC 445A.435
		NAC 445A.438
		NAC 445A.442
		SRCE Process Ponds Tab
TT 1 135	80000 7	Interim Fluid Management
Underground Mine	§3809.5	NAC 519A.345.10
	\$3809.4211	NAC 519A.260
	§3809.431(c)(1-7) ⁴	NAC 519.270



CERCLA 108(b)	BLM Regulations	Nevada Regulations and
Response	43 CFR §3809	SRCE
Category		Worksheet Tabs
	§3809.592 ⁶	NAC 519A.295
	§3809.595 ⁷	NAC 445A.424
		NAC 445A.433
		SRCE Underground
		Openings Tab
Slag Pile	N/A – pertains to smelters	N/A - pertains to smelters
Drainage	§3809.5, §3809.420(b)(11)(i, ii,	NAC 519A.345.7
	iii), §3809.431(c)(1)	NAC 519A.260
	§3809.421 ¹	NAC 519A.270
	§3809.431(c)(1-7) ⁴	NAC 519A.295
	$\S3809.592^{\hat{6}}$	NAC 445A.424
	§3809.595 ⁷	NAC 445A.433.1
		SRCE Sediment and
		Drainage Control Tab
Interim O&M	§3809.116	NAC 445A.440
	§3809.401(b)(5)	NAC 519A.260
	§3809.421 ¹	NAC 519A.270.16
	$\S 3809.423^2$	NAC 519A.295
	$\S3809.424(a)$, (b) $\S3$	NAC 519A.350
	§3809.431(a) ⁴	NAC 445A.440
	$\S3809.592^6$	SRCE Monitoring Tab
	$\S 3809.595^7$	SRCE Construction
	§3809.598 ⁸	Management Tab
		Heap Leach Draindown
		Estimator (HLDE)
		Process Fluid Cost
		Estimator (PFCE)
		Interim Fluid Management
Water Treatment	§3809.421 ¹	NAC 519A.270
	$\S3809.424(a), (b)^3$	NAC 519A.295
	§3809.431(a), (c)(3) ⁴	NAC 519A.360
	§3809.552(c) ⁵	This line item is not
	$\S 3809.592^6$	specifically included in the
	§3809.595 ⁷	SRCE, but there is unlimited
	§3809.598 ⁸	potential in the SRCE to
		include infinite customized
		User Tabs specific to site
		needs or regulatory
		requirements.



CERCLA 108(b) Response Category	BLM Regulations 43 CFR §3809	Nevada Regulations and SRCE Worksheet Tabs
		Calculations on cost will be specific to each operation and will require custom calculation sheets.
Short-Term O&M/ Monitoring	\$3809.116 \$3809.421 ¹ \$3809.423 ² \$3809.424(a), (b) ³ \$3809.592 ⁶ \$3809.595 ⁷ \$3809.598 ⁸	NAC 445A.440 NAC 519A.270 NAC 519A.295 NAC 519A.350 NAC 519A.360 NAC 445A.440 NAC 445A.442 SRCE Monitoring Tab SRCE Construction Management Tab Heap Leach Draindown Estimator (HLDE) Process Fluid Cost Estimator (PFCE) Interim Fluid Management
Long-Term O&M/ Monitoring	\$3809.116 \$3809.421 ¹ \$3809.423 ² \$3809.424(a), (b) ³ \$3809.552(c) ⁵ \$3809.592 ⁶ \$3809.595 ⁷ \$3809.598 ⁸	NAC 445A.440 NAC 519A.270 NAC 519A.295 NAC 519A.350 NAC 519A.360 NAC 519A.380 NAC 445A.440 NAC 445A.446 SRCE Monitoring Tab SRCE Construction Management Tab Heap Leach Draindown Estimator (HLDE) Process Fluid Cost Estimator (PFCE) Interim Fluid Management

 \underline{N} otes:



§3809.421 Enforcement of performance standards:

Failure of the operator to prevent unnecessary or undue degradation or to complete reclamation to the standards described in this subpart may cause the operator to be subject to enforcement as described in §§3809.600 through 3809.605 of this subpart.

§3809.423. How long does my plan of operations remain in effect?

Your plan of operations remains in effect as long as you are conducting operations, unless BLM suspends or revokes your plan of operations for failure to comply with this subpart.

- §3809.424(a) What are my obligations if I stop conducting operations?
- (i) You must follow your approved interim management plan submitted under §3809.401(b)(5); (ii) You must submit a modification to your interim management plan to BLM within 30 calendar days if it does not cover the circumstances of your temporary closure per §3809.431(a); (iii) You must take all necessary actions to assure that unnecessary or undue degradation does not occur; and (iv) You must maintain an adequate financial guarantee.

The BLM will require you to take all necessary actions to assure that unnecessary or undue degradation does not occur, including requiring you, after an extended period of non-operation for other than seasonal operations, to remove all structures, equipment, and other facilities and reclaim the project area.

BLM may initiate forfeiture under §3809.595. If the amount of the financial guarantee is inadequate to cover the costs of reclamation, BLM may complete the reclamation, and the operator and all other responsible persons are liable for the costs of such reclamation. See §3809.336(a) for indicators of abandonment.

§3809.424 (b)

Your reclamation and closure obligations continue until satisfied.

- 4 §3809.431 When must I modify my plan of operations?
- (a) Before making any changes to the operations described in your approved plan of operations;
- (b) When BLM requires you to do so to prevent unnecessary or undue degradation; and
- (c) Before final closure, to address impacts from unanticipated events or conditions or newly discovered circumstances or information, including the following:



- (1) Development of acid or toxic drainage;
- (2) Loss of surface springs or water supplies;
- (3) The need for long-term water treatment and site maintenance;
- (4) Repair of reclamation failures;
- (5) Plans for assuring the adequacy of containment structures and the integrity of closed waste units;
- (6) Providing for post-closure management; and (7) Eliminating hazards to public safety.
- 5 §3809.552(c) What must my individual financial guarantee cover?

When BLM identifies a need for it, you must establish a trust fund or other funding mechanism available to BLM to ensure the continuation of long-term treatment to achieve water quality standards and for other long term, post-mining maintenance requirements. The funding must be adequate to provide for construction, long-term operation, maintenance, or replacement of any treatment facilities and infrastructure, for as long as the treatment and facilities are needed after mine closure. BLM may identify the need for a trust fund or other funding mechanism during plan review or later.

- §3809.592 Does release of my financial guarantee relieve me of all responsibility for my project area?
- (a) Release of your financial guarantee under this subpart does not release you (the mining claimant or operator) from responsibility for reclamation of your operations should reclamation fail to meet the standards of this subpart.
- (b) Any release of your financial guarantee under this subpart does not release or waive any claim BLM or other persons may have against any person under the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, 42 U.S.C. 9601 *et seq.*, or under any other applicable statutes or regulations.
- ⁷ §3809.595 When may BLM initiate forfeiture of my financial guarantee?

BLM may initiate forfeiture of all or part of your financial guarantee for any project area or portion of a project area if-

(a) You (the operator or mining claimant) refuse or are unable to conduct reclamation as provided in the reclamation measures incorporated into your notice or approved plan of operations or the regulations in this subpart;



- (b) You fail to meet the terms of your notice or your approved plan of operations; or
- (c) You default on any of the conditions under which you obtained the financial guarantee.
- § §3809.598. What if the amount forfeited will not cover the cost of reclamation?

If the amount forfeited is insufficient to pay for the full cost of reclamation, the operators and mining claimants are liable for the remaining costs as set forth in §3809.1169. BLM may complete or authorize completion of reclamation of the area covered by the financial guarantee and may recover from responsible persons all costs of reclamation in excess of the amount forfeited.

- §3809.116. As a mining claimant or operator, what are my responsibilities under this subpart for my project area?
- (a) Mining claimants and operators (if other than the mining claimant) are liable for obligations under this subpart that accrue while they hold their interests.
- (b) Relinquishment, forfeiture, or abandonment of a mining claim does not relieve a mining claimant's or operator's responsibility under this subpart for obligations that accrued or conditions that were created while the mining claimant or operator was responsible for operations conducted on that mining claim or in the project area.
- (c) Transfer of a mining claim or operation does not relieve a mining claimant's or operator's responsibility under this subpart for obligations that accrued or conditions that were created while the mining claimant or operator was responsible for operations conducted on that mining claim or in the project area until-
 - (1) BLM receives documentation that a transferee accepts responsibility for the transferor's previously accrued obligations, and
 - (2) BLM accepts an adequate replacement financial guarantee adequate to cover such previously accrued obligations and the transferee's new obligations.