Panel Outreach Meeting with Small Entity Representatives for the CERCLA 108(b) Hardrock Mining Rulemaking (August 31, 2016)

Written Comments from Small Entity Representatives

1. Eric Struhsacker (Renaissance Exploration)
2. Tim Dyhr (Nevada Copper)
3. Debra Struhsacker (Pershing Gold Corporation)
4. Brad Moore (PolyMet Mining)
5. Frank Ongaro (MiningMinnesota)
6. Laura Skaer (American Exploration & Mining Association)
7. Ron Rimelman (Novagold Resources)
8. Patrick Rogers (General Moly)
9. Paul Goranson (Uranez Energy)
10. Dana Bennett (Nevada Mining Association)

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September 15, 2016

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Sent via email

Re: Renaissance Exploration Inc. Comments and Questions regarding CERCLA 108(b) in Response to the SBAR Panel Meeting of August 31st, 2016

Dear Ms. Wiggins and Ms. Barr:

On behalf of Renaissance Exploration Inc. (RenEx), a Small Entity Representative (SER) to the Small Business Advocacy Review (SBAR) Panel for the EPA rulemaking "EPA's CERCLA Section 108(b) Financial Responsibility for the Hardrock Mining Industry", I submit the following questions and comments. Our concerns at this time result from discussions at the SBAR Panel meeting in the EPA offices in Washington, D.C. on August 31st. I refer to the SBREFA slide show of August 23rd entitled "(CERCLA 108(b) Financial Responsibility: Small Business Advocacy Review Panel Outreach". Also, my comments reflect information contained in the EPA slide presentation "Eleven Financial Responsibility Calculations Based on EPA's Current Approach" of August 26th, 2016.

In my email communication of July 6th, 2015 and my letter of June 30th, 2016, I described RenEx as a small mineral exploration company focusing its activities in the Great Basin region. RenEx is not a mineral production company and controls no operating mines or processing facilities. The company depends entirely on funds from investors and venture partners to advance its projects and generate new prospects. RenEx and other small companies conduct exploration with expenditures in the earliest and riskiest part of a mining cycle of discovery, delineation, development, production, and closure. Any additional costs at the exploration stage can negatively impact the ability to raise funds for exploration and, therefore, the chances of discovery.

Two general areas of concern remain for RenEx after the pre-panel reviews of May and June 2016 and the August 31st SBAR Panel discussion:

- the extent to-which the proposed CERCLA 108(b) rule would impact exploration activities in early-stage projects.

- the extent to-which the proposed CERCLA 108(b) rule would duplicate and, possibly, preempt existing assurance requirements administered by federal and state agencies (FLMA's). An over-reaching financial assurance rule would present a strong disincentive to investment in the mining sector. The likelihood that the rule would deter venture partners and potential investors from investing in the projects poses a very real threat to the viability of the exploration and mining industry and the high-quality jobs provided there-in. Production-focused companies, whether small or large and exploration companies share this concern.

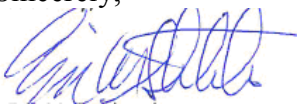
RenEx still requires specific information on the following matters in-order to evaluate potential impacts to company activities on its exploration properties:

- EPA should provide, as part of the SBAR panel process, the criteria that would be used to define an "Exploration Mine", possibly under-consideration for exclusion from the CERCLA 108(b) rulemaking.
- EPA should discuss what hazardous substances would be of-concern if an exploration property was subject to CERCLA 108(b) rulemaking.
- EPA should provide definitions for legacy mines and prospects and discuss how these features would be treated where they are co-located with active exploration projects.
- Similar to the previous point, new exploration often occurs at the sites of modern mines in-closure or in the process of closure. In some instances, the previous mine operator is still the responsible party for the closure. Clarity will be needed from the EPA as to the extent of responsibilities imposed on the small exploration company regarding the financial assurance for the inactive mine.
- EPA should provide the results of studies on the availability of financial instruments for exploration projects and small mines that could be subject to the CERCLA 108(b) rule. Many small exploration and mining companies will not be eligible for financial instruments and will proceed only with cash bonds.
- EPA should ensure that small exploration companies are adequately represented as SERS for the SBAR Panel. I recognize, at this point in the process, that the SER's have been selected. However, there is a substantial population of small exploration and mining companies that are not fully represented.

RenEx supports the premise that the financial assurance programs, developed and administered in recent years by the FLMA's and by several state agencies, fully meet the objectives of CERCLA 108(b). The new rule, when finalized, should recognize the effectiveness of the FLMA and state agency closure and financial assurance programs in reducing the risks associated with hard rock mining and closure projects. Also, the rule should give credit for the protections provided by financial assurance programs already in-place and to be developed. These protections would reduce the financial exposure of the Superfund program to zero or minimal

levels. The EPA should, as part of developing or administering the rule, conduct a comprehensive evaluation of the FLMA and state programs and, if any programs fall short of the objectives of CERCLA 108(b) rule, work with the agencies to develop more effective programs. Such efforts would reduce the duplication of financial assurance programs and the costs to SER's.

Sincerely,



Eric M. Struhsacker
Representative for
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NEVADA COPPER

Pumpkin Hollow Project

September 16, 2016

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Dear Ms. Wiggin and Ms. Barr:

On behalf of Nevada Copper Corp., doing business as Nevada Copper, Inc., a Nevada company ("Nevada Copper" or the "Company"), as an approved Small Entity Representative (SER), please find herein ***additional*** comments on the Small Business Regulatory Enforcement Fairness Act (SBREFA) review process being undertaken by the Environmental Protection Agency (EPA), Small Business Administration (SBA) and the Office of Management and Budget (OMB) regarding the proposed rulemaking on CERCLA 108(b) financial assurance for hardrock mining.

Nevada Copper submitted formal comments to EPA on July 7, 2016. Those comments and concerns remain valid. Nevada Copper also participated in the panel review process, including the CERCLA 108(b) Hardrock Mining Panel Outreach meeting on August 31, 2016.

That meeting and subsequent information provided to date by EPA still do not address the fundamental question we as the industry and SER's have asked: where are the gaps in existing federal land management agency (FLMA) and state bonding programs?

Since that panel outreach meeting, Nevada Copper and several other Nevada-based SER's have begun a detailed analysis of the specific program requirements in Nevada that address the thirteen (13) elements that EPA has identified and the associated of financial assurance requirements. It is clear that almost all of those elements are addressed in Nevada. These either reduce the "degree and duration of risk associated with the production, transportation, treatment, storage, or disposal of hazardous substances", and/or provide financial assurance for those aspects of our mining operations throughout the entire life cycle – prior to construction, during operations and after completion of operations. Though we had hoped to submit that analysis with our comments, the time did not allow us to complete that analysis. We would still like to be able to submit that analysis in the near future.

Nevada has one of the most robust financial assurance programs for hardrock mining in the world. It has been developed in cooperation with the Nevada Division of Environmental Protection (NDEP), the U.S. Bureau of Land Management (BLM), the U.S. Forest Service (USFS) and the mining industry. Literally thousands of man-hours have been invested over more than 25 years to

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develop a thorough, auditable and defensible method to identify needs and address them with financial assurance. Furthermore, the financial assurance program has been continually reviewed and revised based on direct experience by all of those parties and will continue to be revised as experience dictates.

One example that our analysis to date has identified is pit lakes. Several mine operations in Nevada have identified aspects pit lake water quality that must be addressed during and after completion of operations. Though these aspects are not explicitly addressed in the regulations or the Standard Reclamation Cost Estimator (SRCE), the authority provided by both FLMA's and NDEP allow them to require that costs for long term pit lake water quality be addressed and covered by financial assurance.

This example illustrates three key points: 1) that the state and FLMA's have the authority and expertise to identify the aspects of mine operations that require environmental management attention to reduce the risk to *de minimus* levels; 2) that they have the authority to and indeed do require financial assurance for these aspects; 3) that they are directly involved via their respective permitting authorities to regularly review and verify that these aspects are fully addressed.

It is clear to me that there is significant, existing depth of experience and expertise amongst mine operators - including the SER's that are prospective mine operators - the state and federal agencies and consultants who have years of experience in addressing financial assurance and how to calculate it. Indeed this rulemaking process has produced the most comprehensive review of most if not all state and federal regulatory programs that address financial assurance for the hardrock mining industry.

The consultative process has produced a wealth of information and evidence of various state and federal programs that were absolutely absent when CERCLA 108(b) was first promulgated and have been continually and significantly upgraded over the past 25 years in Nevada.

I believe there is a real opportunity for EPA to address potential concerns on financial assurance without adding additional or duplicative regulatory compliance to mine operators and other agencies.

It has been suggested that we evaluate existing state and programs and not projects. EPA should seriously consider that approach to avoid adding duplicative regulatory burdens to an industry that is already sufficiently regulated to reduce "degree and duration of risk associated with the production, transportation, treatment, storage, or disposal of hazardous substances" to *de minimus* levels. If that approach can achieve the objective by identifying specific gaps in existing programs and have them addressed within the existing programs that would be beneficial to all parties.

EPA has stated that its proposed Section 108(b) regulations will be stand-alone financial responsibility requirements. It also states that here are significant differences between these requirements and other existing requirements for hardrock mining facilities. However in

examining the thirteen (13) categories EPA has provided, almost all of them are "existing requirements" that are addressed by state and FLMA programs. It appears to the industry that "the proposed rule ***does*** include technical requirements regulating the operation, closure, or reclamation of hardrock mining facilities", contrary to EPA's assertion that it ***does not***. If "EPA intends "to develop only those requirements that are appropriate for the limited purpose of demonstrating evidence of financial responsibility under CERCLA" then it has yet to specifically identify those gaps.

If, as EPA asserts, that "CERCLA is primarily a response program that does not establish a permitting regime and thus the proposed regulation would operate differently from other financial responsibility programs", it certainly appears from the information provided that there is significant overlap with existing programs.

In the August 31, 2016 Hardrock Mining Panel Outreach meeting, EPA stated, in response to the SER's request that EPA provide the "model", that it is developing and proposes to use, that it would not be available until the rule is published in December 2016. If that is the case, the industry and SER's will need to reserve final comments until that model is available for review.

In summary, we believe that the existing FLMA and Nevada regulations and financial assurance requirements already provide sufficient regulatory controls and financial assurance for hardrock mining. EPA needs to seriously consider developing a rule that allows it to conduct a detailed and meaningful review of respective FLMA and state programs, ***and not*** regulate individual operations and projects. By doing that, it can identify those specific elements that are not addressed in those programs, assure that it meets its CERCLA obligations and avoid duplicative regulatory program that adds unnecessary regulatory and financial burden, ***especially to SER's***.

We look forward to further meaningful and constructive dialogue.

Sincerely,

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Filename: NevadaCopper-SBREFA-FormalComments20160916tmd

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Sent via email

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Re: CERCLA 108(b) Financial Responsibility for the Hardrock Mining Industry SBREFA Panel Additional Comments

Dear Ms. Wiggins and Ms. Barr:

I. Introduction

On behalf of Pershing Gold Corporation, I would like to thank the Environmental Protection Agency ("EPA"), the Office of Management and Budget ("OMB"), and the Small Business Administration ("SBA") collectively the Small Business Advocacy Review agencies ("SBAR Agencies") for the opportunity to meet with you and participate as a Small Entity Representative ("SER") in the August 31, 2016 SBAR Panel to discuss the impact that EPA's proposed bonding rule for the hardrock mining industry under CERCLA Section 108(b) could have on SERs – and the entire US mining industry. This letter is being submitted in response to EPA's request for additional comments following the SBAR Panel discussion.

I hope that the information the SERs presented during the SBAR Panel was useful and gave EPA, OMB, and SBA a more thorough understanding of the comprehensive scope of the reclamation and closure bonds, also known as Financial Assurance ("FA"), that hardrock mining companies provide – especially for mining projects for which the bond amount is determined using the Nevada Standardized Reclamation Cost Estimator ("SRCE") or an equivalent cost estimating tool.

Although the thoughtful and productive SBAR Panel discussion helped clarify EPA's progress in developing the proposed rule, it clearly revealed that the draft rule is still a work in progress. As described in Pershing Gold's previously submitted comments, EPA still needs to provide crucial information to the SERs about the formula and the FA reductions based on existing state and federal regulatory and

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FA programs in order for the SERs to complete the analysis of how the proposed CERCLA 108(b) rule will impact small businesses.

These comments supplement Pershing Gold's previously submitted correspondence dated July 7, 2016 and August 29, 2016. We incorporate by reference and reiterate as though fully set out herein these previously submitted comments. For your convenience, copies of our July 7 and August 29 correspondence are included herein as Attachments I and II.[1]

II. Nevada-Style FA Prevents Future Unfunded CERCLA 107 Liabilities

Towards the end of our meeting, EPA explained its position that a CERCLA 108(b) rule is warranted because today's mines could incur future unfunded CERCLA Section 107 response liabilities. It appears that EPA's premise is based on an incomplete understanding of the scope of FA required under BLM's, USFS', Nevada's regulations[2]. As the SERs emphasized, the overarching purpose of BLM's, USFS' and Nevada's FA requirements is to provide sufficient short-term and long-term (if necessary at a given site) resources to ensure adequate operational and post-closure monitoring to determine whether any releases are occurring, remediate a release in the event the monitoring data detect a release, close and reclaim the site, and to manage the site in a manner that prevents environmental damage both during and after operation.

BLM's 43 CFR § 3809 regulations, USFS' Part 228A regulations, and Nevada's NAC 445A.350-447 and NAC 519A.010-415 mining regulatory and FA programs minimize the risk of a release and provide regulators with cradle-to-grave Mining Lifecycle FA that covers the operational, closure, and post-closure phases of the mining lifecycle. These regulations include monitoring, reporting, and quarterly agency inspections[3] and FA that must be updated whenever requested by BLM or

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[1] Attachment II is the final version of Pershing Gold's August 29, 2016 preliminary comments.

[2] Because my expertise focuses mainly on BLM's, USFS', and Nevada's requirements my comments will discuss these programs. However, my comments also apply to other states that use the NV SRCE or an equivalent reclamation cost estimating protocol.

[3] The Nevada Division of Environmental Protection/Bureau of Mining Regulation and Reclamation ("NDEP") and BLM conduct quarterly inspections for all mines that use sodium cyanide as a processing reagent. *See* 43 CFR § 3809.600(b) and NAC 519A.395.

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USFS, (*see* 43 CFR § 3809.552(b) and 36 CFR 28.13) or at least every three years pursuant to NAC 519A.380.[4]

These regulatory and FA programs prevent modern mines from becoming future Superfund sites in two ways. First, the regulations are designed to minimize the potential for a release and to provide effective early warning systems (monitoring data) to detect a potential release. Secondly, regulators have adequate regulatory authority to implement adaptive management and respond to monitoring data that indicate a potential release, and compel operators to remediate a release. In the case of an abandoned site where the operator has forfeited the bond, agencies have substantial FA with which to remediate a release. Additionally, BLM's regulations at 43 CFR § 3809.598 give BLM cost recovery authority that deems operators and mining claimants as responsible parties who are fully liable to reimburse BLM for the costs to reclaim a site if the FA is insufficient.[5]

Under today's regulatory and FA framework, there is virtually zero risk that regulators will not have adequate regulatory authority and FA with which to respond to a release. The existing Nevada, Nevada-style, BLM, and USFS programs provide cradle-to-grave regulatory authority and FA that are the functional equivalent to CERCLA 108(b). Thus the need for additional FA has been eliminated because these existing state and federal programs reduce the "degree and duration of risk" associated with hardrock mining to nil. There is no justification for duplicative FA under CERCLA 108(b).

The Nevada NAC 445A and NAC 519A regulations provide a useful example of how modern regulations already address the intended scope of the CERCLA 108(b) FA directive[6]. Compliance with NAC 445A and NAC 519A requires detailed and site-

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[4] This FA updating requirement guarantees that all operating mines – even mines that were first developed in the 1990s – have an up to date bond that calculates current reclamation costs based on today's regulatory standards and costs. Moreover, every time an operator modifies a project permit, the FA must be updated to reflect the modified project.

[5] **§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 §3809.116. 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.

[6] BLM and USFS Plans of Operations for mining projects include similar requirements.

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specific operational and post-closure monitoring requirements that provide operators and regulators with real-time data to verify that all of the mine site's environmental controls are functioning properly.

For example, the Nevada Water Pollution Control Permits ("WPCP") issued pursuant to NAC 445A.350-447 include the requirement for an operator to take frequent measurements of solution levels in pad and pond leak detection systems that serve as an early-warning system to let operators and regulators know if the primary liner is leaking[7]. Accumulation of solution in excess of daily, monthly, or quarterly thresholds established as conditions in the WPCP requires an operator to notify the agencies and develop a response plan to locate and repair the defect in the primary liner.

Another monitoring requirement is quarterly sampling of upgradient and downgradient monitoring wells and the submittal of quarterly monitoring reports to transmit the sampling results to the agencies. The monitoring reports must include graphs showing water quality trends over time so that NDEP can readily assess whether groundwater is being adversely impacted by a potential release of a contaminant from a mine, mine waste disposal, or mineral processing facility. The FA instrument for each mine must include post-closure monitoring costs, including costs for monitoring well sampling and reporting, to verify that contaminants are not being released from the site (or in the case of a site with a documented contaminant plume, that the plume is not migrating downgradient and is being properly treated.)

There are examples of Nevada mines where groundwater monitoring data have indicated a release of contaminants[8]. It would be instructive for EPA to discuss the releases at these sites with NDEP, BLM, and USFS to determine how the agencies have required the current operators of these sites to implement remedial activities and in some cases establish long-term FA instruments to provide the necessary financial resources for the agencies to operate the system(s) designed to address the contamination.

As a result of the monitoring, reporting, and quarterly inspection requirements, it is very difficult to envision a realistic situation in which a problem at a Nevada mine

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[7] Solutions detected in leak detection systems indicate a leak in the primary (upper liner) may have occurred; it does not mean a release to the environment has occurred because the secondary (lower) liner provides containment of the detected solution.

[8] Most of these are older sites that were not designed with they types of liners and other environmental controls that are now required.

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could go undetected and unreported, where regulators would not require the operator to respond to the problem, or where regulators would not use the FA for an agency-led response at an orphaned site. Therefore the probability of a site creating CERCLA Section 107 liability is extremely low. Consequently, EPA's justification for the CERCLA 108(b) FA program is misinformeded – at least for mines operating on BLM- or USFS-administered mines and for mines operating on either public or private lands in Nevada (and in states with equivalent regulations and FA programs).

Similarly, it is hard to imagine how claims for Natural Resources Damage (NRD) or a situation requiring a Human Health Assessment (HHA) could arise at a currently operating Nevada mine. The Nevada SRCE provides state and federal regulators with sufficient funds to manage process solutions during an unanticipated emergency, including site abandonment, or to respond to a release that could occur due to an extreme event or a natural disaster such as an earthquake or a storm event exceeding the design storm criteria. The numerous environmental safeguards required to operate a Nevada mine on public or private land effectively eliminate the circumstances in which a NRD claim could develop or a risk to human health to occur that would warrant a HHA. Consequently, the CERCLA 108(b) FA should not include a fixed amount or any requirement for NRD or HHA because there is very little risk of NRD to occur or for a site to pose a risk to human health.

III. Why the Detailed and Site-Specific SRCE Provides a Superior FA Determination than EPA's FR Methodology

EPA's August 26, 2016 document entitled "Eleven Financial Responsibility Calculations Based on EPA's Approach" (updated on August 29th) presented the SERs with a glimpse into the model that EPA will use to calculate Financial Responsibility ("FR Model") for the CERCLA 108(b) program. This document presented eleven unidentified small entity mining projects and showed the results of the model's calculation of FR for thirteen CERCLA Response Categories. As discussed in more detail in Section VII, this partial disclosure of the FR Model is insufficient for the SERs to understand how the CERCLA 108(b) will affect their businesses.

Based on the partial disclosure of the FR Model, it became apparent during the SBAR Panel discussion that the FR Model uses a simplistic, one-size-fits-all approach that is inferior to the detailed and site-specific approach of the Nevada SRCE and other SRCE-equivalent cost estimating tools. For example, Ron Rimelman, NovaGold Resources Inc. Vice President Environment, Health, Safety, & Sustainability, made a comment about the importance of considering truck size in determining bond costs. There was not sufficient time to discuss why that level of detail is important, but it was apparent that the FR Model does not consider

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critically important site-specific information in determining a site's FA responsibility. Selecting properly sized equipment for the various earthworks tasks to reclaim a site (i.e., recontouring, spreading growth medium, reseeding, etc.) is a critically important cost factor. The SRCE costs are based on equipment type, size, capacity, and the manufacturer's productivity factor for each specific piece of equipment. This analysis illustrates the type of detailed, site-specific information required to provide realistic estimates of reclamation and closure costs that stands in marked contrast to EPA's simplistic and one-size-fits FR Model.

The Nevada SRCE represents years of the collective expertise of mining industry specialists and regulators at NDEP, BLM, and USFS who developed this reclamation, mine closure, and post-closure cost calculation tool that accurately represents the factors and level of detail that need to be considered in calculating a reliable reclamation cost estimate. This widely adopted software is used in mining jurisdictions worldwide and represents a state-of-the-art approach to calculating mine reclamation, closure, monitoring, and post-closure costs. Moreover, the Nevada SRCE provides comprehensive FA for the thirteen CERCLA Response Categories enumerated for the eleven mines as shown in Table 1 attached to this letter.

EPA's FR Model is far too simplified and generalized to yield a comparable result and will produce inaccurate FR calculations that will either overestimate or underestimate the FR requirement. EPA should abandon its FR Model and adopt a SRCE-style cost estimating tool that would produce much more accurate, reliable, and comprehensive cost estimates for each of the thirteen CERCLA Response Categories listed for the eleven mine examples.

EPA's one-size-fits-all FR Model is reminiscent of how reclamation costs were calculated 20 to 25 years ago when agencies based reclamation costs on very basic factors like dollars per acre of disturbed lands or gallons per minute of solution to be managed. It is indeed ironic that EPA has chosen the Formosa Mine in Oregon as one of two examples of a "modern" mine that justifies the need for CERCLA 108(b) FA. Oregon regulators calculated the inadequate FA for this mine on a simplistic, one-size-fits all dollars per acre of disturbance basis, which appears to be similar to EPA's current FR Model. Compared to the SRCE and SRCE-style site-specific and detailed reclamation cost estimating methodologies, EPA's FR Model is a giant step backwards in calculating reclamation and closure costs.

IV. Water Treatment, and Short- and Long-term O&M

The FA calculations for the eleven example mines did not give CERCLA 108(b) FA reductions for water treatment or short-term O&M costs for most of the eleven mines and did not reduce the CERCLA 108(b) liability for long-term O&M at any of

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the eleven mines. EPA explained that the permits for these sites were still being reviewed and that these factors are still being evaluated. Because the Nevada SRCE clearly includes all three factors, these factors should be fully credited for sites that have bonds calculated with the SRCE or a SRCE-equivalent FA cost estimating tool. The resulting CERCLA 108(b) FA amount should be zero for these sites.[9] It is suggested that EPA take a closer look at the actual SRCE worksheets and supporting documentation to evaluate the presence and adequacy of these factors rather than relying on narratives in the permit documents. EPA should also discuss these examples with the state regulators where the eleven sites are located. Additionally, Jeff Parshley, the SERs' Helper, developed the Nevada SRCE in conjunction with the NDEP and could be consulted as another expert in how the SRCE determines the necessary FA amount for water treatment and short- and long-term O&M. Table 1 provides a list of the BLM and Nevada regulations provisions that specifically deal with water treatment and short- and long-term O&M.

V. EPA Lacks Hardrock Mining Expertise

During her presentation on September 10, 2016 at the Nevada Mining Association convention, Ms. Alexis Strauss, Acting Regional Administrator, Pacific Southwest, U.S. Environmental Protection Agency, stated a couple of times during her presentation that the Pacific Southwest EPA Region does not have much mining expertise. The lack of EPA's expertise with mining – despite the fact that the Pacific Southwest Region is one of the most important U.S. mining regions – is a compelling reason why EPA should rely on the States', BLM, and USFS mining programs because these regulators have far more expertise with FA for mining than EPA.

EPA's general lack of expertise with hardrock mining is reflected in EPA's FR Model. As discussed above, the simplistic one-size-fits-all FR Model will not yield accurate reclamation cost estimates. A reliable reclamation cost estimates must be based on site-specific factors including but not limited to site geology, topography, climate, mine design, and operational and closure parameters. Because no two mines are the same, a simplistic, uniform formula will produce inaccurate cost estimates that may grossly underestimate or overestimate the likely reclamation and closure costs. State regulators, BLM, and USFS have the necessary expertise

[9] Pershing Gold's August 29, 2016 document assumed that the eleven mines did not include any currently operating Nevada mines based on the fact that none of the eleven mines showed a zero for long-term O&M, and some didn't show zeros for water treatment and short-term O&M.

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and are in the best position to assess these factors and develop site-specific reclamation cost estimates.

VI. EPA's Financial Assurance Study

On September 2, 2016, EPA provided the SERs with its August 25, 2016 FA market analysis entitled "CERCLA 108(b) Hardrock Mining and Mineral Processing Evaluation of Markets for Financial Responsibility Instruments, and the Relationship of CERCLA 108(b) to Financial Responsibility Programs of Other Federal Agencies" ("FA Market Study"). EPA should have provided the FA Market Study to the SERs prior to the August 31 SBAR Panel so the study's findings could have been one of the topics discussed that day. Had the SERs been given the opportunity to discuss the FA Market Study during the SBAR Panel, Pershing Gold and other similarly situated SERs with no revenue stream or credit rating would have explained that the FA Market Study is not applicable to this subset of SERs because we are unlikely to be able to qualify for the FA instruments evaluated in the study.

Many small entities like Pershing Gold would likely have to provide a cash bond or possibly a surety bond. However, even if surety bonds were an available option, they would probably require substantial cash collateral (plus annual premiums) making the cash requirements for CERCLA 108(b) FA very burdensome. At this point it is impossible for Pershing Gold to quantify this burden without knowing whether the FR Model will provide full credit for projects that have already provided FA to the State and federal regulators (BLM and/or USFS) that complies with the NV SRCE.

Just as EPA held the SBAR Panel prematurely, prior to providing the SERs with all of the information they needed to evaluate the impact on small businesses, EPA's FA Market Study is also premature because the details of the FR Model EPA will use to calculate FA requirements have not been fully defined. Obviously, FA market capacity will be significantly influenced by the aggregate amount of the required CERCLA 108(b) FA. The extent to which operators will be given full credit for the environmental controls and existing FA already provided remains unknown — especially for long-term O&M[10].

The FA Market Study acknowledges that the scope of the FA reductions needs to be taken into account. In order for this study to be responsive to the directive in the FY

[10] None of the eleven small mining examples described in the EPA's PowerPoint received FA reduction for long-term O&M despite the fact that FA requirements calculated using the NV SRCE clearly include substantial monies for long-term O&M.

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2016 Conference Committee Report that requested the EPA FA Market Study, EPA must revise this study once the FR Model and scope of the FA reductions have been finalized. The Committee directed EPA to explain how the CERCLA 108(b) rule will avoid duplicating FA requirements that are already required by other federal agencies (e.g., BLM and USFS). This explanation is a critical component of the FA Market Study.

Companies that can qualify for the FA instruments described in EPA's FA Market Study should take no comfort in the study's findings, which state there is limited market capacity for underwriting "volatile business lines" – which includes mining. The study found there is a great deal of uncertainty in predicting the market capacity for CERCLA 108(b) FA instruments:

> "At this time it is not possible to predict the exact market for these instruments in response to EPA's CERCLA 108(b) regulations"... "[T]here may be softening of the underwriting of traditionally volatile lines of business, including environmental liability and mining…Such uncertainty makes it exceedingly difficult to make inferences or predictions from the data as to future market trends and capacity[11]…It is important to keep in mind that insurers and sureties will continue to be wary of business lines that are recognized as volatile (as the hardrock mining industry could be characterized)."[12]

The FA Market Study estimates that there may be as much as $600 million of market capacity for environmental insurance and $5 billion for surety coverage, resulting in a combined market capacity of $5.6 billion potentially available to respond to a future CERCLA 108(b) FA requirement. Depending on the scope of the FA reductions allowed in the FR Model, this might not be enough to cover the required FA under the rule. For example, using the 184 operations[13] that EPA has identified for its Regulatory Impact Analysis as a surrogate number for the universe of facilities that will be subject to the CERCLA 108(b) rule, roughly $30.5 million would be available per facility, ($5.6 billion of market capacity divided by 184

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[11] In January 2016, one of the largest underwriters of environmental liability insurance to cover large-scale and long-term environmental risks (AIG) announced that it would no longer offer environmental impairment liability coverage. EPA's research found that "the marketplace is continuing to evaluate the impact of this decision."

[12] Wells Fargo cautioned EPA: "Energy risks, power and utility risks, and mining risks: these industries have significantly less capacity available to them, with carriers generally not willing to write more than a one- or two-year term."

[13] See Slide 15 of EPA's August 23, 2016 presentation.

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facilities). As shown in EPA's August 29, 2016 presentation for the eleven small entity examples, four of the eleven facilities have an estimated total FA requirement greater than $30.5 million.

Slide 46 of EPA's August 23, 2016 presentation also suggests that there may not be sufficient market capacity. This slide, which describes one small entity facility and two large entity facilities, shows an aggregate FA responsibility for these three facilities of $625 million after reductions for existing FA and environmental controls. These three example facilities consume roughly nine percent of the $5.6 billion estimated market capacity but constitute only about 1.6 percent of the universe of facilities considered for the regulatory impact analysis that represent a surrogate of the number of facilities that would be regulated under CERCLA 108(b). Based on this analysis, there could be a significant shortfall in FA market capacity to respond to the CERCLA 108(b) rule.

VII. Costs to SERs

Regrettably, EPA has not provided sufficient information about the FR Model to enable me to evaluate the financial impact of the proposed CERCLA 108(b) rule on Pershing Gold. EPA's assertion in Ms. Lanelle Wiggin's September 14, 2016 email that EPA has provided the SERs with adequate information for us to estimate how the proposed rule will affect small entities is incorrect. We have only been provided a preview of EPA's FR Model; we do not know the details of how the model would be applied to a specific site. Because the identity of the eleven mine examples is not revealed, it is not possible to compare Pershing Gold's Relief Canyon Mine in Pershing County, Nevada to these mines or to make any judgments about how the EPA would use the FR Model to evaluate the CERCLA 108(b) FA requirement for Pershing Gold's mine.

By withholding critical information about the FR Model, EPA has prevented the SERs from fulfilling our primary role as SERs, which is to provide the SBAR Agencies with a fact-based assessment of how the proposed rule would impact us. Consequently, the SBAR Panel is procedurally flawed.

Using the incomplete information provided to date by EPA, it is apparent that the impact of the proposed CERCLA 108(b) rule on Pershing Gold and other SERs could potentially be very onerous. None of the eleven small entity examples had a FR of zero, with the envisioned amounts ranging from $950,000 for Mine F, an underground mine[14] to $58.3 million for Mine D, a surface mine. These amounts

[14] EPA should verify that Mine F is an actual mining operation and not a small exploration project. Mine F appears to be a small underground mine with no waste

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would be in addition to the existing FA required by state and federal regulators for these sites.

If the CERCLA 108(b) rule establishes FA requirement similar to the FR shown in the eleven example mines, the impact on Pershing Gold could be quite detrimental. We would likely have to provide substantial cash to collateralize a surety or an insurance policy – if such instruments would be available to small entities like us with no revenue or operating history. The most likely scenario is that Pershing Gold would have to use cash to satisfy the CERCLA 108(b) FA requirement, which could significantly impact the financial viability of the Relief Canyon Mine and potentially render it uneconomic depending on the amount of required CERCLA 108(b) FA.

VII. Recommended Alternative: EPA Should Programmatically Exempt BLM, USFS, and States that Use the Nevada SRCE or Comparable Tools from the Section 108(b) Rule

The SERs have been asked to provide the SBAR Panel with recommended alternatives to the proposed rule to reduce the costs and regulatory burden to small entities. In evaluating alternatives, EPA must comply with the CERCLA Section 108(b) directive to develop a rule in response to the "degree and duration" of risk. As explained above, the existing Nevada, BLM, USFS, and other state programs substantially minimize the degree and duration of risk to a level at which there is no longer a need for CERCLA 108(b) FA. EPA must acknowledge that as a result of the current state and federal regulatory and FA framework for mining, there are minimal risks of future CERCLA response costs for hardrock mining operations. Therefore EPA must not base a CERCLA 108(b) FA program using anachronistic examples of CERCLA releases or response costs from legacy (i.e., pre-regulation) and older mines that are not representative of current regulatory and FA requirements.

Recognizing the strength and comprehensive nature of BLM's, USFS', Nevada's, and other states' regulatory and FA programs, EPA should evaluate a Programmatic Exemption Alternative to its current approach and FR Model. The Programmatic Exemption Alternative would involve conducting a programmatic due diligence effort to evaluate BLM's, USFS', Nevada's, and other states' regulations and FA requirements to identify those programs that provide cradle-to-grave, Mining Lifecycle FA. Mining Lifecycle FA programs cover all aspects of CERCLA 108(b) and are consequently the functional equivalent of CERCLA 108(b).

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rock or on-site milling or other processing activities, which is a very unusual situation and not at all representative of most underground mining situations

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Based on the findings of this due diligence evaluation, the federal and state programs that provide cradle-to-grave, Mining Lifecycle FA should be categorically exempted from the CERCLA 108(b) rule. In the event this due diligence reveals gaps in some state programs, EPA should give these states an opportunity to fill the gaps. Alternatively, EPA could write a surgical rule that fills identified gaps in the rules for specific states. The Programmatic Exemption Alternative would be much more efficient and save considerable taxpayer dollars compared to EPA's current FR Model and approach that evaluates each mine on a project-by-project basis.

I believe that the findings of this programmatic evaluation would determine that the Nevada, BLM, and USFS Mining Lifecycle FA programs qualify for exemption from the CERCLA 108(b) rule because they provide enforceable regulatory mechanisms and FA for the thirteen CERCLA Response Categories enumerated for the eleven example mines. Table 1 lists the specific citations to BLM's and NDEP's regulations that pertain to each of the thirteen CERCLA Response Categories and shows the SRCE tab or tabs that provide detailed and site-specific cost estimates for each of the thirteen CERCLA Response Categories[15]. (The BLM and NDEP regulations also give full consideration to each of the activities and features listed in Slide 28 of EPA's August 23, 2016 PowerPoint).

The Programmatic Exemption Alternative should also evaluate how the states, BLM, and USFS have used their expertise and authority to expand and refine their FA programs in response to developing situations. As illustrated in Figure 1 (*see* Page 14), the FA held by NDEP, BLM, and USFS for Nevada mines has increased dramatically in the last eleven years. In 2005, NDEP, BLM, and USFS cumulatively held $721 million of FA; today these agencies have $2.66 billion of FA. This nearly four-fold increase[16] in FA in the last eleven years clearly demonstrates that NDEP, BLM, and USFS have continuously refined and improved their FA programs by adjusting the required bond amounts based on their expertise and ability to quickly fill any identified gaps or shortfalls on a project-by-project basis as well as programmatically.

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[15] Due to time constraints, Table 1 does not include the equivalent USFS citations that govern the thirteen CERLCA Response Categories.

[16] Although some of the FA increase can be attributed to the development of new mines or expansion of existing m
ines, the rate of FA growth significantly exceeds new and expanded mine development. Much of the increase in required FA is attributable to costs for interim fluid management, heap leach drain down, process fluid stabilization, and mine-impacted water.

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Given, EPA's admission that it lacks expertise in hardrock mining, it is clear that NDEP, BLM, USFS, and other state programs are in a far better position to achieve continuous improvement in their regulatory and FA programs. This is another compelling reason why EPA should select the Programmatic Exemption Alternative for its proposed CERCLA 108(b) rule and exempt those programs that provide Mining Lifecycle FA from CERCLA 108(b).

Finally, in evaluating alternatives to the proposed rule, EPA must comply with the statutory directive in establishing CERCLA 108(b) that the rule be commensurate with the degree and duration of risk. It also must be consistent with Congress' broad intent pertaining to mining and mine waste management. As discussed in Pershing Gold's August 29, 2016 comments (see Attachment II, Pages 13 – 15), EPA acknowledged in its July 3, 1986 Regulatory Determination for Wastes from the Extraction and Beneficiation of Ores and Minerals (51 FR 24496-01), the following Congressional directives pertaining to the regulation of mine wastes:

1. Mine wastes are not hazardous waste pursuant to the 1980 Bevill Amendment;

2. Any requirements necessary to protect human health and the environment should consider the existing Federal and State mining waste programs and avoid duplicating other existing state and federal regulations;

3. Additional regulations may not be necessary if other state and federal regulations already control risks; and

4. EPA must consider both the cost and impact of regulations in deciding whether they are warranted because Congress believes it is important to maintain a viable mining industry. Therefore, regulations that would cause widespread closures in the industry would be unwarranted.

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Growth of NV Financial Assurance Amounts for Hardrock Mining Operations 2005 - 2016

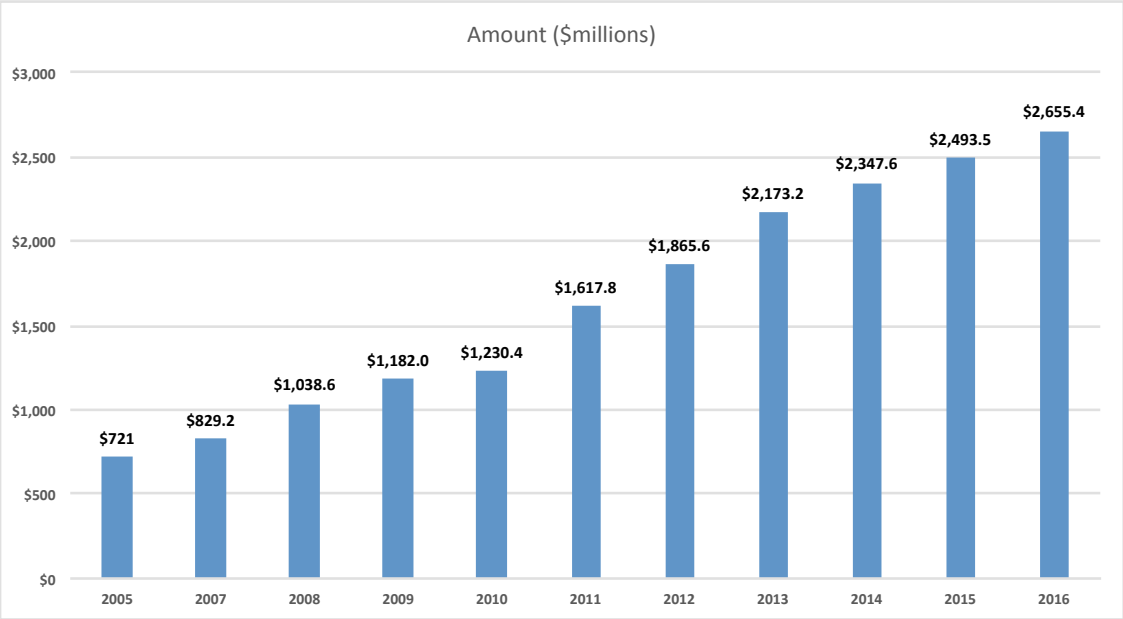

Figure 1. Cumulative Financial Assurance Held by the State of NV, BLM & USFS
Data provided by NV Division of Environmental Protection, 9/12/16

Fast-forward thirty years to 2016, and there have been no changes in congressional intent. Therefore the CERCLA 108(b) rule must be consistent with these directives. The recommended Programmatic Exemption Alternative would satisfy these concerns because it would avoid duplicating existing state and federal programs and would not impose additional burdensome costs on the mining industry that could threaten its viability and precipitate mine closures. There can be no doubt that the Programmatic Exemption Alternative would minimize costs to the SERs.

VIII. Conclusions

I would like to acknowledge the substantial efforts that EPA has devoted to developing materials for the SBAR Panel, reviewing the comments we have provided to date, and the opportunity to meet on August 31. I also very much appreciate EPA's determination that the CERCLA 108(b) rule will not apply to legacy sites and that the FR Model appears to be making an attempt to minimize duplication with existing state and federal FA programs by giving credit for some of

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the 13 CERCLA Response Categories listed for the eleven example mines where there is FA based on an enforceable regulatory mechanism.

Although I appreciate the opportunity to be a SER and to participate in the SBAR Panel, I am disappointed that EPA has withheld some information about the FR Model, which has prevented me from fulfilling my principal role as a SER, which is to provide the SBAR Agencies with an assessment of how the proposed rule will impact small entities like Pershing Gold. I agreed to be a SER with the understanding that the SBAR Panel would be a fully transparent process in which EPA would provide a full disclosure of its proposed rule for the SERs to evaluate. The SERs should have received adequate information from EPA on the proposed CERCLA 108(b) rule in order for us to provide the SBAR Agencies with informed advice on how the proposed rule will affect us. As stated in Section 5.7.5 of EPA's Regulatory Flexibility Act guidance document: "You should provide the SERs with enough information about the rule for them to be able to judge the likely impacts of the rulemaking on small entities."[17]

Unfortunately, EPA has ignored its own guidance document and has not provided the SERs with adequate information. Throughout the SBAR Panel process, the SERs made numerous requests to EPA for additional information. EPA has only partially responded to these requests. Consequently, the SBAR Panel process for the CERCLA 108(b) rulemaking is seriously flawed because it fails to comply with the SBAR Panel requirements under SBREFA[18]. Specifically, the SERs needed to review the full FR Model and a draft of the proposed rule to be able to provide the SBAR Agencies with the requested advice on how the proposed CERCLA 108(b) rule will affect small entities. U.S.C. 609(b)(4) required EPA to provide the SERs with this information. Without this information, the SERs cannot fulfill the very purpose of the SBAR Panel. The future opportunity that I and the other SERs will have to comment on the proposed rule does not cure the defects in the SBAR Panel process.

I remain committed to working with EPA, OMB, and SBA in a constructive fashion and believe the dialogue we have had to date has been productive. I would welcome

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[17] https://www.epa.gov/sites/production/files/2015-06/documents/guidance-regflexact.pdf

[18] *See* 5 U.S.C. 609(b)(4): "the panel **shall** review any material the agency has prepared in connection with this chapter, **including any draft proposed rule,** collect advice and recommendations of each individual small entity representative identified by the agency after consultation with the Chief Counsel, on issues related to subsections 603(b), paragraphs (3), (4) and (5) and 603(c); (bold emphasis added).

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any comments or questions about this letter, as well as Pershing Gold's July 7, 2016 and August 29, 2016 correspondence, and hope there will be additional opportunities for the SERs to interact with EPA, OMB, and SBA prior to publication of the proposed rule.

Sincerely yours,

/s/ Debra W. Struhsacker

Debra W. Struhsacker
Pershing Gold Corporation
Senior Vice President

Attachments: Table 1 Section 108(b) Response Category Equivalents in BLM's and Nevada's Regulations for Hardrock Mining

Attachment I: Pershing Gold's July 7, 2016
Attachment II: Final version of Pershing Gold's August 29, 2016 comments

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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.433.1 NAC 445A.434 NAC 445A.436 NAC 445A.438

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CERCLA 108(b) Response Category	BLM Regulations 43 CFR §3809	Nevada Regulations and SRCE Worksheet Tabs
		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) §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[6] §3809.595[7]	NAC 519A.345.4 NAC 519A.345.5 NAC 519A.270 generally and specifically NAC 519A. 270 (d)(1) NAC 445A.424 NAC 445A.431 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 Pond/Reservoir	§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[6] §3809.595[7]	NAC 519A.345.7 NAC 445A.433.1 NAC 519A.260 NAC 519A.270 generally and specifically NAC 519A. 270 (d)(1), (2) NAC 519A.295 NAC 445A.424 NAC 445A.433.1 NAC 445A.435 NAC 445A.438 NAC 445A.442 SRCE Process Ponds Tab Interim Fluid Management
Underground Mine	§3809.5 §3809.421[1] §3809.431(c)(1-7) [4]	NAC 519A.345.10 NAC 519A.260 NAC 519.270

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CERCLA 108(b) Response Category	BLM Regulations 43 CFR §3809	Nevada Regulations and SRCE Worksheet Tabs
	§3809.592[6] §3809.595[7]	NAC 519A.295 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, iii), §3809.431(c)(1) §3809.421[1] §3809.431(c)(1-7) [4] §3809.592[6] §3809.595[7]	NAC 519A.345.7 NAC 519A.260 NAC 519A.270 NAC 519A.295 NAC 445A.424 NAC 445A.433.1 SRCE Sediment and Drainage Control Tab
Interim O&M	§3809.116 §3809.401(b)(5) §3809.421[1] §3809.423[2] §3809.424(a), (b) [3] §3809.431(a) [4] §3809.592[6] §3809.595[7] §3809.598[8]	NAC 445A.440 NAC 519A.260 NAC 519A.270.16 NAC 519A.295 NAC 519A.350 NAC 445A.440 SRCE Monitoring Tab SRCE Construction Management Tab Heap Leach Draindown Estimator (HLDE) Process Fluid Cost Estimator (PFCE) Interim Fluid Management
Water Treatment	§3809.421[1] §3809.424(a), (b) [3] §3809.431(a), (c)(3) [4] §3809.552(c) [5] §3809.592[6] §3809.595[7] §3809.598[8]	NAC 519A.270 NAC 519A.295 NAC 519A.360 This line item is not specifically included in the SRCE, but there is unlimited potential in the SRCE to include infinite customized User Tabs specific to site needs or

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CERCLA 108(b) Response Category	BLM Regulations 43 CFR §3809	Nevada Regulations and SRCE Worksheet Tabs
		regulatory requirements. 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

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1 §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.

2 §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.

3 §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:

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(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.

6 §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;

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(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.

[8] §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 §3809.116[9]. 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.

[9] §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.

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ATTACHMENT I

Pershing Gold's July 7, 2016 Letter

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Sent via email

July 7, 2016

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Re: CERCLA 108(b) Financial Responsibility for the Hardrock Mining Industry SBREFA Pre-panel Outreach Comments

Dear Ms. Wiggins and Barr:

I. EPA Must Provide Key Information – EPA has Prematurely Convened the SBAR Panel

I very much appreciate the opportunity to participate as a Small Entity Representative ("SER") on the Environmental Protection Agency's ("EPA's") Small Business Advocacy Review ("SBAR") Panel. It is my understanding that the purpose of the SBAR Panel is to give Small Entities a specific and meaningful role during the rulemaking process as required under the Regulatory Flexibility Act as amended by the Small Business Regulatory Enforcement Fairness Act ("RFA/SBREFA"), for any rule that "…will have a significant economic impact on a substantial number of small entities." Based on the generic information EPA has provided to date on its proposed CERCLA 108(b) financial assurance program for the hardrock mining industry, ("Proposed Rule") there can be no doubt that the Proposed Rule will have serious impacts on Small Entities including small junior mining companies like Pershing Gold – as well as on large mining companies.

I stand ready and willing to participate in good faith as a SER in the SBAR Panel. However, it is presently very difficult if not impossible to fulfill my SER responsibilities as defined under SBREFA because EPA has not provided essential information about its Proposed Rule to allow me or the other SERs to make a complete assessment of the impact it will have on small entities.

Although I appreciated receiving the numerous state summaries and the information from the Federal Land Management Agencies ("FLMA") that EPA provided to the SERs on June 28th, most of the documents were drafts and all of them were written more than several years ago. (Some date back to 2010.) When I requested final documents in my June 30th email to EPA addressed to Ms. Lanelle Wiggins, she replied on July 1st that the agency did not intend to update or finalize any of these documents. The SERs need to see final, updated documents. It is inappropriate for the SERs to base our analysis on draft documents — just as it would be wrong for EPA to propose a rule on the basis of draft and out of date documents. In fact, I believe that a rule that is based on out of date, draft documents may be unlawful because it would not comply with the Federal Data Quality Act and EPA's Information Quality Guidelines, which require information disseminated to the public be accurate and reliable. EPA cannot meet this standard using out of date, draft documents.

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The 2010 BLM document provided on June 28th entitled "Working Draft for Review 10/13/2010, Summary of Bureau of Land Management Financial Responsibility Requirements Applicable to Classes of Hardrock Facilities" has raised an additional concern that the group of SERs that EPA selected for the SBAR Panel may not be congruent with the scope of the Proposed Rule. This 2010 document describes three sectors of hardrock mineral facilities that are the subject of CERCLA 108(b): 1) leasable hardrock minerals; 2) hardrock mining activities in the National Wilderness Protection Areas; and 3) locatable mineral facilities. EPA needs to ensure that the SERs convened for the SBAR panel represent all three sectors. Based on my knowledge of the mining industry, it appears that the SERs may not include representatives from the leasable hardrock mineral sector or those conducting mineral activities within National Wilderness Protection Areas. These mineral sectors need to be represented. It would be inappropriate for EPA to conduct the SBAR Panel without including at least one SER from all three sectors subject to the Proposed Rule.

Moreover, EPA must also provide detailed information about the existing regulatory processes and financial requirements in place for leasable hardrock minerals and hardrock mining activities in the National Wilderness Protection areas. The summary of these programs described in the above-cited 2010 document is insufficient.[1] The SERs need more information from the BLM about these programs – similar to the detailed presentations provided during the June 16 meeting pertaining to locatable minerals.

EPA has prematurely initiated the SBAR Panel process. EPA needs to delay the SBAR Panel process until it can provide the SERs with the information listed in Table 1 in order for us to be in a position to develop specific comments as we committed to do when we volunteered to be SERs.

First and foremost, EPA must provide the model it plans to use to calculate CERCLA 108(b) financial responsibility. Without having detailed information about this model, it is simply impossible to understand and comment upon the relationship between the Proposed Rule and the existing FLMA and state financial assurance programs. The June 28, 2016 draft deliberative document the EPA provided entitled "Mining Practices Currently Under Consideration for the Formula" does not satisfy the request to provide the model. The June 28th document is merely a short list of some engineering controls that are commonly used at modern, fully-regulated mines – but by no means is a complete list of the engineering controls used to protect the environment and prevent releases of hazardous substances. Moreover, this list provides no information on how these controls will be used as inputs to the model. EPA cannot use the June 28 list as a proxy to fulfill the SER's request for the model.

[1] As discussed below, there are several errors in the discussion of the locatable minerals program presented in the 2010 BLM summary. There may be similar errors in the discussions pertaining to leasable hardrock minerals and hardrock mining activities in the National Wilderness Protection areas, which highlights the need for more information including updated and finalized documents.

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Table 1 **Essential Information Required for the SERs to Provide Meaningful Comments to the SBAR Panel on the Proposed CERCLA 108(b) Rule**
1. The model EPA will use to calculate CERCLA 108(b) financial responsibility 2. The cost data, engineering data, and underlying formulas that the model will use or otherwise inform the model; a. Where did EPA obtain the costs and data? b. Is EPA using costs from Superfund cleanup of pre-regulated mines? 3. How is the HAA determined? a. Justify the proposed fixed amount when each mine site is unique? 4. How is the NRD percentage determined? a. Justify the proposed fixed amount when each mine site is unique? 5. List the BMPs being considered for model inputs to determine credit reductions in the amount of required financial assurance. 6. List the engineering controls being considered for model inputs to determine credit reductions in the amount of required financial assurance. 7. List the site features used as model inputs 8. Clarify when in the mining life cycle the CERCLA 108(b) financial responsibility instrument has to be provided a. Does it need to be provided before operations begin? 9. Is the amount of required financial assurance negotiable or appealable? 10. When could a CERCLA 108(b) financial assurance instrument be released? a. Can there be partial release? b. How long will it take after a facility closes to release the instrument? 11. Provide the financial assurance capacity study including information on who prepared the study a. Did the study evaluate collateral requirements b. What will EPA do if this study reveals that the financial assurance and insurance industries are unwilling or unable to provide financial assurance instruments pursuant to the Proposed Rule c. Did this study include a credit rating survey for the range of entities, including small businesses, which will be subject to the Proposed Rule. If so, please provide. 12. Demonstrate that the Proposed Rule does not duplicate the existing financial assurance requirements under federal and state laws and regulations. a. Identify with specificity any perceived gaps in the existing federal and state regulatory and financial assurance programs for hardrock mining that need to be filled with the Proposed Rule. b. Demonstrate that EPA is the right entity – rather than the Federal Land Management Agencies and the state agencies to fill those gaps. c. Show that the EPA has the necessary expertise to address any gaps or to administer the Proposed Program.

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II. Historical Overview – There is No Regulatory Void that Needs to Be Filled

Prior to developing the Proposed Rule, it is essential that EPA consider the historical context of the regulatory and financial assurance requirements for hardrock mines in 1980 when Congress enacted CERCLA and established the CERCLA 108(b) financial assurance requirement. At that time, there were few comprehensive financial assurance requirements in either state or federal regulations. Although the US Forest Service's ("USFS'") 36 CFR Part 228 Subpart A surface management regulations included financial assurance requirements. However because these regulations became effective in 1974, they were fairly new and therefore largely untested. The Bureau of Land Management's ("BLM's") 43 CFR 3809 surface management regulations for locatable minerals were not yet in effect – they became effective on January 1, 1981. In 1980, most state regulations had very limited – if any – financial assurance requirements. For example, Nevada's reclamation regulations, NAC 519A became effective in 1990. Given the lack of financial assurance requirements for hardrock mines in 1980, there was a regulatory void, which Congress directed EPA to fill when it enacted CERCLA 108(b). Had EPA acted in a timely manner to conduct rulemaking in response to the CERCLA 108(b) directive, we wouldn't be having this discussion today. However, that's not what happened.

Fast-forward 36 years to 2016 and the state and federal regulatory and financial assurance landscapes are very different than in 1980. Today, there is no regulatory void. To the contrary, as we heard on June 16, both BLM and USFS have effective and comprehensive financial assurance requirements that extend far beyond reclamation (i.e., earthworks and revegetation) and can include long-term financial assurance for sites where warranted. Similarly, the presentations from Nevada, Utah, New Mexico, and South Dakota provided ample evidence of the robust financial assurance programs established through one or more state regulatory programs in each state.

In light of the existing federal and state financial assurance programs, EPA's Proposed Rule is both anachronistic and redundant. BLM, USFS, and the states have filled the regulatory void with comprehensive programs. Indeed we heard from BLM that the agency holds $2.9 billion in reclamation bonds to cover the agency's costs to reclaim the active mines on BLM-administered lands. The many ways in which a new EPA financial assurance program would be duplicative, redundant, and therefore harmful to small entities is discussed in more detail below.

Recognizing that EPA must finally respond to the 36-year old directive to evaluate a financial assurance program for hard rock mining, EPA must tailor its response to fit current circumstances. Rather than build a new and duplicative financial assurance requirement out of whole cloth, as if it were still 1980, EPA must take a much more surgical approach and evaluate whether there are any gaps in the existing federal and state financial assurances that need to be filled. Secondly, EPA should evaluate the regulatory agency or agencies best suited to fill any identified gaps. The financial assurance programs that BLM, USFS, and the four western states described on June 16 clearly demonstrated that these agencies have the necessary expertise to administer their programs, and by analogy, respond to any identified gaps. These presentations also proved that financial assurance must be established on a site-by-site, project-by-project basis. A one-size-fits all, standardized bond amount – like that being considered by EPA – is completely inappropriate.

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III. The Four Requested SER Advice and Recommendation Elements

According to the June 9, 2016 pre-panel outreach materials EPA circulated to the SERs, "the RFA tasks the Panel with reviewing the material the Agency has available concerning the rulemaking, and collecting advice and recommendations from small entity representatives (SERs) on issues related to the following four elements:

1. Who are the small entities to which the proposed rule will apply?
2. What are the anticipated reporting, recordkeeping, and other compliance requirements of the upcoming proposed rule?
3. Are there any existing federal rules that may duplicate, overlap, or conflict with the regulation?
4. Are there any significant regulatory alternatives that could minimize the impact on small entities?

The remainder of this letter responds specifically to these four questions.

A. Who are the small entities to which the proposed rule will apply?

The answer to this question is highly dependent upon whether the model to determine financial assurance requirements under the Proposed Rule gives adequate credit for existing requirements under federal and state financial assurance rules so that no or little additional financial assurance is required. However, because EPA has not provided the information in Table 1, especially details about the model it will use to determine financial assurance requirements under the Proposed Rule, it is impossible to determine how or whether the Proposed Rule will affect small entities – as well as the rest of the mining industry.

As enumerated above, EPA is requesting information from the SERs on "existing federal rules that may duplicate, overlap, or conflict with the regulation." On June 16, EPA received detailed information from BLM, USFS, and four western states documenting that there are already comprehensive federal and state financial assurance requirements in place. Thus there is considerable potential for EPA's Proposed Rule to duplicate, overlap, and conflict with the existing requirements, which would be extremely problematic for small entities.

Ideally, EPA's evaluation of the existing federal and state financial assurance will find that these existing financial assurance requirements are sufficient to substantially reduce or even completely eliminate the application of the Proposed Rule, in which case the Proposed Rule would have a fairly small or even negligible impact on small entities operating on BLM- or USFS- administered federal lands and/or located in Nevada and other states that already have a comprehensive financial assurance program in place. Unfortunately the example mines EPA provided on Slides No. 27 and 28 in its June 9th presentation raises serious concerns that EPA has not recognized the scope of the existing financial assurance programs and intends to advance a Proposed Rule that will have a very onerous impact on small entities.

Additionally, EPA cannot complete the study that is underway to assess the capacity of third-party markets to underwrite financial responsibility instruments required by the CERCLA 108(b) rulemaking without first knowing the universe of small entities that will be affected by the Proposed Rule. Small entities that do not currently have a revenue stream from a producing mine

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will have substantially different ability to qualify for commercially available financial assurance instruments than other small entities with revenue sources. The draft study, which is examining both the current state and future outlook of the markets for financial responsibility instruments based on publically available and attributable data (from the US Treasury, GAO, Standard & Poor's, industry, and non-profit institutions), will not provide meaningful information about all small entities, some of whom do not have a Standard & Poor's credit rating.

During the June 9 conference call/meeting, EPA presented an example of the required financial assurance for a small mine and for two large mines. The statistics for the small mine – particularly the size of the open pit – compared to the other mine features (including having < 1,500 employees and producing $1 billion in revenue) would be more appropriately described as an imaginary mine rather than an example. Additionally, as discussed above, the credit rating scores shown for this company would not be applicable to some small entities. The resulting analysis is useless because EPA's envisioned financial assurance program does not fit the facts. Without the right facts, EPA will design a saddle for a Unicorn.

The outlandish parameters listed for the imaginary small mine "example" underscore EPA's lack of experience with or understanding of the hardrock mining sector – both big and small entities. Given EPA's obvious lack of expertise, the agency cannot and should not proceed with the Proposed Rulemaking. The task of determining, collecting, and enforcing financial assurance requirements should remain with BLM, USFS, and state regulatory agencies.

Using the imaginary small mine as an example, EPA's projected financial assurance requirement of $75 million would mean most small entities could never develop this mine in the first place. For mines that are already in production, the imposition of a new annual cost ranging from $4 million to $28 million could make the mine uneconomic and force it to close prematurely. Most mines – small or large – have narrow profit margins. Adding a new multi-million dollar financial assurance requirement would put some mines and mining companies out of business.

B. What are the anticipated reporting, recordkeeping, and other compliance requirements of the upcoming proposed rule?

It is impossible to answer this question at this time. As discussed throughout this letter, EPA has not provided sufficient information about the model and the model inputs to assess the reporting, recordkeeping and compliance requirements associated with the Proposed Rule.

C. Are there any existing federal rules that may duplicate, overlap or conflict with the regulation?

Based on the June 16 presentations made by BLM, USFS, Nevada, Utah, New Mexico, and South Dakota, it should be abundantly obvious to EPA that comprehensive and effective financial assurance programs are already in place on both the federal and state levels. There can be no doubt whatsoever that the Proposed Rule will duplicate, overlap, and conflict with these existing regulations.

EPA appears to hold the position that somehow the existing federal and state financial assurance programs deal solely with traditional reclamation and mine closure activities (e.g., recontouring

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and revegetating disturbed areas.) This position is incorrect. The existing regulatory requirements for hardrock mining go far beyond reclamation and closure and include many provisions designed to protect the environment. Consequently, they include measures to prevent releases of contaminants from operating and closed mines that would come under the CERCLA 107 hazardous substances definition.

The following is a detailed discussion of BLM's 43 CFR 3809 surface management regulations for hardrock mining ("3809 Regulations") to underscore the point that modern mining regulations focus on preventing environmental degradation, including the release of hazardous substances. As explained by Mr. Adam Merrill of BLM on June 16, the stated purpose of the 3809 Regulations is to: "Prevent unnecessary or undue degradation ("UUD") of public lands by operations authorized by the mining laws." 43 CFR § 3809.1(a). It is important to note that the 3809 Regulations include a broad definition of reclamation at 43 CFR § 3809.5 that goes far beyond earthworks and revegetation and clearly includes measures to prevent post-mining releases of hazardous substances:

> "*Reclamation* means taking measures required by this subpart following disturbance of public lands caused by operations to meet applicable performance standards and achieve conditions required by BLM at the conclusion of operations...Components of reclamation include, where applicable:
>
> **(1) Isolation, control, or removal of acid-forming, toxic, or deleterious substances;**
>
> (2) Regrading and reshaping to conform with adjacent landforms, facilitate revegetation, control drainage, and minimize erosion;
>
> (3) Rehabilitation of fisheries or wildlife habitat;
>
> (4) Placement of growth medium and establishment of self-sustaining revegetation;
>
> (5) Removal or stabilization of buildings, structures, or other support facilities;
>
> **(6) Plugging of drill holes and closure of underground workings; and**
>
> **(7) Providing for post-mining monitoring, maintenance, or treatment."**

The reclamation components shown in bold above are designed to prevent releases of hazardous substances such as processing chemicals and reagents, acid mine drainage, metal-bearing leachates, and petroleum products when mining is completed. Item No. 7 authorizes BLM to require long-term, post-mining financial assurance for monitoring, maintenance, and treatment such as water-quality treatment.

In order for BLM to deem a Plan of Operations technically complete, the operator must satisfy provide a reclamation plan consistent with the requirements in 43 CFR § 3809.401(b)(3) which include measures to prevent the release of hazardous substances including procedures for drill hole plugging; plans to isolate and control acid-forming, toxic, or deleterious materials; and post-closure management, which can include long-term financial assurance.

Plans of Operations must also include a detailed monitoring plan per 43 CFR § 3809.401(b)(4):

> "A proposed plan for monitoring the effect of your operations. You must design monitoring plans to meet the following objectives: To demonstrate compliance with the approved plan of operations and other Federal or State environmental laws and regulations, to provide early detection of potential problems, and to supply information that will assist in directing corrective actions should they become necessary. Where applicable, you must include in monitoring plans details on type and location of monitoring devices, sampling parameters and frequency, analytical methods, reporting procedures, and procedures to respond to adverse monitoring results. Monitoring plans may incorporate existing State or other Federal monitoring requirements to avoid duplication. Examples of monitoring programs which may be necessary include surface- and ground-water quality and quantity, air quality, revegetation, stability, noise levels, and wildlife mortality."

The objective of such monitoring plans under the 3809 Regulations is to provide early detection of any environmental issues, including a release of potential contaminants to surface water or groundwater or to the air. These monitoring provisions in the 3809 Regulations clearly address the potential release of a hazardous substance both during and after mining.

The 3809 Regulations also require Plans of Operations to include an Interim Management Plan per 43 CFR § 3809.401(b)(5) to address site management in the event of a temporary shut down. An Interim Management plan requires operators to provide plans for isolating or controlling toxic or deleterious materials during temporary closure periods. This is another component of the 3809 Regulations that prevent the release of hazardous substances.

The environmental performance standards at 43 CFR § 3809.420 establish several additional requirements that prevent the release of hazardous substances. First, 43 CFR § 3809.420(a)(6) requires compliance with other state and federal laws. This means that all mining operations on BLM-administered lands much comply with the provisions of the Clean Water Act, the Clean Air Act, the Resource Conservation and Recovery Act ("RCRA"), and all other pertinent federal laws. This requirement that mines must comply with other federal environmental protection laws is very important in the context of the Proposed Rule because it means there can be no unauthorized releases of contaminants or hazardous substances to surface water, ground water, or to the air.

Secondly, the 43 CFR § 3809.420 environmental performance standards specifically reference several federal environmental laws. 43 CFR § 3809.420(b)(4) requires compliance with the Clean Air Act. 43 CFR § 3809.420(b)(5) requires compliance with the Federal Water Pollution Control Act. 43 CFR § 3809.420(b)(6) requires compliance with RCRA:

"(6) *Solid wastes.* All operators shall comply with applicable Federal and state standards for the disposal and treatment of solid wastes, including regulations issued pursuant to the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act (42 U.S.C. 6901 *et seq.*). All garbage, refuse or waste shall either be removed from the affected lands or disposed of or treated to minimize, so far as is practicable, its impact on the lands."

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This specific reference to RCRA means that mining operations must comply with all applicable aspects of RCRA Subtitles C and D. In this manner, the 3809 Regulations already explicitly govern the potential release of hazardous substances associated with solid waste handling at mine sites by requiring compliance with RCRA.

The 43 CFR § 3809.420(b)(11) environmental performance standard includes the following very specific requirements governing acid mine drainage and metal-bearing leachates:

> "(11) *Acid-forming, toxic, or other deleterious materials.* You must incorporate identification, handling, and placement of potentially acid-forming, toxic or other deleterious materials into your operations, facility design, reclamation, and environmental monitoring programs to minimize the formation and impacts of acidic, alkaline, metal-bearing, or other deleterious leachate, including the following:
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> (i) You must handle, place, or treat potentially acid-forming, toxic, or other deleterious materials in a manner that minimizes the likelihood of acid formation and toxic and other deleterious leachate generation (source control);
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> (ii) If you cannot prevent the formation of acid, toxic, or other deleterious drainage, you must minimize uncontrolled migration of leachate; and
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> (iii) You must capture and treat acid drainage, or other undesirable effluent, to the applicable standard if source controls and migration controls do not prove effective. You are responsible for any costs associated with water treatment or facility maintenance after project closure. Long-term, or post-mining, effluent capture and treatment are not acceptable substitutes for source and migration control, and you may rely on them only after all reasonable source and migration control methods have been employed."

Thus, 43 CFR § 3809.420(b)(11) already explicitly governs the potential release of mine effluents containing contaminants (e.g., hazardous substances). Moreover, the 3809 Regulations require operators to provide long-term management of leachates and long-term financial assurance to cover management and treatment costs. Consequently, there is no regulatory gap that EPA needs to fill with a Proposed Rule to govern potential releases of effluents containing hazardous substances from mine sites on BLM-administered lands that are subject to the 3809 Regulations.

The 43 CFR § 3809.420(b)(12) environmental performance standard dictates that leaching operations and tailings impoundments must be designed with low-permeability liners specifically to minimize the potential for a release of hazardous substances to the environment:

> "(12) *Leaching operations and impoundments.* (i) You must design, construct, and operate all leach pads, tailings impoundments, ponds, and solution-holding facilities according to standard engineering practices to achieve and maintain stability and facilitate reclamation.
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> (ii) You must construct a low-permeability liner or containment system that will minimize the release of leaching solutions to the environment. You must monitor

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to detect potential releases of contaminants from heaps, process ponds, tailings impoundments, and other structures and remediate environmental impacts if leakage occurs.

(iii) You must design, construct, and operate cyanide or other leaching facilities and impoundments to contain precipitation from the local 100-year, 24-hour storm event in addition to the maximum process solution inventory. Your design must also include allowances for snowmelt events and draindown from heaps during power outages in the design.

(iv) You must construct a secondary containment system around vats, tanks, or recovery circuits adequate to prevent the release of toxic solutions to the environment in the event of primary containment failure.

(v) You must exclude access by the public, wildlife, or livestock to solution containment and transfer structures that contain lethal levels of cyanide or other solutions.

(vi) During closure and at final reclamation, you must detoxify leaching solutions and heaps and manage tailings or other process waste to minimize impacts to the environment from contact with toxic materials or leachate. Acceptable practices to detoxify solutions and materials include natural degradation, rinsing, chemical treatment, or equally successful alternative methods. Upon completion of reclamation, all materials and discharges must meet applicable standards.

(vii) In cases of temporary or seasonal closure, you must provide adequate maintenance, monitoring, security, and financial guarantee, and BLM may require you to detoxify process solutions."

The Nevada regulations (NAC 445A.350 - NAC 445A.447) require the use of similar engineering controls as 43 CFR § 3809.420(b)(11) and 43 CFR § 3809.420(b)(12) to meet a zero-discharge performance standard for process solutions. These controls include liners to contain process solutions, detailed operational and post-closure performance monitoring, storm water management, process fluid management in the event of a power outage or site abandonment, and mine waste characterization to determine the potential for acid generation and metals leaching. Zero discharge is defined as: "…the standard of performance for the protection of surface waters which requires the containment of all process fluids." (NAC 445A.385)

Thus, 43 CFR § 3809.420(b)(12) as well as the Nevada regulations already explicitly mandate the use of numerous engineering controls to minimize the potential for a release of contaminants (e.g., hazardous substances) and financial assurance to provide the necessary funds for regulators to maintain and operate these controls if necessary. Once again, there is no regulatory gap that EPA needs to fill with a Proposed Rule to govern potential releases of effluents containing hazardous substances from mine sites on BLM-administered lands that are subject to the 3809 Regulations and other mine sites on private land in Nevada subject to the NAC 445A regulations.

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This level of analysis of the 3809 Regulations should have been included in the draft 2010 EPA document referenced above describing BLM's regulatory program. This draft document includes the following incorrect statements:

> Page 9: "Under BLM regulations, financial responsibility does not cover potential remedial or removal actions due to pre-existing releases of CERCLA hazardous substances, or future clean-up costs" is an oversimplification. The 3809 Regulations would include financial assurance for projects in which the re-mining or clean-up of historic sites is integrated into a Plan of Operations.
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> Page 10: "BLM regulations do not explicitly provide for the inclusion of any contingency in the calculation of financial responsibility amount." The required financial assurance for mines on BLM-administered lands in Nevada include interim fluid management costs to provide BLM with the necessary funds to keep the pumps running to manage tailings impoundments and heap leach facilities to prevent a release of process solutions in the event of an abrupt mine closure or bankruptcy. This most certainly is a contingency-style cost that is a requirement for mines in Nevada.
>
> Page 10: "plans are subject to a public comment period for 30 days prior to plan approval." This is a serious oversimplification. Plans of Operation are subject to a NEPA analysis – either an Environmental Assessment or an Environmental Impact Statement. The review times for a Plan of Operation are dictated by NEPA – not BLM's 3809 Regulations. NEPA review times vary depending on whether the agency has prepared an Environmental Assessment or an EIS.

It should also be noted that the underlying premise of the Nevada reclamation cost estimate presumes a contingency – that the operator has abandoned the site and that state and/or federal regulators must step in to prevent environmental harm or the release of hazardous substances through emergency interim fluid management and to close and reclaim the site. The Nevada reclamation cost estimate includes a surcharge or Indirect Cost addition of roughly 35 percent to give regulators the necessary financial resources to address the contingency of a bankrupt operator or an operator who abandons a mine site.

D. Are there any significant regulatory alternatives that could minimize the impact on small entities?

EPA must minimize the impact of the Proposed Rule on small entities by ensuring that it does not overlap, duplicate, or conflict with existing federal and state regulations like the 3809 Regulations and Nevada's regulatory program described above. As noted by the State of Nevada on June 16, the Nevada Division of Environmental Protection/Bureau of Mining Regulation and Reclamation ("NDEP") and FLMA in Nevada hold roughly $2.66 billion in reclamation bonds. Clearly any duplication of that amount resulting from the Proposed Rule would have a profoundly adverse impact upon Nevada small entities – as well as the rest of the Nevada mining industry.

The only way for EPA to minimize the impact of the Proposed Rule on small entities (as well as on the entire mining industry) would be to conduct a detailed gap analysis to provide specific

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information on whether there are any gaps in the existing federal and state programs. The obvious viable alternative to the Proposed Rule is to use the findings of this gap analysis to develop a surgical approach to filling any identified gaps. EPA must thoroughly evaluate and then implement this alternative.

EPA should conduct this gap analysis on a program-by-program basis. For example, given the comprehensive scope of the 3809 Regulations, EPA should be required to identify whether it has identified any specific shortcomings in the 3809 Regulations and propose targeted measures to fill the gaps. Similarly, the EPA should specify whether there are any gaps that need to be filled in each states' regulatory program.

I believe an evaluation of the State of Nevada's regulatory programs governing reclamation, mine closure, and environmental protection for operating and closed mines (e.g., NAC 519A and NAC 445A), would reveal that the Nevada program provides comprehensive environmental protection designed to prevent releases of hazardous substances both during and after mining. This evaluation would also conclude that the Nevada financial assurance requirements are based on very conservative calculations to provide state regulators with ample financial assurance in the event they must use the bond to close and reclaim a site and to provide for long-term maintenance and management.

In the event EPA identifies gaps in the FLMA or the states' regulatory programs, it should not assume that financial assurance pursuant to CERCLA 108(b) is the best way to eliminate the gaps. Given the site-specific nature of determining the proper financial assurance amount, the states and FLMA are in a superior position to develop gap-filling financial assurance mechanisms. A one-size-fits all approach will likely duplicate, overlap, and conflict with existing programs and not be the best approach.

Turning again to the Nevada program, NDEP has modified and augmented its financial assurance program a couple of time since the NAC 519A bonding regulation went into effect in 1990, demonstrating that the state – not EPA – is in the best position to enhance its bonding programs if and when circumstances demand additional financial assurance. In response to documented shortcomings in the Nevada program that were revealed when a couple of mine operators with reclamation bonds went bankrupt in the late 1990s and early 2000s, NDEP expanded the scope of its financial assurance requirements to require bonds the give state regulators immediate access to funds for emergency management and interim fluid management. As explained in detail in Parshley and Struhsacker (2008) *see* Exhibit 1, NDEP developed a number of enhancements to its bonding program including Interim Fluid Management ("IFM") and Process Fluid Stabilization ("PFS") cost estimating tools. NDEP, BLM, and industry representatives jointly developed the Heap Leach Draindown Estimator ("HLDE") and the Process Fluid Cost Estimator ("PFCE"). Both NDEP and BLM in Nevada use these tools when calculating the level of financial assurance an operator must provide. The resulting modifications to the Nevada bonding program have produced comprehensive and conservative bonds that consider all likely contingencies based on agency costs to manage, close, reclaim, and maintain sites requiring government intervention.

The state's development of these gap-filling enhancements to its financial assurance

requirements vividly demonstrates why it is best to leave any adjustments or gap-filling measures in the hands of regulators with a first-hand knowledge of operations and site conditions in their states. I am confident that if a currently unanticipated event develops at a Nevada mine that points to the need for additional refinement and augmentation of financial assurance in Nevada, that NDEP would respond as it has in the past to fill in any identified gap.

IV. Conclusions

The 30-year old mandate for EPA to develop a financial assurance program pursuant to CERCLA 108(b) is an anachronism, which has been eclipsed by the passage of time and the enactment and implementation of comprehensive federal and state financial assurance programs for hardrock mining. EPA has not provided any compelling reasons demonstrating that a CERCLA 108(b) financial assurance program is justifiable in light of the comprehensive regulatory programs already in place for hardrock mines on BLM- and USFS-administered lands or for mines in Nevada and in other mining states.

It is inappropriate for EPA to proceed with the CERCLA 108(b) rulemaking without performing the detailed gap analysis described above to determine whether there are any regulatory gaps that need to be filled. This analysis will produce a viable alternative to the Proposed Rule as described in the materials EPA has provided to date and is essential to minimizing the impact of the Proposed Rule on small entities. This analysis is also necessary to satisfy EPA's obligations under the Data Quality Act and the agency's Information Quality.

I very much appreciate the opportunity to serve as a SER and to provide this information. I look forward to participating in the future SBAR Panel meeting. However, prior to holding this meeting, it is essential that EPA provide the SERs with the requested information in Table 1, updated and finalized federal and state regulatory program summaries, more information about leasable hardrock mineral regulations and financial assurance requirements, and data on operations in National Wilderness Protection Areas.

Sincerely,

/s/ Debra W. Struhsacker

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Attachment: Exhibit 1: Parshley and Struhsacker (2008)

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EXHIBIT 1

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THE EVOLUTION OF FEDERAL AND NEVADA STATE RECLAMATION BONDING REQUIREMENTS FOR HARDROCK EXPLORATION AND MINING PROJECTS:

A Case History Documenting How Federal and State Regulators Used Existing Regulatory Authorities to Respond to Shortcomings in the Reclamation Bonding Program

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Introduction and Executive Summary

This Northwest Mining Association (NWMA) white paper documents the evolution of the federal and the Nevada state bonding requirements for hardrock exploration and mining projects. Although this white paper focuses primarily on Nevada –the state with the most exploration and mining activity on federal land and the hub of the U.S. gold mining industry – other western states have similar regulatory programs and reclamation bonding requirements for hardrock mineral activities.

Key findings in this white paper include:

- The Nevada mining industry and state and federal regulators recently worked together to update and refine bonding requirements.
    - The resulting modifications to the Nevada bonding program reflect a collaborative effort to develop comprehensive and conservative bonds that consider all likely contingencies based on agency costs to implement, manage, and complete reclamation of sites requiring governmental intervention.
- Existing federal and Nevada state laws and regulations governing hardrock exploration and mining clearly provided the necessary authority and flexibility for regulators to make changes in response to the problems encountered during agency reclamation of several bankruptcy sites.
    - Federal and Nevada regulators – with the mining industry's full participation and concurrence – have significantly improved and expanded reclamation bonding requirements in the last few years based on the lessons learned at the bankruptcy sites.
- Existing federal and Nevada state laws and regulations include comprehensive environmental protection and reclamation bonding requirements for hardrock mines.
    - These laws and regulations already give regulators the necessary tools to protect the environment, to ensure proper reclamation, and to deal effectively with problems, gaps, or unforeseen situations should they develop in the future.
- The recent changes that federal and Nevada regulators made to the bonding program clearly demonstrate that the current federal and state regulations work well.
- The sweeping changes to the nation's environmental and regulatory programs governing hardrock mining that are included in the House Mining Law bill (H.R. 2262) are not needed.
    - The environmental provisions in H.R. 2262 are solutions in search of a problem which seek to fix a system that is working well and does not need "fixing."

Historical Overview of Federal and Nevada Reclamation Bonding Programs

The U.S. Forest Service Has Required Reclamation Bonds Since 1974

The U.S. Forest Service (USFS) has had bonding requirements for mineral projects on National Forest System lands dating back to 1974. The USFS's bonding program is included in Section 13 of the USFS's surface management regulations at 36 C.F.R. Part 228 Subpart A ("the 228A regulations".) In contrast to the original version of the Bureau of Land Management's (BLM's)

regulations, which did not require bonds for small projects, the USFS regulations have always given District Rangers the discretionary authority to require a reclamation bond for any mineral activity that requires a Plan of Operations. Therefore, since 1974 when the 228A regulations went into effect, the USFS has almost always required a bond for all exploration road building, trenching, and drilling projects and for all major mineral projects on National Forest System lands. Like the BLM bonding program described below, when calculating bonds for operations on National Forest System lands, the agency assumes it will perform the reclamation work using government contracting procedures.

BLM Has Required Bonds Since 1981

Since 1981, companies conducting exploration or mining activities affecting more than five acres of BLM-administered public lands have had to secure BLM's approval of a Plan of Operations that includes a Reclamation Plan and a reclamation cost estimate, and have also had to provide BLM with a reclamation bond. This bonding requirement is part of BLM's Surface Management Rules for Hardrock Minerals at 43 C.F.R. Subpart 3809 ("the 3809 regulations.") The amount of the required bond reflects the assumption that BLM – not the company – will perform the reclamation using third-party contractors in accordance with government contracting procedures. This means the reclamation cost estimate is calculated using Davis-Bacon wage rates and includes government administration fees and other charges related to BLM's management of the reclamation effort.

The original 1981 version of the 3809 regulations did not include a bonding requirement for Notice-level projects that disturbed fewer than five acres of public land. As discussed below, in 2001 BLM expanded its bonding program to include Notice-level projects.

During the early years (1981 to 1990) of the 3809 regulations and BLM's bonding program, reclamation cost estimates were typically based on a uniform reclamation cost per acre factor that was simply multiplied by the amount of surface disturbance at a site. Although this approach simplified the preparation and review of bond cost estimates, it also increased the risk of inaccurate cost estimates. In the early 1990s, reclamation plans became considerably more detailed and were designed based on site specific conditions. This produced more detailed and realistic reclamation cost estimates.

Nevada's State Bonding Regulations Started in 1990

Nevada's regulations for "Reclamation of Land Subject to Mining Operations or Exploration Projects" (NAC 519A) became effective in October 1990. The Nevada mining industry supported the development of these regulations and the authorizing statute (NRS 519A).

The Nevada regulations include stringent requirements for reclamation plans and reclamation bond cost estimates for projects on public, state, and private lands. Therefore, with the advent of the NAC 519A regulations, all Nevada mines and exploration projects affecting more than five acres – regardless of land status – require a reclamation bond. The Nevada Division of Environmental Protection/Bureau of Mining Regulation and Reclamation (NDEP) manages the Nevada reclamation bonding program cooperatively with BLM and the USFS under the terms of an interagency Memorandum of Understanding.

BLM Expanded the 3809 Bonding Program in 2001

By the late 1990s, all Plans of Operations had an accompanying detailed reclamation plan and cost estimate upon which the reclamation bond was based. But exploration projects that

disturbed fewer than five acres were still operating under a Notice without a reclamation bond on BLM-administered lands.

In 1999, the National Research Council (NRC) published a study entitled "Hardrock Mining on Federal Lands." One of the recommendations from the NRC study was that BLM should require a bond for all surface disturbing activities, including Notice-level exploration projects affecting fewer than five acres. The mining industry supported this finding and encouraged BLM to modify the 3809 regulations to expand the bonding requirements to include Notice-level exploration projects. In 2001, BLM implemented a new bonding requirement for Notice-level projects.

USFS Updates its Bonding Guidance in 2004

By the 21st century, the USFS, BLM and state agencies had acquired significant experience in reclaiming and closing abandoned and bankrupt mine sites. In order to document this knowledge and experience, and to ensure that reclamation bonds are adequate to fund reclamation and closure, the USFS issued a document entitled "Training Guide for Reclamation Bond Estimation and Administration" in April 2004. This Guide is designed to be used in estimating new bonds and updating existing bonds for projects on National Forest System lands.

Agency Reclamation of Several Bankrupt Cites Revealed the Need for Expanded Bonding Requirements

By the late 1990s, the industry had closed a number of modern mine sites using the techniques commonly included in BLM and Nevada State reclamation plans of that era. However, NDEP and the federal land management agencies (i.e., BLM and the USFS) had closed and reclaimed only a few sites using funds from reclamation bonds.

In the late 1990s – early 2000s timeframe, historically low metal prices forced a few companies to declare bankruptcy. These bankruptcies tested the scope and efficacy of the federal and state reclamation bonding programs – programs that were supposed to provide regulators with sufficient financial resources to reclaim abandoned or bankrupt mines. However, as NDEP and the federal agencies used the reclamation bonds to close and reclaim the bankrupt sites, program-wide deficiencies and inefficiencies became readily apparent. This led to the realization that the bonds for nearly all of the bankrupt sites were inadequate for NDEP, BLM, and the USFS to implement and complete the approved reclamation plans.

The Nevada mining industry, NDEP, and federal regulators readily agreed that this situation was unacceptable and that changes in the bonding requirements were needed. Working cooperatively over the next few years, the industry and state and federal regulators identified the specific deficiencies and found solutions to address each one to ensure that adequate funding would be immediately available to state and federal agencies should any other bankruptcies occur.

This cooperative effort between the mining industry and regulatory agencies in Nevada has resulted in a program that is embraced as being fair, defensible, and accurate. All parties recognize this program may result in somewhat conservative cost estimates. However, the shared commitment to capitalize upon the lessons learned from responding to unexpected situations at the bankrupt sites and to modify the bonding program to eliminate the shortfalls that were due to these unexpected situations makes a conservative approach essential. The resulting bonding program provides comprehensive cost estimates that consider all likely contingencies.

Similar industry-agency collaboration recently occurred in Montana where the Montana Mining Association and the Montana Department of Environmental Quality worked together to update Montana's bonding requirements. This cooperative effort resulted in a bill, HB 460, which Montana Governor Brian Schweitzer recently signed into law to amend the Montana Metal Mine Reclamation statue to provide for temporary bonding in unanticipated circumstances.

The Cooperative Industry – Agency Review Revamped the Bonding Program to Address all Identified Shortcomings

The following are the major issues identified during the review and revamping of the mine closure and reclamation bonding requirements. The identified shortcomings were rectified as described below:

Identified Shortcoming: Some types of costs which would be incurred should a regulatory agency assume responsibility for closing a mine site had not been adequately anticipated or included in the previous cost estimates. Because the agencies' and industry's experience with mine closure at that time was based on planned and orderly closure performed by the mine owner, some costs associated with government management and the timing of mine closure had not been anticipated. For example, some sites required immediate management of process solutions to ensure that the environment was protected, but the process of obtaining the money from the bonds often took several months, during which time bond funds to manage the site were not available. Other emergency funding programs were used to cover this deficiency at that time.

> *Implemented Solution: The Nevada mining industry set up and funded a program to ensure that funds would be immediately available for site management at any site declaring bankruptcy. Now all bonds calculated in the state of Nevada must include the cost for managing the site including all process fluids, for a period of six months under typical care and maintenance conditions.*

Identified Shortcoming: The hourly equipment rates used in the bond cost estimates did not reflect the agencies' costs to contract the work to third parties. The equipment rates used in the bonds were based on a number of sources and varied widely from site to site.

> *Implemented Solution: A small working group comprised of Nevada mining industry professionals and regulators investigated a number of options to provide realistic hourly equipment rates and ultimately decided that the local equipment suppliers' monthly, single-shift rental rates were most appropriate – even though it is highly unlikely that a contractor would only work their equipment for 40 hours per week on this type of job.*

Identified Shortcoming: Some of the bonds assumed that the equipment at the site would be the same types of equipment used for reclamation. Because some of the equipment used at mine sites is larger than the equipment a reclamation contractor would typically have available, this assumption was inappropriate and produced inaccurate reclamation cost estimates.

> *Implemented Solution: Another small working group comprised of Nevada mining industry representatives and regulators reviewed the types and sizes of equipment readily available from contractors and suppliers in Nevada and limited the equipment choices for reclamation bond costs to that equipment.*

Identified Shortcoming: The productivity (quantity of work performed per hour) used for different equipment varied considerably in some of the bond cost estimates. Because the productivity of reclamation equipment has a direct impact on the time required to perform the reclamation activities, it also affects the cost estimate.

> *Implemented Solution: Nevada mining industry experts and the regulatory agencies determined that equipment productivities should be calculated based on accepted, published sources such as equipment manufacturers' handbooks, engineering manuals, and published construction cost databases to provide defensibility and consistency. In addition, typical correction factors were defined to ensure that the productivities represented an average range of conditions. This is believed to represent a conservative approach because the contractors typically used in the western U.S. for reclamation work have highly experienced staff.*

Identified Shortcoming: The costs for and timing of process fluid stabilization and management were inconsistently calculated. The time required to stabilize a site for long-term passive management is directly related to the time needed to reduce the inventory of any remaining process fluids and ensure that the reclamation plan will limit the amount of water that must be managed in a passive management system. Estimating a short- and long-term water balance for a site requires a combination of science, engineering and experience. The industry has spent considerable effort globally in recent years to better understand this process for sites in closure. Most importantly, it is recognized that although common approaches can be applied, each site is different and requires detailed analysis to define the parameters that will affect closure costs.

> *Implemented Solution: Standard approaches and tools that use site specific data have been defined by federal land management agencies and state regulatory agencies along with minimum design criteria and site data required to properly estimate the time and effort required to manage any solutions remaining on-site at closure.*

Identified Shortcoming: The estimate of both long-term site management and monitoring were not always adequate. The requirements and period required for long-term site management and monitoring are highly site-specific. However, the same approach used to bring consistency to the calculation of process fluid stabilization can be used to determine what, if any, long-term management and monitoring is required.

> *Implemented Solution: Site-specific studies and design requirements will determine the need and requirements for long-term site management and monitoring. Often, it is uncertainty that will dictate if or how much funding must be in place for long-term site management. In these cases, trust fund-type approaches are often used to ensure that there will be funding for both expected and unknown future site requirements. Monitoring requirements are typically based on the need to demonstrate stability at the site based on trends in empirical data. This will vary by site, but most regulatory agencies have guidelines for minimum requirements. Nevada's Water Pollution Control regulations allow NDEP to require a 30-year monitoring period, or longer if needed.*

Identified Shortcoming: Some miscellaneous costs were not adequately captured in some cost estimates. The cost for removal of small infrastructure (e.g. power lines, substations, pipelines, etc.) were not included or underestimated. Other miscellaneous costs such as fence

removal or installation, hazardous waste removal, construction or removal of erosion and sediment controls were inconsistently addressed.

Implemented Solution: Nevada mining industry personnel and the regulatory agencies cooperatively developed a checklist of miscellaneous costs that must be considered for each site.

Identified Shortcoming: The cost to mobilize and demobilize (mob/demob) equipment from the sites was often excluded or inadequately estimated. The cost to move equipment to and from a site being reclaimed will be added by a contractor to the overall cost of reclamation. Although this cost primarily included the direct costs to transport equipment and materials to the site, some contractors also include other costs in this line item.

Implemented Solution: The specific items that should be included in the mob/demob cost were defined by a small working group and local transport companies were contacted to determine the cost incurred to transport the necessary equipment to and from the site by a third-party transporter. Other common costs such as the establishment and use of office trailers, portable power and sanitary facilities were added to Nevada reclamation bonding guidelines as separate line items.

Identified Shortcoming: Out of date costs were used in some bond cost estimates. Although Nevada's regulations require that bond costs be updated every three years, the hourly rates often change annually based on economic conditions. Although most annual variations are generally small, cost estimates should be based on current rates.

Implemented Solution: NDEP and federal regulatory agencies update equipment, labor and material rates each year and post the current rates on a public web site for use in reclamation bond cost estimates.

ATTACHMENT II

Final Version of Pershing Gold's August 29, 2016 Comments

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CERCLA 108(B) SMALL BUSINESS ADVOCACY REVIEW PANEL QUESTIONS AND COMMENTS FOR THE AUGUST 31, 2016 SBAR PANEL

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I. Questions and Comments About EPA's August 23, 2016 PowerPoint Presentation

Slide 6

- 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.

Question: Congress directed EPA to develop the CERCLA 108(b) financial assurance program *consistent with the degree and duration of risk*… The numerous examples of comprehensive state and federal Financial Assurance (FA) programs provided to EPA that do cover the release of hazardous substances have substantially addressed the degree and duration of risk provision. As a result of the state and federal FA programs, there remains minimal if any risk of a release of a hazardous substance for which FA does not exist. Consequently, the scope of a Section 108(b) FA program must be commensurate with the remaining degree and duration of risk. How has EPA defined the degree and duration of risk in light of the existing state and federal FA programs?

Slide 9

- CERCLA is a response program that addresses Section 107 liabilities – response costs, natural resource damages (NRD), and assessments – and is distinct from closure and reclamation requirements of federal and state mine permit programs.

Comment: EPA must not decouple the state and federal closure and reclamation requirements from the environmental protection regulations that govern the entire mining lifecycle – (i.e., exploration, development, operation, reclamation, closure, and post-closure monitoring.) In aggregate, these state and federal regulations do address the release of hazardous substances during all phases of the lifecycle. Moreover, there are other state and federal statues and regulations governing the release of hazardous substances in general that are applicable to mine sites. For example, Nevada Administrative Code (NAC) 445.226-445A.22755 establishes action levels for any contaminated site at which a release of a hazardous substance has impacted soil, surface water, or groundwater. Thus, the Section 108(b) FA program should not consider NRD because the risk of NRD has been substantially reduced by the existing state and federal mine regulatory and FA framework.

Slide 14

- EPA's proposed Section 108(b) regulations will be stand-alone financial responsibility requirements. There are significant differences between these requirements and other existing requirements for hardrock mining facilities. In particular:
- CERCLA is primarily a response program that does not establish a permitting regime and thus the proposed regulation would operate differently from other financial responsibility programs;
    - The proposed rule does not include technical requirements regulating the operation, closure, or reclamation of hardrock mining facilities;
    - For purposes of Section 108(b), EPA intends to develop only those requirements that are appropriate for the limited purpose of demonstrating evidence of financial responsibility under CERCLA; and,
    - The proposed rule does not provide financial responsibility to ensure closure or reclamation requirements made applicable to hardrock mining facilities through a permit.

Comment: EPA needs to provide a detailed explanation of what the "significant differences" are between the existing state and federal requirements which do govern response to and cleanup of a release of a hazardous substance at a mine site consistent with other federal and state regulations pertaining to such a release in general (i.e., at any site, business, or operation.)

Moreover, EPA cannot ignore or sever the "technical requirements regulating the operation, closure, or reclamation of hardrock mining facilities" in the context of this rulemaking because these are the factors that directly reduce the risk of a release of hazardous substance in the first place. Any rule promulgated under Section 108(b) must reflect the "degree and duration of risk". Consequently, it would be unlawful for EPA to develop a rule that overlooks the substantial existing state and federal regulatory measures that minimize the risk of a release. The Section 108(b) FA program must not be developed in a regulatory vacuum.

Finally, owners/operators that provide evidence of state and/or federal financial assurance should be deemed in compliance with the Section 108(b) FA requirement.

Slide 15

Question: Please provide the list of the 184 facilities that EPA expects will be affected by this rulemaking. How was this list developed? Classes of facilities that should be exempted from this rule include all operations that are in good standing with the state and federal regulatory requirements governing the operation.

Slide 17

Comment: Note that roughly one-half of the affected parent companies are small businesses. Thus this rule will have a substantial and adverse impact on small businesses.

Slide 20

- EPA's current view is that financial responsibility requirements under Section 108(b) are distinct from financial responsibility requirements for reclamation and closure under state programs, and were not intended to preempt state or local mining reclamation and closure requirements.
- In particular, Section 108(b) financial responsibility is designed to assure that funds are available to pay for CERCLA liabilities, whereas EPA's review of state law financial responsibility requirements to date indicates many are designed to assure compliance with state regulatory requirements, and thus are not "in connection with liability for the release of a hazardous substance" under Section 114(d).

  Comment: EPA's view is misinformed. The states (see letters from Nevada and Florida) have stressed that their regulatory programs do cover releases of hazardous substances. This is a key point that EPA must recognize in order to avoid designing a duplicative financial assurance program that will precipitate the Section 114(d) preemption concerns raised by the states and that is *inconsistent* with the "degree and duration" directive in Section 108(b).

Slide 21

- EPA believes that Section 108(b) requirements, established to address CERCLA liabilities, are distinct from federal closure and reclamation bonding requirements imposed under other statutes.
- It is important to note that EPA intends the Section 108(b) financial responsibility amount to account for environmentally protective practices including those required by other regulations.

Comment: See above. EPA's belief regarding the scope of the state and federal closure and reclamation bonding requirements belies the facts and information that the states have provided.

The intention to "account for environmentally protective practices including those required by other regulations" should include the provision that programs like BLM's, USFS', and Nevada's are the functional equivalent of bonding under Section 108(b) and therefore supplant the need for additional FA under CERCLA. See also, Section II of this document.

Slide 22

- As far as EPA is aware, the Bureau of Land Management (BLM), US Forest Service (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.
- Because EPA's forthcoming Section 108(b) rules are not a financial responsibility requirement for reclamation and closure, direct comparisons of 108(b) financial responsibility amounts with amounts of financial responsibility provided for reclamation and closure programs are not appropriate.
- The proposed Section 108(b) regulations under development are intended to produce a financial responsibility amount that is consistent with risks at the facility, and are specifically designed to provide assurance that CERCLA liabilities are paid for, if CERCLA claims are made.
- EPA's proposed rule under development does not require specific mining practices nor establish a CERCLA remedy or any closure plan that can be compared with existing federal or state plans.
- Where practices at a 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 Section 108(b) financial responsibility amount to reflect those reduced risks, and plans to provide for such adjustment in the proposed rule.

Comments: EPA's understanding, as explained above, is incorrect. For example, the State of Nevada most certainly can use its bonding authority to respond to a release of a hazardous substance in compliance with Nevada law requiring remediation of a release of hazardous substances affecting soil, surface water, or groundwater.[1]

In order for the CERCLA 108(b) program to be "*consistent with the risks at the facility*," EPA must acknowledge the existing financial assurance provided by state and federal regulations that already address the risks of a release through design, operational monitoring, closure, and reclamation requirements. EPA's

[1] Personal communication, August 25, 2016, with Nevada Division of Environmental Protection ("NDEP") officials: Joe Sawyer, NDEP/Bureau of Mining Regulation and Reclamation ("BMRR") Bureau Chief; and Paul Comba, Reclamation Branch Supervisor

focus should be to identify any gaps that represent risks that are not currently bonded.

The SERs cannot provide any meaningful analysis of the impact of the proposed rule without fully understanding how EPA intends to adjust the Section 108(b) FA amounts to reflect the reduced risks. This is essential for the SERs to fulfill their missions to provide information on how they will be affected. The information that EPA provided in the August 26, 2016 document entitled "Eleven Financial Responsibility Calculations Based on EPA's Approach" is helpful. However, as discussed in Section II of this document, the SERs need additional information in order to evaluate how a Section 108(b) bonding program would impact them.

Slide 25

Comment: Using response costs from Superfund sites as inputs to the formula is an unreasonable and technically flawed approach because most Superfund mining sites are historic, pre-regulation mines. The types and magnitude of releases at these sites are not useful analogs to what could occur at modern mines that are designed, operated, closed, and reclaimed to minimize the potential for releases of hazardous substances, and for which comprehensive financial assurance already exists. Additionally, many of the Superfund sites on EPA's list are not mines. The remediation costs from the numerous non-mining sites (including distal mineral processing sites that are not directly associated with a specific mine) must not be considered in determining the factors for the formula used to calculate Section 108(b) response and remediation costs.

Slide 28

Comment: All of the listed features, environmental controls, and activities on this slide are components of modern, regulated mines that are specifically included in FA calculations under existing state and federal programs/reclamation cost estimates. Therefore, the formula used to calculate the Section 108(b) FA amount should give full credit to operations that include FA for the listed features, environmental controls, and activities so that the calculated Section 108(b) bond amount is zero. This issue is discussed in the comments and questions listed in Section II of this document pertaining to the August 26, 2016 document that EPA provided to the SERs entitled "Eleven Financial Responsibility Calculations Based on EPA's Approach."

Slide 29

Comment: The statement: "EPA recognized that current mine practices could affect response costs," should be modified to say: "EPA recognized that current mine practices significantly differ from the practices employed at most of the Superfund sites evaluated for model inputs and that modern mine practices will substantially reduce the risk of a release and influence response costs."

Please provide the list of the 63 sites evaluated so that the SERs can determine whether the mine designs, environmental controls, operating practices, and financial assurance amounts are representative of modern highly regulated and fully bonded mining operations, like those in Nevada. Because the sites are described as "active facilities" rather than "active mines," the SERs also need to verify that the list of the 63 sites is restricted to mines and directly associated mineral processing facilities and does not include non-mining sites or processing facilities unrelated to mining operations (like the many sites included in EPA's Excel spreadsheet entitled "CERCLIS_IFMS 2011 Data").

Slide 30

Comment: The list of the 356 sites in the above-noted 2011 CERCLIS spreadsheet showing the $4.6 billion response costs must be edited to be congruent with the states on the map in Slide 30 showing the location of the 63 evaluated active facilities. All of the CERCLIS sites listed in states not shown on the map in Slide 30 must be eliminated from the CERCLIS spreadsheet being used for this analysis. Removing the sites from the other states will accomplish two important objectives. First, it will eliminate many (but not all) of the non-mining sites from the CERCLIS developed for this analysis, which will provide a more informed analysis of costs associated with responding to pre-regulation and un-bonded facilities. Secondly, it will result in a more defensible policy analysis of a data set with geographic congruity compared to EPA's current analysis that includes numerous sites and facilities that have nothing to do with mining and that are located in states with little or no hardrock mining.

Slide 32

Question: Please clarify EPA's definition of "hazardous materials" in the context of the Section 108(b) rulemaking. The Bevill Amendment[2] excludes mine wastes from being regulated as RCRA Subtitle C hazardous wastes. Therefore, hazardous materials should not include mine waste rocks, tailings, spent leached ores, or other high volume wastes uniquely associated with mining. Does EPA mean Subtitle C hazardous wastes generated at mine sites?

Slide 33

- Reductions based on the impacts of controls currently in place at a facility.

  Question: Does this mean environmental protection measures and controls in place during mine operation?

- Reductions based on the potential impact of controls not yet in place.

[2] 42 U.S.C. §6921(b)(3)(A)(i)-(iii)

Question: Does this mean planned reclamation and closure activities that are included in the FA for a site?

Slide 34

Comment: Please see Section II

Slide 35

Comment: Just as it is inappropriate to base response costs on Superfund sites (see comments on Slide 25), it is similarly inappropriate to use Natural Resource Damage costs from historic, pre-regulation sites in the Section 108(b) policy analysis. Modern mines are designed to prevent damage to natural resources. These designs include comprehensive monitoring programs to give operators and regulators an early warning that an environmental control may not be functioning as designed. Mining regulatory and FA programs give state and federal regulators the authority to compel an operator to address any identified issue and the financial resources (using the bond if necessary) to remediate an identified release. For example, FA for Nevada mines provide state and federal regulators with sufficient funds to manage process solutions during an unanticipated emergency including site abandonment or to respond to a release that could occur due to an extreme event or a natural disaster such as an earthquake or a storm event exceeding the design storm criteria. Consequently, the Section 108(b) FA should not include a fixed amount for natural resources damages.

Slide 36

Question: Please explain how health assessments will be done at remote mine sites where there are no nearby human receptors. Do the health assessments apply to mine workers?

Slide 37

- EPA is interested in hearing from the SERs regarding options for reducing the potential compliance costs to small entities.

Comment: The best way to reduce potential compliance costs for small entities – and to all mining sectors – is to deem the existing state and federal regulatory and FA programs the functional equivalent to Section 108(b). Nevada's regulatory program and similar programs in other states and BLM's and USFS' regulations provide regulators with well-funded and comprehensive authority to respond to a release and to require that mines be designed and operated in a way that minimizes the potential for a release.

Slides 38 and 39

Comment: Small entities are unlikely to qualify for many of the financial assurance instruments that EPA is considering. For example, a Letter of Credit would require companies to post an equivalent or higher amount of cash as collateral. Insurance policies would likely be unavailable or too costly for companies with no revenue that would be classified as high risk and having a high probability of failure within three years because they may not be able to obtain adequate working capital to operate the company. To the extent that a surety bond may be available to small entities, the collateral requirements are likely to be burdensome, requiring a significant outlay of cash in addition to the annual premiums, which would be substantial. Small companies do not typically have credit ratings because they have never issued bonds against which to establish a credit rating. Thus corporate guarantees based on a credit-rating based financial test would be unavailable to small companies. The bottom line is that small companies would likely have to provide cash bonds in response to a Section 108(b) FA program.

Small entities that are seeking to put their first mine into production have no revenue and rely on the investment community to fund their mineral development projects. Investors mainly want their investments to "go into the ground" to fund exploration and development activities to advance the goal of putting a mine into production. Investors are not interested in funding bonding requirements. Thus an onerous and duplicative Section 108(b) FA program could significantly chill investment in the US mining sector, cost mining jobs, and ultimately reduce the domestic supply of minerals and increase the Nation's reliance on foreign sources of minerals. It is also likely that the Section 108(b) FA program could make some mineral development projects infeasible, depriving investors, local communities, and state and federal governments the opportunity to benefit from the jobs, tax revenue, and infrastructure development associated with a new mine.

Thus EPA's and OMB's evaluation of the likely economic impacts of the Section 108(b) must look beyond the impact upon the small entities. It must also assess the economic impacts to the country that could result from the rule including but not limited to lost tax revenues, reduced or lost direct and indirect jobs, and the foregone investments in the infrastructure typically needed for a mining project. The rule could also cause premature mine closures which would cause additional job loss and adversely impact local and state economies. The rule could also result in the unintended consequence of forcing some operations into bankruptcy, requiring state and federal regulators to use the existing bonds to reclaim these sites.

- Because the Section 108(b) rule differs in operation from other existing programs, aspects of how the instruments would operate are novel.

Comment: The statement that the Section 108(b) instruments would be "novel" suggests that there is little or no market capacity for this type of FA instrument due to concerns about how to assess risks for the purpose of underwriting Section 108(b) FA instruments. Consequently, Section 108(b) FA instruments may not be available

for any size mining company. Obviously, this would be an untenable outcome that would be potentially unlawful. EPA's Section 108(b) FA program must not demand FA which is impossible for mining companies – small and large – to obtain.

Slide 40

Because EPA did not ask financial instrument providers to comment upon market capacity to respond to Section 108(b), EPA has no information to determine whether Section 108(b) FA instruments would be available following promulgation of the rule. EPA must not design a FA program for which financial assurance instruments do not exist.

Slides 41 and 42

Comment: State regulators, BLM, and USFS will be far more nimble in responding to a release using their existing authorities than EPA could be using the Superfund enforcement process. For example, Nevada already has an emergency response contractor to provide interim fluid management to ensure containment of process solutions and respond quickly to a release or a potential release. There is no environmental benefit or regulatory advantage in relying on the cumbersome CERCLA response procedures outlined in Slide 42. State regulators, BLM, and USFS can respond to a release by exercising their existing regulatory authorities to compel the operator to remediate the release. If the operator fails to comply with a remediation order or abandons the site, state and federal regulators can use existing bond monies to respond to the release.

Slides 43 – 47

Comment: A $75 million FA requirement will put many if not most small entities out of business because they will not be able to secure a FA instrument to satisfy this demand. An evaluation of the capital expenditure requirements for many small mining companies seeking to develop their first mine would reveal that $75 million is a significant portion of the investment required to put their mines into production. Because these companies do not yet have any revenue sources (because they have no producing mines) they are unlikely to have a credit rating necessary to secure the insurance policy FA instrument shown on Slide 44 – and most certainly would not have BBB- or CCC+ credit ratings.

Thus, the example projects and companies shown in Slide 44 do not represent the financial realities for many or most small entities. EPA should expand its analysis of the 11 mines provided on August 26, 2016 to evaluate whether any of these 11 operators could qualify for the FA instruments listed on Slide 38. This analysis would likely reveal that the listed FA instruments would be unavailable to most, and perhaps all, of the 11 operators.

Some small entities fund their current FA liabilities using surety bonds. However, a surety bond to fund a $75 million Section 108(b) FA requirement will not be a

realistic option. Even if the annual premiums for such a surety bond were affordable, the cost of the collateral that would likely be required to obtain a $75 million surety bond would probably be out of reach for many small entities.

EPA has correctly identified that lost opportunity costs are a significant factor that must be considered. Multi-million dollar opportunity costs that divert resources from "on-the-ground" investments will significantly deter investment in the small ("junior") mining sector. However, this analysis needs to be expanded to examine the lost opportunity costs to state and federal governments because the Section 108(b) FA program will also cost mining jobs and tax revenue, slow down the pace of discovery and development of the Nation's domestic mineral resources, and increase the Country's reliance on foreign sources of the key minerals that are the building blocks of modern society and crucial to our economy and national defense.

Finally, allowing companies that can meet the financial test to qualify for a corporate guarantee to satisfy the Section 108(b) FA requirement will put small companies that are unlikely to be able to qualify at a substantial competitive disadvantage. Moreover, the use of corporate guarantees to satisfy reclamation bonding obligations is a controversial issue that NGOs are likely to challenge. EPA should note that as of January 20, 2001, BLM stopped accepting new corporate guarantees as an acceptable FA instrument (see 43 CFR §3809.574).

Slide 48

- EPA requests SER input on issues related to EPA's development of:
- A description of, and, where feasible, an estimate of the number of small entities to which the proposed rule will apply.

Comment: Not withstanding EPA's August 26, 2016 analysis of the 11 mines, it is premature to respond to this question without a more complete understanding of the credits EPA will recognize for the existing activities and environmental controls listed on Slide 28 and the states', BLM's, and USFS' existing FA programs. Proper recognition of the existing regulations, environmental protection measures, and FA programs as the functional equivalent of a Section 108(b) program would mean that the proposed rule would apply to few small entities. On the other hand, if EPA does not properly recognize the comprehensive nature of existing FA programs to respond to a release, the resulting burdensome and duplicative Section 108(b) bonding program would be adversely affected all small entities.

- A description of the projected reporting, recordkeeping 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.

Comment: As stated above, it is premature to respond to this question. If EPA recognizes the functional equivalency of existing state, BLM, and USFS bonding

programs, the reporting, recordkeeping, and other compliance requirements could be similar to current requirements.

- An identification, to the extent practicable, of all relevant Federal rules which may duplicate, overlap or conflict with the proposed rule.

Comment: The proposed Section 108(b) rule would duplicate, overlap, and conflict with numerous Federal rules. First, it would directly duplicate federal mining-specific regulations: (i) BLM's 43 C.F.R. Subpart 3809 ("3809 regulations"); and (ii) USFS' 36 C.F.R. § Part 228 Subpart A ("228A regulations") surface management regulations for hardrock mining. Both BLM's and USFS' hardrock mining-specific include substantial FA requirements that address a release of a hazardous substance throughout the mining life cycle (i.e., during exploration, development, operation, closure, reclamation, and post-closure monitoring.)

The BLM and USFS June 16, 2016 presentations provided EPA with a thorough overview of the comprehensive nature of these regulatory programs that are designed to protect the environment and ensure adequate FA in the event an operator fails to reclaim a site, abandons a site, or to address a release of a hazardous substance. BLM and USFS have broad regulatory authorities to compel an operator to remediate a release, or in the alternative, to use bond monies to respond to a release if the operator fails to respond adequately to a release of a hazardous substance. Additionally, both BLM's and USFS' bonding programs specifically address hazardous materials. As noted in Slide 4 of the USFS' presentation, USFS policies require the agency to eliminate duplicative bonding. Consequently, a duplicative Section 108(b) FA program could have the unintended consequence of undermining the USFS' existing program. There would clearly be no environmental benefit if this were the unfortunate outcome of a duplicative Section 108(b) rule.

Secondly, all of the federal media-specific environmental protection statutes including those dealing with air, water, and waste disposal apply to mining. Both the 3809 and 228A regulations create a direct nexus between these federal environmental protection statutes and BLM's and USFS' surface mining regulations by explicitly demanding compliance with all applicable federal environmental protection regulations. For example, BLM's environmental performance standards at 43 C.F.R. §3809.420 specifically require compliance with the Clean Air Act, the Federal Water Pollution Control Act as amended, and the Resource Conservation and Recovery Act.

- A description of any significant alternatives to the proposed rule which accomplish the stated objectives of the applicable statutes and which minimize any significant economic impact of the proposed rule on small entities.

Comment: As discussed in detail in Pershing Gold Corporation's July 7, 2016 comments, the best alternative to a new and extensive Section 108(b) FA program would be to deem the release response authorities in the existing state, BLM, and

USFS regulatory and FA programs as functional equivalents to a Section 108(b) rule, making a new and comprehensive Section 108(b) FA program duplicative and therefore unnecessary. EPA could perform a gap analysis of these programs to determine if there are any omissions or deficiencies and then give the states, BLM, and USFS the opportunity to fill any identified gaps. Alternatively, EPA could propose a surgical rule to fill the gaps, although in most cases it would be more efficient to keep the bonding authority in one place – with state regulators, BLM and USFS.

- An explanation of how the proposed rule and significant regulatory alternatives achieve the statutory objectives and the impact on small entities, and why EPA should adopt a particular alternative.

Comment: The statutory objective is clear; EPA must develop a CERCLA Section 108(b) rule that is "consistent with the degree and duration of risk associated with the production, transportation, treatment, storage, or disposal of hazardous substances." In evaluating the "degree and duration of risk" circa 2016, EPA must ask two questions:

1. Are modern mining facilities designed, operated, closed, and reclaimed to minimize the risk of a release of hazardous substances and monitored and inspected on a regular basis to verify that the site's environmental protection and monitoring systems are functioning as designed to protect the environment and to detect a possible release of a hazardous substance; and

2. Do BLM, USFS, and state regulators have sufficient resources to respond to a release of a hazardous substance due to an unforeseen catastrophic event like an earthquake or a storm that exceeds the design storm criteria, or to a an abandoned site or a site where the operator fails to comply with the environmental protection regulations.

There have been many important changes in the regulatory and FA landscape pertaining to hardrock mining in the 36 years that have elapsed since Congress enacted Section 108(b) directing EPA to develop a FA program to address the "degree and duration of risk." EPA must fully consider these changes in evaluating the degree and duration of risk – if any – that remains in light of today's regulatory and FA framework.

As discussed in detail in Pershing Gold's July 7, 2016 comments, the Section 108(b) proposed rule is anachronistic. There is no longer a need for EPA to create a new FA program out of whole cloth because the states, BLM, USFS have all developed comprehensive mining regulatory programs. For example, in Nevada, state and federal regulators hold $2.66 billion in FA to guarantee proper reclamation and closure of Nevada's mines[3]. This FA amount has more than doubled in the last eight

[3] BLM, USFS, and the NDEP co-manage these funds pursuant to a 2014 Memorandum of Understanding.

years, increasing from $1 billion in 2008 to the current amount of $2.66 billion. This dramatic increase does not reflect a commensurate increase in the number of new mines coming into production since 2008 or even the expansion of existing mines. Rather, it underscores the scope of regulators' existing authorities to refine and expand their FA programs.

Therefore, in the case of Nevada mines, it is Pershing Gold's position that the degree and duration of risk of a release of a hazardous substance are essentially zero and there is no need for an EPA Section 108(b) FA assurance program because:

1. Nevada mines are designed, operated, closed, and reclaimed to minimize the potential for a release of a hazardous substance and are inspected and monitored on a regular basis to verify that the environmental controls are functioning properly and a release is not occurring; and

2. BLM, USFS, and Nevada state regulators (NDEP) have sufficient resources to respond to a release of a hazardous substance at a mine.

In addition to the state, BLM, and USFS regulatory and FA programs, another important development was the contemporaneous enactment of the Bevill Amendment to Subtitle C of RCRA in 1980, which determined that high-volume/low toxicity mine wastes should not be regulated as RCRA Subtitle C hazardous wastes. The Bevill Amendment's exemption of mine wastes from hazardous waste classification and regulation is critically important in evaluating the need for and scope of a Section 108(b) rule. Because Bevill-exempt mine wastes are RCRA Subtitle D solid wastes, hardrock mines do not produce, transport, treat, store, or dispose of hazardous substances from the extraction, beneficiation, and processing of ores and minerals.[4] Therefore, in order to comply with the degree and duration of risk directive in CERCLA 108(b), a Section 108(b) FA program must recognize that Subtitle D mine wastes are not hazardous.

An entirely new and duplicative Section 108(b) FA program would be wildly inconsistent with the "degree and duration" of risk associated with potential releases from current highly regulated and fully bonded hardrock mines. Therefore, the only alternative for a Section 108(b) rulemaking that would be consistent with the degree and duration directive in Section 108(b) is for EPA to recognize that the existing BLM, USFS, and state FA authorities have supplanted the need for a comprehensive Section 108(b) program. Although a gap analysis might reveal some discrete shortcomings in some states' bonding programs, the resulting Section 108(b) program would need to be surgical to address the identified gaps – or provide the states with an opportunity to amend their programs to fill the gaps.

[4] Mines typically produce modest quantities of RCRA Subtitle C hazardous wastes, which are regulated and managed in the same manner as hazardous wastes at other industrial facilities. They are stored on-site in compliance with the RCRA storage time limits, manifested, and shipped to off-site licensed hazardous waste treatment and storage facilities.

Finally, the Section 108(b) rule must be consistent with EPA's 1986 determination that mine wastes are not hazardous waste pursuant to the 1980 Bevill Amendment. As clearly demonstrated in the excerpts cited below from EPA's July 3, 1986 Regulatory Determination for Wastes from the Extraction and Beneficiation of Ores and Minerals (51 FR 24496-01), EPA clearly understood then Congress' directives that EPA must avoid duplicating other existing state and federal regulations and the importance of maintaining a viable domestic mining industry. Fast-forward thirty years to 2016, and there have been no changes in congressional intent.

EPA cannot ignore its 1986 findings and must recognize that BLM's, USFS', and the states' mining and FA regulations have evolved considerably since then. Therefore, the Section 108(b) rule must be consistent with EPA's previous understanding of congressional intent – including the directive to avoid a cost prohibitive program that would cause "widespread closures" – and that other federal and state regulations may control risks associated with mining:

> "In reviewing the factors to be studied…and the legislative history of these and other mining waste provisions, EPA has concluded that Congress believed that certain factors are particularly important to consider in making the Subtitle C regulatory determination. First, Congress instructed EPA to study the potential dangers to human health and the environment from mining waste, indicating that the decision to regulate under Subtitle C must be based on a finding of such a danger. Second, section 8002(p) required EPA to review the actions of other Federal and State agencies which deal with mining waste "**with a view toward avoiding duplication of effort**." **From this provision, EPA concludes that Congress believed Subtitle C regulation might not be necessary if other Federal or State programs control any risks associated with mining waste… EPA must consider both the cost and impact of any Subtitle C regulations in deciding whether they are warranted. Clearly, Congress believed that it was important to maintain a viable mining industry. Therefore, any Subtitle C regulations which would cause widespread closures in the industry would be unwarranted.**
>
> EPA is sensitive to the potential costs to the industry associated with mining waste regulations under Subtitle C. **The Agency is also cognizant that many EPA programs already affect the mining industry** such as the Clean Water Act which, among other things, control surface water discharge via national Pollutant Discharge Elimination system (NPDES) permits. Other Federal agencies, including the Bureau of Land Management, the Forest Service, and the National Park Service, also exercise oversight and impose regulatory controls (CRA, 1986b see VII no. 3).

> **A number of states have their own statutes and implementing regulations for mining waste**. **Some states have comprehensive and well-integrated programs; other States have newer, partially developed programs** (CRA, 1986c see VII no. 4). Although there is great variation in programs, many states have siting and permitting requirements, and require financial assurance, ground-water and surface water protection, and closure standards. **EPA agrees that any requirements necessary to protect human health and the environment should consider the existing Federal and State mining waste programs with a view toward avoiding duplication of effort."** (51 FR 24496-01, bold emphasis added).

Appendix (Slides 51 – 53)

The two mines that EPA offers as examples of why a Section 108(b) FA program is necessary, the Barite Hill Mine in South Carolina and the Formosa Mine in Oregon, are not representative of modern, highly regulated mines with comprehensive FA in states where mining is common like Nevada, Utah, and Alaska. EPA cannot use these atypical examples to paint the industry with a broad brush in an attempt to justify the need for an extensive Section 108(b) FA program nationwide. At best, these mines and the regulatory and FA programs in place in the early 1990s in South Carolina and Oregon may be examples of gaps that may still need to be filled – if state regulators have not already addressed the apparent shortcomings in these programs.

Neither the Barite Hill Mine nor the Formosa Mine provide persuasive documentation of the need for a sweeping Section 108(b) FA program. As discussed in Section II, EPA's analysis should focus on mines with up to date permits issued in the last decade for mine expansions or new mines. The permitting and FA requirements in the early 1990s differ substantially from the current requirements. EPA must not look backwards at what happened in the 1990s to define a future need for Section 108(b) FA.

In addition to the outdated vintage of the permits issued for the Barite Hills Mine, the acid generating characteristics of this project and other gold deposits in South Carolina are very different than deposits elsewhere[5] and should not be used as an analogy for acid generation issues that may develop elsewhere. Similarly, it should be noted that the environmental issues at the Formosa Mine are likely attributable at least in part to the *illegal* waste dumps. EPA's justification for a Section 108(b) FA program should not be predicated on an example involving illegal activities. State and federal regulators have ample authority to address illegal activities.

[5] Some South Carolina gold deposits have very high concentrations of sulfur and were originally developed in the Civil War as sulfur mines.

II. Comments on the August 26, 2016 document entitled "Eleven Financial Responsibility Calculations Based on EPA's Approach"

The information about the eleven mines that EPA provided on August 26 provides some useful insights into how EPA intends to recognize credits for the environmental controls and FA at operating mines. However, the August 26 document does not provide sufficient information to enable the SERs to fully understand EPA's approach. It also raises a number of questions about the locations and representativeness of the eleven mines, the regulatory and FA requirements at these mines, and the apparent gaps in the existing regulatory and FA requirements that led EPA to conclude that no reduction in bonding is warranted for the listed formula inputs at each specific mine.

The overview presented on Slide 2 raises a number of important issues. First, as explained above (see comments on Slides 9, and 36), the Section 108(b) FA program should not include a "response component" to cover natural resources damage claims because modern mining regulatory programs are designed to protect the environment, to prevent damage to natural resources, and to respond in the event of a release of a hazardous substance. The response costs at the numerous legacy/pre-regulation and non-mining sites listed in the 2011 CERCLIS are completely irrelevant to assessing response costs under Section 108(b).

Secondly, the Section 108(b) FA program should not consider a response component to cover Health Assessments, which are inapplicable at most remote mine sites at which there are no nearby human receptors and worker health and safety considerations are regulated by other agencies (including the Mine Safety and Health Administration) and therefore are not EPA's purview. Additionally, EPA must not ignore its 1986 findings regarding the potential dangers to human health posed by mine waste when it concluded that mine wastes should not be regulated as hazardous because, among other factors, mine wastes do not pose a danger to human health. (See the comments on Slide 48). EPA should acknowledge that Health Assessments that have been conducted at mine sites typically represent legacy sites near communities; they are not applicable to modern, regulated sites.

Third, please explain what is meant by: "Availability would not be tied to particular site features and would not in any way be driven by components of the formula."

Finally, there is insufficient information to ascertain whether the eleven Small Entity Examples are representative of the types of mines being developed today, the scope of today's regulatory and FA programs, and the characteristics of the sites at which mines are being developed. EPA needs to identify the states in which the eleven examples are located so the SERs can evaluate whether the regulatory and FA requirements in these states are representative of modern requirements. Specifically, EPA should verify that the eleven sites are located in the states shown in Slide 30 in the August 23, 2016 PowerPoint presentation. There needs to be

congruity between the 11 sites and the 63 facilities evaluated for current engineering costs.

It is important to realize that sites that were permitted 25 years ago are definitely not representative of how mines are designed, permitted, and bonded today – unless these 25-year old sites are still operating and their permits have been recently updated. In order to conduct a meaningful evaluation of current regulatory and FA requirements, EPA should confine its analysis to sites that have been permitted within the last ten years. This ten-year analysis could include older mines with permit updates and modifications within the last ten years as well as new mines that have sought permits in the last decade.

The SERs need to be provided with specific information about why there are no "reductions under consideration" for the formula inputs listed for Mines A through K. What is missing from the regulatory controls and FA requirements at these sites that EPA beliefs are gaps that need to be filled with Section 108(b) FA? It will be important to determine that the data EPA used to evaluate the eleven example mines captures all of the controls and FA requirements for those sites – and not just those factors for which information was readily available from public records.

It appears that none of the eleven mines are located in Nevada because Nevada's regulations include comprehensive environmental protection controls for all of the listed formula inputs and FA that covers the entire mining lifecycle including post-closure monitoring and trust funds for long-term care to operate water treatment facilities and to cover monitoring and maintenance costs. Therefore, complete reductions should be given to Nevada mines, with the resulting response amount of zero.

Because mining in Nevada accounts for such a large percentage of U.S. mining – especially mining on public land in the U.S. – EPA's analysis must take a hard look at the regulatory and FA requirements for mines on federal and private land in Nevada. This analysis will show that there are no regulatory or FA gaps in Nevada and that the Section 108(b) FA requirement for Nevada mines is zero. Once EPA has performed this gap analysis, it should deem the federal and state regulatory and FA programs in Nevada as fulfilling all of the intended purposes of a Section 108(b) rule and exempt Nevada from the Section 108(b) rule. EPA should perform a similar analysis of the other mining states.

All of the eleven example mines include $2.6 million for solid/hazardous waste disposal that needs to be explained. This fee should not be applicable in Nevada (and probably in other states) where the reclamation cost estimate includes line-item funds to dispose of hazardous waste and petroleum-contaminate soils. If existing regulations and FA requirements do not cover solid/hazardous waste disposal in some states and there is a need to include a solid/hazardous waste disposal in a Section 108(b) FA program, the required amount should not be uniform. Rather, the costs should be site-specific and based on a site's history of the

quantity and types of hazardous waste generated and the costs to transport and dispose of these wastes at off-site hazardous waste disposal facilities.

Reductions were not allowed at any of the example mines with water treatment systems. This is inappropriate if these mines have long-term FA instruments like trust funds to operate the water treatment system – a requirement under Nevada's regulations as well as BLM and USFS mining regulatory programs. There would be no need for a Section 108(b) bond for water treatment at sites in Nevada or on BLM- or USFS-administered lands because there is no gap that needs to be filled. Existing FA already covers long-term water treatment costs.

Why were formula reductions denied at all of the sites with zero acres for long-term O&M/Monitoring? Why would Mine A, a wet site with 6 acres of long-term O&M/Monitoring be assessed a lower O&M/Monitoring cost ($0.21 million) than Mine C, a dry site with zero acres of long-term O&M/Monitoring that is assessed a higher O&M/Monitoring cost ($0.82 million)?

The Total Financial Responsibility line needs to be explained for each site. If the difference between the Total Response Amount and the Total Financial Responsibility amount represents the natural resource damage and health assessment costs, these incremental costs need to be eliminated. As explained above, neither natural resources damages nor health assessment costs should not be included the Section 108(b) FA program. They are not justifiable in light of the modern environmental protection and FA regulations governing mining. Moreover, if the natural resources damages and health assessment costs are based on some of the legacy sites in the 2011 CERCLIS, they are irrelevant to modern mines that are designed, operated, closed, and reclaimed to protect the environment. These sites will not become Superfund sites requiring remediation or triggering natural resource damage claims and health assessments.

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September 16, 2016

Lanelle Bembenek Wiggins
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Dear Ms. Bembenek Wiggins:

As a Small Entity Representative (SER) to the Small Business Advocacy Review (SBAR) Panel for the EPA rulemaking on CERCLA 108(b) Financial Responsibility for the Hardrock Mining Industry (EPA Rule), I'm providing the second set of comments as part of the process.

As discussed in more detail in my prior letter to you concerning this rulemaking, the information that EPA has made available strongly suggests that the model will (1) fail to address the site specific conditions of each mine and (2) duplicate financial assurance requirements already in place at the federal and state level. As a result, EPA's proposed rule would impose major economic hardship for proposed mines, and quite likely even prevent many responsibly designed and well-managed mines from starting or continuing to operate at all.

Based on the information that EPA has provided to date on how its model was constructed, it appears that the underlying data supporting the model is drawn from a small sample of legacy mines whose engineering design and practices do not translate well to modern mining in general. This not only ignores significant improvements in technology of mining and environmental protection, but also ignores the strides made in the current federal and state regulatory requirements for financial assurance required at all stages of mining (including design, construction, operations, reclamation/closure, and post-closure); the frequency with which mines must amend their financial assurance as their mine plan matures and/or changes (done annually in Minnesota); and the increased amounts of financial assurance required of mines at all stages of mine life as a result. For example, EPA's model is based upon data from sites that predominantly have natural resource damage NRD costs associated with them; yet, we know of no modern mine site that has resulted in natural resource damage costs. In short, EPA has yet to demonstrate the need for imposing financial assurance requirements to cover the cost of NRD claims, or human health risk assessments (HHRAs), in the context of modern mining.

EPA seems to suggest that because financial assurance required under BLM, USFS, and state mining regulations does not literally reimburse for CERCLA response costs that such requirements are inadequate to protect taxpayers and the environment in the event of mine failures. However, the reality is that modern financial assurance requirements effectively prevent the occurrence of CERCLA response costs. As I discussed at some length in my prior letter, the state of Minnesota, like many states, has a very robust set of financial assurance laws and rules that sufficienctly address the risks associated with the hardrock mining industry that EPA purports to target with its new rule. As I noted earlier, these requirements cover the entire cycle of the mine life, including post-closure (which, as appropriate, would require trust moneys set aside for long-term maintenance and water treatment).

As a result of the robust financial assurance laws and regulations already governing the hardrock mining industry, we strongly believe that prior to issuing a proposed rule, EPA should complete a programmatic evaluation of the financial assurance requirements under USFS, BLM, and state regulations to identify whether those programs are sufficient to exempt mines subject to their jurisdiction from EPA's new rule because those programs sufficiently reduce the "degree and duration of risk" of a CERCLA Section 107 release such that CERCLA Section 108(b) financial assurance is unnecessary. If EPA's programmatic evaluation identifies gaps in a federal agency's or state's program, EPA either should allow that federal agency or state to fill the gap or should write a rule that would allow EPA to fill only that gap (and thereby avoid imposing redundant and economically burdensome financial assurance requirements) under its new rule.

Furthermore, EPA's model, in addition to being based on outdated information, does not account fairly and accurately for risks associated with the spectrum of engineering/design features that could be used on the wide variety of different types of facilities operating at sites situated in unique geologic and climate conditions across the country. A model that is derived from outdated information and that is not facile enough to account for the unique circumstances of a given mine will, by virtue of its design, incorrectly calculate the appropriate amount of financial assurance required for that mine. For example, EPA not only described using legacy data to develop its dataset for the model, but also admitted subjecting that dataset to a simplistic regression analysis. This anaysis is ill-equipped to address the unique circumstances of each mine. This will almost certainly generate costs that grossly underestimate or overestimate the needed financial assurance, producing a cost range as wide as an order of magnitude from the low to high end. This is not acceptable.

Given the challenges and stakes involved, it is clear that much additional work is needed on this proposed formula, and more consultation is needed with potentially affected stakeholders. As a result, PolyMet believes the SBAR panel review process should be extended prior to the proposed rule going on notice in the Federal Register. Thank you for your consideration.

Sincerely,

Brad Moore
Executive VP – Environmental and Governmental Affairs
PolyMet Mining

C: Jon Cherry, President & CEO, PolyMet Mining
Laura Skaer, Executive Director, American Exploration & Mining Association
Katie Sweeney, Senior VP Legal Affairs and General Counsel, National Mining Assoc.
Frank Ongaro, Executive Director, Mining Minnesota

MINING MINNESOTA
RESPONSIBLE DEVELOPMENT of NATURAL RESOURCES

September 16, 2016

VIA E-MAIL

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RE: MiningMinnesota Comments on CERCLA 108(b) Financial Responsibility SBAR Panel Meeting

Dear Ms. Wiggins and Ms. Barr:

MiningMinnesota respectfully submits the following written comments in response to the information EPA has provided during the pre-panel outreach prior to the convening of the SBAR Panel, as well as at the SBAR Panel Meeting on August 31, 2016, and the clarifying email from Ms. Wiggins on September 14, 2016. These comments supplement our previous comment letter dated July 7, 2016. We incorporate by reference and reiterate as though fully set out herein, all of our comments previously submitted except to the extent they are specifically modified in this letter.

First, we appreciate EPA acknowledging that the rule would not apply to legacy sites, and recognizing and agreeing that credit should be given for reduction in risk that results from compliance with existing requirements. We also appreciate EPA acknowledging that financial responsibility requirements for the 13 response categories can be reduced to reflect reductions in risk at the facility due to anticipated activities, the occurrence of which is assured by requirements enforceable against the owner or operator and supported by financial responsibility requirements

However, given these two important acknowledgements by EPA, the fact EPA recognizes that mines will receive 100% reduction for engineering controls or compliance with enforceable regulatory requirements supported by financial responsibility, and that EPA has failed to tell the SERs why the existing FLMA and state FR programs are not sufficient, we do not understand why EPA continues to pursue a rule that offers no additional benefit to the environment and no additional protection of the federal Superfund program and the American taxpayer than what already exists today.

Second, while the SER meeting with the SBAR Panel members and EPA on August 31, 2016 was productive, we are disappointed that EPA has not answered many of the questions raised in

our previous comments nor provided the information requested which is necessary to determine the financial impact of a CERCLA 108(b) rule on our small members. We strongly disagree with EPA's position that it has provided sufficient information for the SERs to determine the impact of a CERCLA 108(b) rule on small entities. In fact, we believe EPA has failed to comply with the letter and spirit of SBREFA and EPA's Regulatory Flexibility Act Guidance. Despite repeated requests for the model and formula, EPA failed to provide this basic information necessary to determine the impact of a CERCLA 108(b) rule on small entities.

The proposed CERCLA 108 (b) rule will have a devastating economic impact on all operators, especially small operators with more limited financial and human resources. Small entity members are reporting that a duplicative CERCLA 108 (b) rule calculating financial assurance according to the examples in the EPA slides will dramatically limit access to investment capital and prevent companies from raising the capital necessary to develop their projects into a producing mine or to expand an existing mine.

In addition, the requirements will unnecessarily duplicate current State and federal programs and significantly increase the costs of operations without any demonstrated benefit to the environment, safety, human health, or taxpayers. The extensive financial assurance requirements imposed by the State of Minnesota already effectively address the risks that the EPA Rule seeks to address, and the two FLMAs have clearly demonstrated their comprehensive regulatory and financial assurance programs designed to prevent release of hazardous substances and to provide financial assurance in the event the operator is unable to complete reclamation and closure, or to take corrective action if and when necessary.

Therefore, EPA should conclude, based on the record and the information provided by the SERs, the FLMAs, and the states during federalism consultation, that CERCLA 108(b)'s statutory mandate has been met and additional financial responsibility requirements are not necessary to protect the federal Superfund program and the American taxpayer. The DC Circuit Court of Appeals has clearly empowered EPA to reach this conclusion in its Mandamus Order.

The EPA must also take into account the following as it moves forward with its consideration of this unnecessary rule:

I. CERCLA's Statutory Mandate has been met by the Federal Land Management Agencies (FLMA) and States' Mine Regulatory and Financial Assurance Programs

The June 16 presentations by the FLMA and states revealed comprehensive regulatory and financial assurance programs designed to prevent the release of hazardous substances and to provide financial assurance (FA) in the event the operator is unable to complete reclamation and closure or take corrective action if and when necessary. These presentations demonstrated that all CERCLA 107 liabilities/obligations are covered 100%. EPA has failed to respond to the SERs and states on this point and has failed to identify any gaps in the FLMA's and states' regulatory and financial assurance programs.

The existing FLMA and state regulatory programs are constantly being improved as the regulatory agencies and industry gain experience. This continuous improvement approach is a key element in these programs and is responsible for the significant increases in the FA amounts required by state and federal agencies over the last 25 years. The FLMA and state programs require updates to plans and FA calculations whenever there is any change in the program or as specified in a particular program. For example, the BLM reviews the amount and terms of the financial guarantee for each increment of your operations at least annually, or sooner if there is a modification to the plan of operation or the agency determines a need. The USFS Training Guide for Reclamation Bond Estimation and Administration states *"[T]o ensure the bond can be adjusted as needed to reflect the actual cost of reclamation, the FS should include provisions allowing for the periodic adjustment of bonds in the Plan of Operation prior to approval."*

In Minnesota, each FA, included in a Permit to Mine, requires annual review and adjustment to cost estimates. In addition, FA requires coverage of all costs, that the instrument(s) be continually in place, always available to the Commissioner, not dischargeable through bankruptcy, along with other requirements. All FA specified in a Permit to Mine are open to citizen participation, and are subject to enforcement.

The EPA seems to be assuming that modern mines are operated in a manner similar to those that have become CERCLA sites. This assumption ignores the scope of the state and FLMA programs under which today's mines are required to operate. The FLMA and state mine regulatory and FA programs are specifically designed to ensure that mines are designed, constructed, operated and closed in a manner that avoids the types of problems that were caused by practices implemented by unregulated or under-regulated mines of the past..

The EPA continues to assert that FLMA/state regulatory and FA programs do not require operators to cover the cost of CERCLA liabilities. As the FLMAs, states and SERs have factually demonstrated to EPA, that assertion is simply not true. The FLMA/state programs require FA to ensure the regulatory and engineering controls designed to eliminate the risk of CERCLA liabilities are implemented even in the event of a default. Thus, currently operating and future mines never incur CERCLA liabilities because the state and federal programs are effective in preventing that from happening. These programs are designed to address each of the potential or actual remedial actions addressed in the Eleven Mine slides, lines 1-13, and EPA did not disagree or contradict this point in its September 14, 2016 email response.

EPA's CERCLA 108(b) rulemaking for hardrock mining and beneficiation is a classic "*solution in search of a problem*;" a problem that clearly does not exist. The hardrock mining states and the federal land management agencies have comprehensive, robust regulatory programs in place that address financial assurance requirements associated with mining and beneficiation, reclamation, closure and post-closure issues. The entire mining life-cycle is covered. Monitoring and regular inspections are part of these regulatory programs to ensure that FA is always current. These programs substantially reduce, if not eliminate, the risk that a mine will have an unpermitted release of hazardous substances. The states and FLMAs have the expertise and staff to calculate the appropriate amount of financial assurance based on the unique circumstances and features, including geochemistry of the rock, for each mining operation and to adjust financial assurance as required over the life of the operation, including post-closure.

EPA's intent to put forth a proposed rule that helps ensure that the burdens associated with cleanup do not fall to the federal Superfund program or the American taxpayers is exactly what the FLMA's and state's comprehensive, robust regulatory programs do. Those programs are designed to prevent the release of hazardous substances and ensure that sufficient financial assurance is in place to ensure that the costs of taking remedial action "*do not fall to the federal Superfund program or the American taxpayers*" in the event of bankruptcy or an event that requires corrective action.

The fact no hardrock mining or beneficiation plan of operation approved by the BLM or USFS since 1990 has been added to the CERCLA NPL demonstrates that the "degree and duration of risk" for hardrock mining is zero or too small to regulate, thereby satisfying CERCLA 108(b)'s statutory mandate and EPA does not need to propose a rule. Because the existing FLMA and state programs cover CERCLA 107 liabilities, there is zero or minimal benefit to the public or the environment from a CERCLA 108(b) rule and significant regulatory burdens and costs on the industry, especially small entities. EPA has failed to demonstrate otherwise.

II. EPA has not provided sufficient information to enable the SERs to determine the impact of a CERCLA 108(b) rule on their operations

Throughout the SBAR process, MiningMinnesota, and other SERs have repeatedly requested information concerning the model and formula, including:

- the selection criteria used to identify the 63 mines used to inform the model/formula;
- the complete list of engineering controls and best management practices the agency is currently considering for reductions in the total financial responsibility obligation, including those controls and practices EPA intends to include that are currently required under state and federal regulatory programs;
- the criteria for identifying engineering controls and best management practices that will be assigned reduction values in the model/formula;
- the corresponding reduction percentages/values for each engineering control and best management practice and the criteria, formula, and assumptions used to determine these numbers; and
- the formula, calculations, and assumptions, including spreadsheets, used to determine the annualized instrument costs to obtain the hypothetical financial responsibility amounts in the SBREFA slides, including the costs for insurance policies, trust funds, and letters of credit, as well as information on costs for surety bonds (not provided in the slides, at the June 9, 2016 meeting, or the August 31 meeting).

Without this information, it is impossible for the SERs to determine the financial impact of a CERCLA 108(b) rule on their business. By email dated September 6, 2016, additional information necessary to properly comment on EPA's proposal and fulfill our responsibility as a SERs was requested. By email dated September 14, EPA stated it was able to clarify some points, but would provide no new or additional information. EPA stated that it believes the information provided "*provides sufficient basis for meaningful comments from the SERs*." MiningMinnesota disagrees. Without knowing how the financial responsibility for each of the 13 line items is calculated and without knowing the criteria used to qualify for a reduction (column

D), our members cannot determine the impact of a 108(b) rule on their operations. It is impossible to evaluate the validity of the formula EPA is using without knowing how columns C and E are calculated. However, we do know that the existing FLMA and state programs presented on June 16 cover all 13 response categories with enforceable regulatory requirements supported by financial assurance.

III. Alternatives for EPA to consider

a. The FLMA and state regulatory and financial assurance programs (and mines covered by those programs) are the functional equivalent of a CERCLA 108(b) rule and therefore should be exempt from a 108(b) rule.

EPA has stated throughout the SBAR process that "*CERCLA is a response program that addresses Section 107 liabilities – response costs, natural resource damages (NRD), and health assessments – and is distinct from closure and reclamation requirements of federal and state mine permit programs.*

MiningMinnesota believe this statement is incorrect because state and FLMA mine permit programs include financial assurance for the entire mining life cycle to address Section 107 liabilities. This life cycle approach includes financial assurance for reasonably foreseeable contingencies. These financial assurance calculations are based on a site- specific approved reclamation and closure plan and are update frequently, generally at least every one to three years or more often as conditions warrant or operating permits modified. A component of required state and FLMA financial assurance is response costs—financial assurance is required to pay for the permitting agency's response to an unplanned or unpermitted release in the event the mine operator does not take action. This component also includes financial assurance for reasonably foreseeable contingencies in the future. Furthermore, current FLMA and state mine regulatory programs are designed to prevent the release of hazardous substances, minimizing and in some cases eliminating release which could lead to CERCLA liability. This is especially true with respect to NRD and HA where the FLMA and State programs take the risk of NRD and HA costs to zero.

There is a semantics issue which has led to a distinction without a difference. While the FLMA and State mine regulatory and financial assurance programs may not use the same terms as CERCLA, it is clear that the FLMA and State programs address section 107 liabilities and provide financial assurance to enable the permitting agency to respond to a release in the event there is a release. In fact, the amount of financial assurance held FLMAs and states is substantial. The BLM holds almost $3 billion and the USFS holds more than $325 million which includes many of the amounts listed above through Memorandums of Understanding with the various states. Importantly, the amounts held in long term trust funds are in addition to the above amounts.

The USFS and states have similar requirements and authorities.

The FLMA and state regulatory programs and FR requirements prevent the release of hazardous substances and provide funds to take corrective action and respond to a release if one occurs and the operator doesn't take action. Working together, the FLMA and state regulatory and financial assurance requirements are the functional equivalent of CERCLA 108(b). The risk is reduced and the funds are there if needed.

As stated above, EPA is emphasizing a distinction without a difference. As the FLMA and State presentations on June 16 clearly demonstrated, FLMA & State mine regulatory and financial assurance requirements not only prevent the release of hazardous substances, they include monies to respond to a release in the event a release occurs and the operator is unable or unwilling to respond. Thus, the FLMA & State financial assurance programs are "in connection with liability for a release of a hazardous substance." Again, the FLMA and State financial assurance requirements are the functional equivalent of a CERCLA 108(b) requirement. Federalism comments filed by WGA, ECOS, IMCC and the states of Alaska, Arizona, Florida, Nevada, South Dakota and Utah confirm this.

b. <u>The Criteria Alternative -- EPA should do a programmatic evaluation of the FLMA and states regulations and FA requirements and programmatically exempt those federal and state programs that have regulatory requirements supported by financial responsibility that address each of the 13 response categories</u>.

FLMA and state programs that address each of the 13 response categories substantially reduce the "degree and duration of risk" of a CERCLA Section 107 release to a point where CERCLA Section 108(b) bonding becomes unnecessary. Additionally, if a release occurs, the FLMA and state regulations and supporting financial assurance give regulators the authority and FA resources to respond to a release. In essence, the FLMA and state programs require comprehensive financial responsibility for the entire mining lifecycle. This lifecycle financial assurance covers the construction, operation, closure and post-closure phases of the mining lifecycle.

The criteria for exemption should be enforceable regulatory mechanisms that address each of the 13 response categories; financial responsibility requirements that support the regulatory mechanisms and are available to the regulators throughout the mining lifecycle; inspection and monitoring requirements; and frequent review and updating of financial assurance.

This alternative would minimize duplication of existing state and federal programs and minimize costs to SERs while protecting the federal Superfund program and the American taxpayer. It would avoid the time and expense to complete and submit unnecessary paperwork to EPA to support a CERCLA 108(b) financial responsibility calculation that will equal zero. It eliminates the costs and burdens of unnecessary recordkeeping.

c. In conjunction with the Criteria Alternative discussed above, EPA would be conducting a "gap analysis" of FLMA and state mine regulatory and financial responsibility programs to determine if a CERCLA 108(b) rule is necessary.

If the programmatic evaluation identifies gaps in a FLMA or state program, EPA should allow the FLMA or state three years to update their programs and fill any identified gaps. The FLMAs and states have between 20 and 40 years' experience developing and enforcing hardrock mine regulatory and financial assurance programs. The expertise developed over that time provides the FLMAs and states with unique ability to fill the gaps if any and administer what will then be the functional equivalent of a CERCLA 108(b) rule.

IV. Financial Burdens of a CERCLA 108(b) rule for hardrock mining on SERs

As set forth above, EPA has failed to provide sufficient information for the SERs to determine the financial burden on their operations. If EPA evaluates and adopts one of the alternatives described above categorically exempts the FLMAs and states with regulations and supporting FA that are the functional equivalent of CERCLA 108(b), or meet the criteria in the Criteria Alternative, then the impact upon the SERs operating under these state and federal regulations would be zero. These programs address each of the 13 CERCLA 108(b) response tasks and reduce the risk of future NRD or the need for HA to near zero. However, without knowing if that's what EPA intends to do, the SERs can only assume, based on the data made available to us to date, that we are looking at potentially significant CERCLA 108(b) FA requirements for one or more of the 13 response tasks, NRD, and HA.

Several of the 11 mine slides showed reduced FR (column E) in the $40 to $60 million range. This would be devastating to small entity mining companies. Most SERs and other small entity mining companies do not have cash flow from production and must raise all of their capital in either the debt or equity markets. Investors in small entity mining companies want their investment dollars used to find minerals or to advance a developing mine to production. They will not be interested in investing if their investment is going to be used to provide duplicative bonds over and above what is already provided to the FLMAs and states.

MiningMinnesota has reviewed EPA's Evaluation of Markets for Financial Responsibility Instruments and found it to be lacking of substance. Most importantly, it did not discuss or evaluate the availability of financial responsibility instruments. Capacity and availability are two very different issues. In addition, EPA's evaluation failed to consider the actual mechanics of the instrument (such as direct right of action and the requirement for guaranteed renewals) which will directly impact an insurance or surety company's risk perspective.

In response to other SERs that consulted with representatives of the surety and insurance industries, the SERs were told that the direct action requirement and/or the guaranteed renewal requirement will result in either the unavailability of financial responsibility instruments or premiums so high that no mining company, including the largest mining companies, could afford them.

Because most SERs and other small entity mining companies do not have credit ratings, the only alternative will be cash or cash collateral equal to the amount of a financial responsibility instrument. Thus, the financial burden on the SERs will be at least 100% of the amount in column E of the 11 mine slides.

Although EPA states that it is excluding "exploration mines" from the rule, there will be an indirect and in some cases direct adverse financial impact on "exploration mines." The goal of exploration is to discover an economically viable mineral deposit that will become a future producing mine. Adding CERCLA 108(b) financial responsibility on top of FLMA and state required financial assurance could turn an otherwise economically viable mineral deposit uneconomic. This will have an adverse impact on the U.S. mining industry and increase our Nation's reliance on foreign sources of minerals necessary for clean energy, economic growth and national security.

In summary, the hardrock mining states and the federal land management agencies have comprehensive, robust regulatory programs in place that address financial assurance requirements associated with mining and beneficiation, reclamation, closure and post-closure issues. These programs substantially reduce, if not eliminate, the risk that a mine will have a release of hazardous substances. The states and FLMAs have the expertise and staff to calculate the appropriate amount of financial assurance based on the unique circumstances and features, including geochemistry of the rock, for each mining operation and to adjust financial assurance as required over the life of the operation, including post-closure.

The FLMA's and state's comprehensive, robust regulatory programs are designed to prevent the release of hazardous substances and assure sufficient financial assurance is in place to protect the taxpayer in the event of bankruptcy or an event that requires corrective action. The fact no hardrock mining or beneficiation plan of operation approved by the BLM or USFS since 1990 has been added to the CERCLA NPL demonstrates that the "degree and duration of risk" for hardrock mining is too small to regulate. This is the conclusion EPA should publish as a proposed rule on December 1, 2016.

Thank you for your consideration of these comments.

Sincerely,

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September 16, 2016

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Sent via email

Re: AEMA Comments on CERCLA 108(b) Financial Responsibility SBAR Panel Meeting

Dear Lanelle and Linda:

The American Exploration & Mining Association (AEMA) submits these comments in response to the information EPA has provided during the pre-panel outreach, prior to the convening of the SBAR Panel, at the SBAR Panel Meeting on August 31, 2016, and the clarifying email from Lanelle Wiggins on September 14, 2016. These comments supplement our previous comment letters dated June 1, 2016 and July 7, 2016 and email correspondence dated 29, 2016. We hereby incorporate by reference and reiterate as though fully set out herein, all of our comments previously submitted except to the extent they are specifically modified in this letter.

While the SER meeting with the SBAR Panel members and EPA on August 31, 2016 was productive, we are disappointed that EPA has not answered many of the questions raised in our previous comments nor provided the information requested which is necessary for AEMA to determine the financial impact of a CERCLA 108(b) rule on our small entity members. We strongly disagree with EPA's position that it has provided sufficient information for the SERs to determine the impact of a CERCLA 108(b) rule on small entities. In fact, we believe EPA has failed to comply with the letter and spirit of SBREFA and EPA's Regulatory Flexibility Act Guidance, "*You should provide the SERs with enough information about the rule for them to be able to judge the likely impacts of the rulemaking on small entities. Outreach materials could include any draft of the rule or preamble text, if such materials are available*." Section 5.7.5. Despite repeated requests for the model and formulae, EPA failed to provide this basic information necessary to determine the impact of a CERCLA 108(b) rule on small entities.

AEMA has a copy of EPA's September 2, 2016 response to Chairmen Bishop and Upton, and is aware that other federal agencies including the FLMAs will have an opportunity to review and evaluate the financial responsibility model and formula before it is released for public comment. However, that does not replace nor satisfy SBREFA's requirement that EPA provide the SERs with sufficient information to determine the impact of a CERCLA 108(b) rule on small entities.

Furthermore, AEMA is aware of EPA's commitment in their response to Chairmen Bishop and Upton that "*the financial responsibility formula will undergo an external, independent scientific peer review*." We are disappointed EPA did not share this information with the SERs during the SBAR process. Throughout the SBAR process, the SERs have expressed concern with the transparency of the process, the lack of relevant information about the model and formula and EPA's rush to get a proposed rule published by December 1, 2016 in order to comply with an arbitrary date in a court order. The result, in our view, is a flawed SBREFA process. Had EPA shared the formula and model with the SERs, we could have engaged experts to review the model and formula and helped EPA develop a rule with minimal adverse financial impacts on SERs and the hardrock mining industry while complying with CERCLA 108(b)'s mandate.

We do appreciate EPA acknowledging that the rule would not apply to legacy sites (slide 16, August 23 slides), and agreeing that credit should be given for "*reduction in risk that results from compliance with existing requirements.*"[1] We also appreciate EPA acknowledging that financial responsibility requirements for the 13 response categories "*can be reduced to reflect reductions in risk at the facility due to anticipated activities, the occurrence of which is assured by requirements enforceable against the owner or operator and supported by financial responsibility requirements*."[2] However, given these two important acknowledgements by EPA, the fact EPA recognizes that mines will receive 100% reduction for engineering controls or compliance with enforceable regulatory requirements supported by financial responsibility, and that EPA has failed to tell the SERs why the existing FLMA and state FR programs are not sufficient, we do not understand why EPA continues to pursue a rule that offers no benefit to the environment and no more protection of the federal Superfund program and the American taxpayer than we have today.

Based on information EPA did provide the SERs and information provided by FLMA and state regulators, it is clear EPA has not done the diligence required to support the need for a national rule under CERCLA 108(b). EPA acknowledges that the rule is not appropriate for legacy sites and agrees that mines will receive 100% reduction for engineering controls or compliance with enforceable regulatory requirements supported by financial responsibility under other federal or state requirements. At the same time, EPA has failed to provide any evidence to suggest existing FLMA and state FR programs are insufficient. Yet, EPA continues to forge ahead with development of a blanket rule that will apply to an entire industry. This shifting of the burden of proving a negative is entirely inappropriate and illegal.

Therefore, EPA should conclude, based on the record and the information provided by the SERs, the FLMAs and the states during federalism consultation, that CERCLA 108(b)'s statutory mandate has been met and additional financial responsibility requirements are not necessary to protect the federal Superfund program and the American Taxpayer. The DC Circuit Court of Appeals empowered EPA to reach this conclusion in its Mandamus Order,

> *But the proposed joint order "does not require EPA to promulgate a new, stricter rule." Id. at 1324. At most, it "merely requires that EPA conduct a rulemaking*

[1] Email dated September 14, 2016 from Lanelle Wiggins on behalf of EPA's CERCLA 108(b) Hardrock Mining Panel to Laura Skaer and the other SERs.
[2] *Id.*

> *and then decide whether to promulgate a new rule — the content of which is not in any way dictated by the [proposed order on consent]* — using a specific timeline." *Id.* The timeline in the joint motion requires that EPA commence a rulemaking with respect to hardrock mining by December 1, 2016, and provide "notice of its final action" by December 1, 2017. Joint Mot. 3. 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*.[3] (Emphasis added)

I. CERCLA's Statutory Mandate has been met by the Federal Land Management Agencies (FLMA) and States' Mine Regulatory and Financial Assurance Programs

The June 16 presentations by the FLMA and four states revealed comprehensive regulatory and financial assurance programs designed to prevent the release of hazardous substances and to provide financial assurance (FA) in the event the operator is unable to complete reclamation and closure or take corrective action if and when necessary. These presentations demonstrated that all CERCLA 107 liabilities/obligations are covered 100%. EPA has failed to respond to the SERs and states on this point and has failed to identify any gaps in the FLMA's and states' regulatory and financial assurance programs.

The existing FLMA and state regulatory programs are constantly being improved as the regulatory agencies and industry gain experience. This continuous improvement approach is a key element in these programs and is responsible for the significant increases in the FA amounts required by state and federal agencies over the last 25 years. The FLMA and state programs require updates to plans and FA calculations whenever there is any change in the program or as specified in a particular program. For example, the BLM reviews the "*amount and terms of the financial guarantee for each increment of your operations at least annually*"[4] or sooner if there is a modification to the plan of operation or the agency determines a need. The USFS Training Guide for Reclamation Bond Estimation and Administration states *"[T]o ensure the bond can be adjusted as needed to reflect the actual cost of reclamation, the FS should include provisions allowing for the periodic adjustment of bonds in the Plan of Operation prior to approval."*

In Nevada, each FA cost estimate must be updated at least every three years or any time a change is proposed. The fluid management permit program administered by Nevada requires permit renewals every five years, which also triggers an update to the FA. Although specific timeframes for permit or FA updates are not included in all of the programs, it is common practice that mine plans will change on a regular basis and each of these changes triggers a review and update of all permit conditions, including the FA calculations.

The EPA seems to be assuming that modern mines are operated in a manner similar to those that have become CERCLA sites. This assumption ignores the scope of the state and FLMA programs under which today's mines are required to operate. The FLMA and state mine

[3] *In re Idaho Conservation League, et al,* No. 14-1149 (DC Cir. January 29, 2016) at 17.
[4] 43 CFR §3809.553(b)

regulatory and FA programs are specifically designed to ensure that mines are designed, constructed, operated and closed in a manner that avoids the types of problems that were caused by practices implemented by unregulated or under-regulated mines of the past. EPA is relying on sites that predominantly have assigned NRD costs – we do not know of any modern mines with NRD costs.

The EPA continues to assert that FLMA/state regulatory and FA programs do not require operators to cover the cost of CERCLA liabilities. As the FLMAs, states and SERs have factually demonstrated to EPA, that assertion is simply not true. The FLMA/state programs require FA to ensure the regulatory and engineering controls designed to eliminate the risk of CERCLA liabilities are implemented even in the event of a default. Thus, currently operating and future mines are unlikely to incur CERCLA liabilities because the state and federal programs are effective in preventing that from happening. These programs are designed to address each of the potential or actual remedial actions addressed in the Eleven Mine slides, lines 1-13, and EPA did not disagree or contradict this point in its September 14, 2016 email response to our September 6, 2016 email (attached).

EPA's CERCLA 108(b) rulemaking for hardrock mining and beneficiation is a classic "*solution in search of a problem*;" a problem that clearly does not exist. The hardrock mining states and the federal land management agencies have comprehensive, robust regulatory programs in place that address financial assurance requirements associated with mining and beneficiation, reclamation, closure and post-closure issues. The entire mining life-cycle is covered. Monitoring and regular inspections are part of these regulatory programs to ensure that FA is always current. These programs substantially reduce, if not eliminate, the risk that a mine will have an unpermitted release of hazardous substances. The states and FLMAs have the expertise and staff to calculate the appropriate amount of financial assurance based on the unique circumstances and features, including geochemistry of the rock, for each mining operation and to adjust financial assurance as required over the life of the operation, including post-closure.

In EPA's responses to Chairmen Upton and Bishop, and in EPA's September 14 response to our September 6 email letter, "*EPA intends to put for the a proposed rule that helps ensure that the burdens associated with cleanup do not fall to the federal Superfund program or the American taxpayers*." **That is exactly what the FLMA's and state's comprehensive, robust regulatory programs do.** Those programs are designed to prevent the release of hazardous substances and ensure that sufficient financial assurance is in place to ensure that the costs of taking remedial action "*do not fall to the federal Superfund program or the American taxpayers*" in the event of bankruptcy or an event that requires corrective action.

The fact no hardrock mining or beneficiation plan of operation approved by the BLM or USFS since 1990 has been added to the CERCLA NPL demonstrates that the "degree and duration of risk" for hardrock mining is zero or too small to regulate, thereby satisfying CERCLA 108(b)'s statutory mandate and EPA does not need to propose a rule. Because the existing FLMA and state programs cover CERCLA 107 liabilities, there is zero or minimal benefit to the public or the environment from a CERCLA 108(b) rule and significant regulatory burdens and costs on the industry, especially small entities. EPA has failed to demonstrate otherwise.

II. EPA has not provided sufficient information to enable the SERs to determine the impact of a CERCLA 108(b) rule on their operations

Throughout the SBAR process, AEMA and other SERs have repeatedly requested information concerning the model and formulae, including:

- the selection criteria used to identify the 63 mines used to inform the model/formula;
- the complete list of engineering controls and best management practices the agency is currently considering for reductions in the total financial responsibility obligation, including those controls and practices EPA intends to include that are currently required under state and federal regulatory programs;
- the criteria for identifying engineering controls and best management practices that will be assigned reduction values in the model/formula;
- the corresponding reduction percentages/values for each engineering control and best management practice and the criteria, formula, and assumptions used to determine these numbers; and
- the formula, calculations, and assumptions, including spreadsheets, used to determine the annualized instrument costs to obtain the hypothetical financial responsibility amounts in the SBREFA slides, including the costs for insurance policies, trust funds, and letters of credit, as well as information on costs for surety bonds (not provided in the slides, at the June 9, 2016 meeting, or the August 31 meeting).

Without this information, it is impossible for the SERs to determine the financial impact of a CERCLA 108(b) rule on their business. By email dated September 6, 2016, AEMA requested additional information necessary to properly comment on EPA's proposal and fulfill our responsibility as a SER. By email dated September 14, EPA stated it was able to clarify some points, but would provide no new or additional information. EPA stated that it believes the information provided "*provides sufficient basis for meaningful comments from the SERs*." AEMA disagrees. Without knowing how the financial responsibility for each of the 13 line items is calculated and without knowing the criteria used to qualify for a reduction (column D), our members cannot determine the impact of a 108(b) rule on their operations. It is impossible to evaluate the validity of the formula EPA is using without knowing how columns C and E are calculated. However, we do know that the existing FLMA and state programs presented on June 16 cover all 13 response categories with enforceable regulatory requirements supported by financial assurance.

III. Comments related to the August 23 SBREFA Slides and the August 29 Eleven Mines Slides

Financial responsibility cost estimate**.** The EPA claims that "*The proposed Section 108(b) regulations under development are intended to produce a financial responsibility amount that is*

consistent with risks at the facility…"[5]. This approach appears to initially ignore the fact that requirements of the FLMA/state programs under which mines are permitted eliminate or greatly minimize the risk to generate a financial responsibility (FR) cost, and then gives credit to operations that implement actions that eliminate or minimize risk. The result of this approach is to require operators to calculate an FR, then reduce it based on practices implemented at the mine to minimize the risks, including those required by other regulatory programs. If the intent is to credit actions that eliminate or substantially minimize risk, any mine operating under modern mining regulations should have their FR reduced to zero. This was demonstrated in a number of the 11 mine examples provided by the EPA even though EPA had not finalized the FR reduction formulae. However, even if all the other FR categories are reduced to zero, the EPA still intends to require FA for Health Assessments (HAs).

On September 14, EPA asked for input on the appropriate criteria for assigning a "yes" or "no" in column D. EPA also stated that it plans to propose 0% or 100% reductions for lines 1-13 and welcomes comments on this feature of the model. AEMA believes EPA should rely on the FLMA and state experience and expertise in calculating financial assurance based on site specific conditions and the approved design of the operating and reclamation and closure plans. If any of the 13 response categories is subject to an enforceable FLMA or state regulatory requirement and supported by financial responsibility requirements, then column D should be "yes" for that response category and receive 100% reduction. If all 13 response categories are subject to an enforceable FLMA or state regulatory requirement supported by financial responsibility requirements, then all 13 response categories should be assigned a "yes" with 100% reduction and a resulting response amount of zero ($0.00) (line 14). As explained above and below, this should result in zero for NRD and zero for HA and the total CERCLA 108(b) financial responsibility of zero ($0.00) (line 15).

FA for HAs and NRD claims. If the current hardrock mining regulations are sufficient to reduce the FR to zero, then there should be little or no risk of the site becoming a CERCLA site. Therefore, there is little or no risk of an HA being required or an NRD claim being made. EPA has yet to demonstrate that any modern mine has HA or NRD costs and we look forward to examining the specific sites that EPA believes carry these costs.

FR amounts for HAs and NRD claims. The one-size-fits-all for these items in EPA's model ignore site specific conditions, creating one-size-fits-none. EPA did not account for the mines with zero costs. The HA amount is not based on mines, but an average of a multitude of different types of sites over an 18-month period. A cursory review of the ATSDR website searching on the word "mine" reveals only legacy sites with HA (called PHA on the ASTDR site). We are not aware of any currently operating mines that have incurred HA, thus the amount charged for HA should be zero. Assessing HA based on an 18 month period of all industries is clearly arbitrary and capricious as it does not consider the "degree and duration of risk" at modern, currently operating mines.

[5] EPA. Aug 23, 2016. CERCLA108(b)FR-SBREFA-PanelOutreach2016-08-23Annot20160826tmd.pptx. Slide 22 of 53.

Likewise, we are not aware of any currently operating mine that has incurred NRD. If EPA is aware of currently operating mines with NRD, please tell us. Furthermore, it is not reasonable to use NRD amounts from legacy sites which were mined before the adoption of modern mine regulatory and financial assurance programs and, importantly, before the mining industry adopted mining practices that ensures modern mines are designed, built, operated and closed to protect the environment and prevent the release of hazardous substances. Thus, the amount of financial responsibility assessed for currently operating mines and mines that begin operation in the future should be zero.

FR calculations. The EPA "*identified activities at hardrock mining facilities undertaken by Superfund in the past, based on historical Superfund data, then estimated the current costs of those actions based primarily on data from current situations*"[6]. The FR costs for these activities were obtained from "*63 current facilities with publicly available engineering cost estimates that contained costs specific to these activities, supplemented with three historical sites for water treatment costs due to a small sample size*"[7]. During the August 31meeting, EPA indicated these costs were obtained from FA calculations submitted by those mines under federal and/or state regulatory programs. If these programs have FA requirements suitable for use as a basis for the EPA models for CERCLA 108(b) FA, don't those programs satisfy the 108(b) FA requirements already? Why are these sites not costed at zero? If not, why did the EPA use them as a basis for their model?

Benchmarking the 63 facilities**.** Although no details were provided regarding the actual calculations of FR in the EPA model, the EPA indicated that costs for the identified activities at those sites were used to create a dataset that was subjected to "regression analysis". This analysis was then used to define costs for each activity based on a few filtering criteria (e.g. tailings facility acreage).[8] This benchmarking approach is an extremely simplistic approach for creating a cost estimate and cannot account for numerous site specific/project specific conditions that can have profound impacts on the costs. In other words, using the acreage of a tailings impoundment multiplied by some one-size-fits-all cost/acre to determine the cost of a "response activity" for any tailings impoundment will either underestimate the cost, or overestimate the cost. Furthermore, this conventional model will conflict with mining sites that have adopted innovative approaches to environmental protection.

Although this approach is still used in some locations around the world to estimate FA amounts, it is now being abandoned by most jurisdictions with mature mining regulations and was abandoned in the US at the end of the 1990's when the FLMAs and states recognized how erroneous estimates could be using that approach. This approach, financial assurance calculated by acre, is why the Formosa Mine in Oregon was under bonded. As described in our email communication dated August 29, 2016, Formosa was an attempt to remine a legacy site. At the time it was permitted, Oregon calculated reclamation bonds on a per acre basis rather than an actual cost estimate based on the mine design and reclamation and closure plan.

[6] Ibid. Slide 25 of 53.
[7] Ibid. Slide 29 of 53
[8] Ibid. Slide 32 of 53

Thus, federal and state programs that regulate FA for mining projects now require site specific estimates based on actual project design and operating parameters, such as those calculated for the 63 facilities the EPA attempted to use as the basis for their model. In Nevada, a well-tested and agency validated, first principle model is used to calculate cost estimates. Furthermore, these costs are subject to expert review by the regulators, the mine, and most often the public.

On a recent project for a major mining company, one of our members attempted to benchmark closure costs from 23 similar mining operations to provide cost estimates filtered on a number site-specific parameters. For tailings impoundments, there were 21 site-specific parameters and 15 cost categories. The conclusion made from this exercise was that this benchmarking approach provided an order-of-magnitude range of possible costs with large error bars at best, and the only way to prepare a reasonably accurate closure cost estimate is to prepare a site-specific estimate based on site conditions and facility design.

Finally, by considering the risks of a release to the environment in the development and permitting phase of a project and monitoring that throughout the mine life cycle, the overall FA estimates under the current FLMA/state regulatory programs should be significantly lower than a Superfund activity because they are intended to keep the horse in the barn, not shut the door and chase it after it is already out.

Long-term O&M and water treatment. AEMA recognizes that as of September 14, 2016, EPA has not developed the criteria for assigning a "yes" or "no" in column D, including the criteria for water treatment and long term O&M. In developing the criteria for water treatment and long-term O&M, EPA must recognize that the purpose of the modern regulations is to reduce the risk of long-term O&M, and particularly water treatment ever being required. That being said, we are aware of a number of mines that have long-term O&M and many with long-term water treatment included in FA calculations. Some of these are really contingency costs, but a few actually anticipate long-term activity at the site. These costs may be included in a separate FA calculation used to estimate the requirements of a long-term trust fund, which could explain why EPA did not see these costs during their review.

Credits for voluntary measures and best practices. In addition, EPA should broaden its proposal on risk reduction to include best practices and voluntary measures such as compliance with the GARD Guide, the International Cyanide Management Code, or standards certified by the International Organization for Standardization (ISO standards).

IV. Phosphate mining should not be included in the definition of Hardrock Mining and Beneficiation for CERCLA 108(b) purposes

We believe phosphate mining and manufacturing should be removed from the definition of hardrock mining for the purposes of CERCLA 108(b) because the risks posed by phosphate mining are more similar to the risks associated with the 59 sectors EPA excluded from this rulemaking in its July, 2009 Priority Notice (74 Fed. Reg. 37,213), than to metal mining (traditional hardrock mining). EPA did not complete an analysis of the phosphate mining

industry. Had EPA performed the required analysis, it would have concluded that phosphate mining poses very low risk. Like the excluded sectors, phosphate mining (1) involves shallow mining, (2) utilizes physical, rather than chemical, separation methods, (3) does not involve land-based production units requiring the use of sulfuric acid or sodium cyanide application to generate solutions for further beneficiation, (4) has no, or limited, chemical use, (5) has no sites listed on the National Priority List ("NPL"), and (6) with very minor exceptions, has not needed CERCLA funds for remedial actions at phosphate mines. The complete rationale for excluding phosphate mining is set forth in the attached letter dated July 13, 2016 from The Fertilizer Institute to Barnes Johnson, Director, Office of Resource Conservation and Recovery, EPA. That letter accompanies this letter and is incorporated by reference as though fully set forth herein.

V. Alternatives for EPA to consider:

a. <u>The FLMA and state regulatory and financial assurance programs (and mines covered by those programs) are the functional equivalent of a CERCLA 108(b) rule and therefore should be exempt from a 108(b) rule.</u>

EPA has stated throughout the SBAR process that "*CERCLA is a response program that addresses Section 107 liabilities – response costs, natural resource damages (NRD), and health assessments – and is distinct from closure and reclamation requirements of federal and state mine permit programs.*

We believe this statement is incorrect because state and FLMA mine permit programs include financial assurance for the entire mining life cycle to address Section 107 liabilities. This life cycle approach includes financial assurance for reasonably foreseeable contingencies. These financial assurance calculations are based on a site-specific approved reclamation and closure plan and are update frequently, generally at least every one to three years or more often as conditions warrant or operating permits modified. A component of required state and FLMA financial assurance is response costs—financial assurance is required to pay for the permitting agency's response to an unplanned or unpermitted release in the event the mine operator does not take action. This component also includes financial assurance for reasonably foreseeable contingencies in the future. Furthermore, current FLMA and state mine regulatory programs are designed to prevent the release of hazardous substances, minimizing and in some cases eliminating release which could lead to CERCLA liability. This is especially true with respect to NRD and HA.

We have a semantics issue which leads to a distinction without a difference. While the FLMA and State mine regulatory and financial assurance programs may not use the same terms as CERCLA, it is clear that the FLMA and State programs address section 107 liabilities and provide financial assurance to enable the permitting agency to respond to a release in the event there is a release. In fact, the amount of financial assurance held FLMAs and states is substantial as the attached graphs for NV ($2.66 billion), NM ($634 million) and SD ($153.7 million) indicate. The BLM holds almost $3 billion and the USFS holds more than $325 million which includes many of the amounts listed above through Memorandums of Understanding with the various

states. Importantly, the amounts held in long term trust funds are in addition to the above amounts,

For example, the Federal Land Policy and Management Act (FLPMA) requires BLM to prevent the unnecessary or undue degradation of the public lands. BLM's 43 CFR 3809 regulations implement this requirement and are quite specific in this regard. The performance standards at 3809.420 include the requirement to comply with all federal and state environmental laws and regulations and 3809.500 *et. seq* covers financial assurance requirements, including authority for long term trust funds. We have included these regulations as Exhibit I attached to these comments.

With respect to long term trust funds, 43 CFR §3809.552(c) provides:

> *(c) 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.*

The USFS and states have similar requirements and authorities. I know some of the SERs will provide detail about the regulatory programs in the states in which they operate.

The FLMA and state regulatory programs and FR requirements prevent the release of hazardous substances and provide funds to take corrective action and respond to a release if one occurs and the operator doesn't take action. Working together, the FLMA and state regulatory and financial assurance requirements are the functional equivalent of CERCLA 108(b). The risk is reduced and the funds are there if needed.

As stated above, EPA is emphasizing a distinction without a difference. As the FLMA and State presentations on June 16 clearly demonstrated, FLMA & State mine regulatory and financial assurance requirements not only prevent the release of hazardous substances, they include monies to respond to a release in the event a release occurs and the operator is unable or unwilling to respond. Thus, the FLMA & State financial assurance programs are "in connection with liability for a release of a hazardous substance." Again, the FLMA and State financial assurance requirements are the functional equivalent of a CERCLA 108(b) requirement. Federalism comments filed by WGA, ECOS, IMCC and the states of Alaska, Arizona, Florida, Nevada, South Dakota and Utah confirm this.

b. The Criteria Alternative -- EPA should do a programmatic evaluation of the FLMA and states regulations and FA requirements and programmatically exempt those federal and state programs that have regulatory requirements supported by financial responsibility that address each of the 13 response categories.

FLMA and state programs that address each of the 13 response categories substantially reduce the "degree and duration of risk" of a CERCLA Section 107 release to a point where CERCLA Section 108(b) bonding becomes unnecessary. Additionally, if a release occurs, the FLMA and state regulations and supporting financial assurance give regulators the authority and FA resources to respond to a release. In essence, the FLMA and state programs require comprehensive financial responsibility for the entire mining lifecycle. This lifecycle financial assurance covers the construction, operation, closure and post-closure phases of the mining lifecycle.

The criteria for exemption should include enforceable regulatory mechanisms that address each of the 13 response categories; financial responsibility requirements that support the regulatory mechanisms and are available to the regulators throughout the mining lifecycle; inspection and monitoring requirements; and frequent review and updating of financial assurance.

This alternative would minimize duplication of existing state and federal programs and minimize costs to SERs while protecting the federal Superfund program and the American taxpayer. It would avoid the time and expense to complete and submit unnecessary paperwork to EPA to support a CERCLA 108(b) financial responsibility calculation that will equal zero. It eliminates the costs and burdens of unnecessary recordkeeping.

c. In conjunction with the Criteria Alternative discussed above, EPA would be conducting a "gap analysis" of FLMA and state mine regulatory and financial responsibility programs to determine if a CERCLA 108(b) rule is necessary.

If the programmatic evaluation identifies gaps in a FLMA or state program, EPA should allow the FLMA or state three years to update their programs and fill any identified gaps. The FLMAs and states have between 25 and 40 years' experience developing and enforcing hardrock mine regulatory and financial assurance programs. The expertise developed over that time provides the FLMAs and states with unique ability to fill the gaps if any and administer what will then be the functional equivalent of a CERCLA 108(b) rule. This approach is consistent with E.O. 12866[9] which requires EPA to identify and assess such alternatives to direct regulation.

VI. Financial Burdens of a CERCLA 108(b) rule for hardrock mining on SERs

[9] Executive Order 12866 Section 1(b)(3), 58 Fed. Reg. 190, (Oct. 4, 1993).
(3)Each agency shall identify and assess available alternatives to direct regulation, including providing economic incentives to encourage the desired behavior, such as user fees or marketable permits, or providing information upon which choices can be made by the public.

As set forth above, EPA has failed to provide sufficient information for the SERs to determine the financial burden on their operations. If EPA evaluates and adopts one of the alternatives described above that categorically exempts the FLMAs and states with regulations and supporting FA that are the functional equivalent of CERCLA 108(b), or that meet the criteria in the Criteria Alternative, then the impact upon the SERs operating under these state and federal regulations would be minimal or zero. These programs address each of the 13 CERCLA 108(b) response tasks and reduce the risk of future NRD or the need for HA to near zero. However, without knowing if that is what EPA intends to do, the SERs can only assume, based on the data made available to us to date, that we are looking at potentially significant CERCLA 108(b) FA requirements for one or more of the 13 response tasks, NRD, and HA.

Several of the 11 mine slides showed reduced FR (column E) in the $40 to $60 million range. This would be devastating to small entity mining companies. Most SERs and other small entity mining companies do not have cash flow from production and must raise all of their capital in either the debt or equity markets. Investors in small entity mining companies want their investment dollars used to find minerals or to advance a developing mine to production. They will not be interested in investing if their investment is going to be used to provide duplicative bonds over and above what is already provided to the FLMAs and states.

AEMA has reviewed EPA's Evaluation of Markets for Financial Responsibility Instruments and found it to be shallow and superficial. Most importantly, it did not discuss or evaluate the availability of financial responsibility instruments. Capacity and availability are two very different issues. In addition, EPA's evaluation failed to consider the actual mechanics of the instrument (such as direct right of action and the requirement for guaranteed renewals) which will directly impact an insurance or surety company's risk perspective.

AEMA also has consulted with representatives of the surety and insurance industries and was told that the direct action requirement and/or the guaranteed renewal requirement will result in either the unavailability of financial responsibility instruments or premiums so high that no mining company, including the largest mining companies, could afford them.

Because most SERs and other small entity mining companies do not have credit ratings, the only alternative will be cash or cash collateral equal to the amount of a financial responsibility instrument. Thus, the financial burden on the SERs will be at least 100% of the amount in column E of the 11 mine slides.

Although EPA states that it is excluding "exploration mines" from the rule, there will be an indirect and in some cases direct adverse financial impact on "exploration mines." The goal of exploration is to discover an economically viable mineral deposit that will become a future producing mine. Adding CERCLA 108(b) financial responsibility on top of FLMA and state required financial assurance could turn an otherwise economically viable mineral deposit uneconomic. This will have an adverse impact on the U.S. mining industry and increase our Nation's reliance on foreign sources of minerals necessary for clean energy, economic growth and national security.

VII. Existing Federal Rules that duplicate, overlap and conflict

As previously stated in earlier comments, the proposed regulation duplicates, overlaps and conflicts with the BLM 43 CFR 3809 regulations and the USFS 36 CFR 228A regulations. Pertinent sections of the 43 CFR 3809 and 36 CFR 228A regulations are included as Exhibit I to these comments.

VIII. Conclusion

AEMA appreciates the opportunity to serve as a SER and participate in the SBAR Panel process. We also appreciate the substantial efforts EPA has devoted to developing materials for the SBAR Panel, reviewing the comments we have provided to date, and the opportunity to meet on August 31. As stated at the beginning of this comment letter, we are disappointed EPA has withheld some information about the FR Model, which has prevented AEMA from fulfilling its principal role as a SER, which is to provide EPA and the SBAR Panel with an assessment of how the proposed rule will impact small entities. Throughout the SBAR Panel process, the SERs made numerous requests to EPA for additional information. EPA has only partially responded to these requests. Consequently, we believe the SBAR Panel process for the CERCLA 108(b) rulemaking is seriously flawed and fails to comply with SBREFA. The future opportunity the SERs will have to comment on the proposed rule does not cure the defects in the SBAR Panel process.

We remain committed to working with EPA and the SBAR Panel in a constructive fashion and believe the dialogue we have had to date has been productive. We welcome any comments or questions about this letter or our previously submitted comments, and hope there will be additional opportunities for the SERs to interact with EPA prior to publication of the proposed rule.

Respectfully submitted,

Laura Skaer

Laura Skaer
Executive Director

Exhibit I
Selected excerpts from BLM's 3809 Regulations

§3809.420 What performance standards apply to my notice or plan of operations?

The following performance standards apply to your notice or plan of operations:

(a) *General performance standards*—(1) *Technology and practices.* You must use equipment, devices, and practices that will meet the performance standards of this subpart.

(2) *Sequence of operations.* You must avoid unnecessary impacts and facilitate reclamation by following a reasonable and customary mineral exploration, development, mining and reclamation sequence.

(3) *Land-use plans.* Consistent with the mining laws, your operations and post-mining land use must comply with the applicable BLM land-use plans and activity plans, and with coastal zone management plans under 16 U.S.C. 1451, as appropriate.

(4) *Mitigation.* You must take mitigation measures specified by BLM to protect public lands.

(5) *Concurrent reclamation.* You must initiate and complete reclamation at the earliest economically and technically feasible time on those portions of the disturbed area that you will not disturb further.

(6) *Compliance with other laws.* You must conduct all operations in a manner that complies with all pertinent Federal and state laws.

(b) *Specific standards*—(1) *Access routes.* Access routes shall be planned for only the minimum width needed for operations and shall follow natural contours, where practicable to minimize cut and fill. When the construction of access routes involves slopes that require cuts on the inside edge in excess of 3 feet, the operator may be required to consult with the authorized officer concerning the most appropriate location of the access route prior to commencing operations. An operator is entitled to access to his operations consistent with provisions of the mining laws. Where a notice or a plan of operations is required, it shall specify the location of access routes for operations and other conditions necessary to prevent unnecessary or undue degradation. The authorized officer may require the operator to use existing roads to minimize the number of access routes, and, if practicable, to construct access roads within a designated transportation or utility corridor. When commercial hauling is involved and the use of an existing road is required, the authorized officer may require the operator to make appropriate arrangements for use and maintenance.

(2) *Mining wastes.* All tailings, dumps, deleterious materials or substances, and other waste produced by the operations shall be disposed of so as to prevent unnecessary or undue degradation and in accordance with applicable Federal and state Laws.

(3) *Reclamation.* (i) At the earliest feasible time, the operator shall reclaim the area disturbed, except to the extent necessary to preserve evidence of mineralization, by taking reasonable measures to prevent or control on-site and off-site damage of the Federal lands.

(ii) Reclamation shall include, but shall not be limited to:

(A) Saving of topsoil for final application after reshaping of disturbed areas have been completed;

(B) Measures to control erosion, landslides, and water runoff;

(C) Measures to isolate, remove, or control toxic materials;

(D) Reshaping the area disturbed, application of the topsoil, and revegetation of disturbed areas, where reasonably practicable; and

(E) Rehabilitation of fisheries and wildlife habitat.

(iii) When reclamation of the disturbed area has been completed, except to the extent necessary to preserve evidence of mineralization, the authorized officer shall be notified so that an inspection of the area can be made.

(4) *Air quality.* All operators shall comply with applicable Federal and state air quality standards, including the Clean Air Act (42 U.S.C. 1857 *et seq.*).

(5) *Water quality.* All operators shall comply with applicable Federal and state water quality standards, including the Federal Water Pollution Control Act, as amended (30 U.S.C. 1151 *et seq.*).

(6) *Solid wastes.* All operators shall comply with applicable Federal and state standards for the disposal and treatment of solid wastes, including regulations issued pursuant to the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act (42 U.S.C. 6901 *et seq.*). All garbage, refuse or waste shall either be removed from the affected lands or disposed of or treated to minimize, so far as is practicable, its impact on the lands.

(7) *Fisheries, wildlife and plant habitat.* The operator shall take such action as may be needed to prevent adverse impacts to threatened or endangered species, and their habitat which may be affected by operations.

(8) *Cultural and paleontological resources.* (i) Operators shall not knowingly disturb, alter, injure, or destroy any scientifically important paleontological remains or any historical or archaeological site, structure, building or object on Federal lands.

(ii) Operators shall immediately bring to the attention of the authorized officer any cultural and/or paleontological resources that might be altered or destroyed on Federal lands by his/her operations, and shall leave such discovery intact until told to proceed by the authorized officer. The authorized officer shall evaluate the discoveries brought to his/her attention, take action to protect or remove the resource, and allow operations to proceed within 10 working days after notification to the authorized officer of such discovery.

(iii) The Federal Government shall have the responsibility and bear the cost of investigations and salvage of cultural and paleontology values discovered after a plan of operations has been approved, or where a plan is not involved.

(9) *Protection of survey monuments.* To the extent practicable, all operators shall protect all survey monuments, witness corners, reference monuments, bearing trees and line trees against unnecessary or undue destruction, obliteration or damage. If, in the course of operations, any monuments, corners, or accessories are destroyed, obliterated, or damaged by such operations, the operator shall immediately report the matter to the authorized officer. The authorized officer shall prescribe, in writing, the requirements for the restoration or reestablishment of monuments, corners, bearing and line trees.

(10) *Fire.* The operator shall comply with all applicable Federal and state fire laws and regulations, and shall take all reasonable measures to prevent and suppress fires in the area of operations.

(11) *Acid-forming, toxic, or other deleterious materials.* You must incorporate identification, handling, and placement of potentially acid-forming, toxic or other deleterious materials into your operations, facility design, reclamation, and environmental monitoring programs to minimize the formation and impacts of acidic, alkaline, metal-bearing, or other deleterious leachate, including the following:

(i) You must handle, place, or treat potentially acid-forming, toxic, or other deleterious materials in a manner that minimizes the likelihood of acid formation and toxic and other deleterious leachate generation (source control);

(ii) If you cannot prevent the formation of acid, toxic, or other deleterious drainage, you must minimize uncontrolled migration of leachate; and

(iii) You must capture and treat acid drainage, or other undesirable effluent, to the applicable standard if source controls and migration controls do not prove effective. You are responsible for any costs associated with water treatment or facility maintenance after project closure. Long-term, or post-mining, effluent capture and treatment are not acceptable substitutes

for source and migration control, and you may rely on them only after all reasonable source and migration control methods have been employed.

(12) *Leaching operations and impoundments.* (i) You must design, construct, and operate all leach pads, tailings impoundments, ponds, and solution-holding facilities according to standard engineering practices to achieve and maintain stability and facilitate reclamation.

(ii) You must construct a low-permeability liner or containment system that will minimize the release of leaching solutions to the environment. You must monitor to detect potential releases of contaminants from heaps, process ponds, tailings impoundments, and other structures and remediate environmental impacts if leakage occurs.

(iii) You must design, construct, and operate cyanide or other leaching facilities and impoundments to contain precipitation from the local 100-year, 24-hour storm event in addition to the maximum process solution inventory. Your design must also include allowances for snowmelt events and draindown from heaps during power outages in the design.

(iv) You must construct a secondary containment system around vats, tanks, or recovery circuits adequate to prevent the release of toxic solutions to the environment in the event of primary containment failure.

(v) You must exclude access by the public, wildlife, or livestock to solution containment and transfer structures that contain lethal levels of cyanide or other solutions.

(vi) During closure and at final reclamation, you must detoxify leaching solutions and heaps and manage tailings or other process waste to minimize impacts to the environment from contact with toxic materials or leachate. Acceptable practices to detoxify solutions and materials include natural degradation, rinsing, chemical treatment, or equally successful alternative methods. Upon completion of reclamation, all materials and discharges must meet applicable standards.

(vii) In cases of temporary or seasonal closure, you must provide adequate maintenance, monitoring, security, and financial guarantee, and BLM may require you to detoxify process solutions.

(13) *Maintenance and public safety.* During all operations, the operator shall maintain his or her structures, equipment, and other facilities in a safe and orderly manner. Hazardous sites or conditions resulting from operations shall be marked by signs, fenced, or otherwise identified to alert the public in accordance with applicable Federal and state laws and regulations.

§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.

§3809.552 What must my individual financial guarantee cover?

(a) If you conduct operations under a notice or a plan of operations and you provide an individual financial guarantee, it must cover the estimated cost as if BLM were to contract with a third party to reclaim your operations according to the reclamation plan, including construction and maintenance costs for any treatment facilities necessary to meet Federal and State environmental standards. The financial guarantee must also cover any interim stabilization and infrastructure maintenance costs needed to maintain the area of operations in compliance with applicable environmental requirements while third-party contracts are developed and executed.

(b) BLM will periodically review the estimated cost of reclamation and the adequacy of any funding mechanism established under paragraph (c) of this section and require increased coverage, if necessary.

(c) 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.

§3809.554 How do I estimate the cost to reclaim my operations?

(a) You must estimate the cost to reclaim your operations as if BLM were hiring a third-party contractor to perform reclamation of your operations after you have vacated the project area. Your estimate must include BLM's cost to administer the reclamation contract. Contact BLM to obtain this administrative cost information.

(b) Your estimate of the cost to reclaim your operations must be acceptable to BLM.

Selected excerpts from the USFS 36 CFR 228A Regulations

§ 228.8 Requirements for environmental protection.

All operations shall be conducted so as, where feasible, to minimize adverse environmental impacts on National Forest surface resources, including the following requirements:

(a) *Air Quality.* Operator shall comply with applicable Federal and State air quality standards, including the requirements of the Clean Air Act, as amended (42 U.S.C. 1857 *et seq.*).

(b) *Water Quality.* Operator shall comply with applicable Federal and State water quality standards, including regulations issued pursuant to the Federal Water Pollution Control Act, as amended (33 U.S.C. 1151 *et seq.*).

(c) *Solid Wastes.* Operator shall comply with applicable Federal and State standards for the disposal and treatment of solid wastes. All garbage, refuse, or waste, shall either be removed from National Forest lands or disposed of or treated so as to minimize, so far as is practicable, its impact on the environment and the forest surface resources. All tailings, dumpage, deleterious materials, or substances and other waste produced by operations shall be deployed, arranged, disposed of or treated so as to minimize adverse impact upon the environment and forest surface resources.

(d) *Scenic Values.* Operator shall, to the extent practicable, harmonize operations with scenic values through such measures as the design and location of operating facilities, including roads and other means of access, vegetative screening of operations, and construction of structures and improvements which blend with the landscape.

(e) *Fisheries and Wildlife Habitat.* In addition to compliance with water quality and solid waste disposal standards required by this section, operator shall take all practicable measures to maintain and protect fisheries and wildlife habitat which may be affected by the operations.

(f) *Roads.* Operator shall construct and maintain all roads so as to assure adequate drainage and to minimize or, where practicable, eliminate damage to soil, water, and other resource values. Unless otherwise approved by the authorized officer, roads no longer needed for operations:

(1) Shall be closed to normal vehicular traffic,

(2) Bridges and culverts shall be removed,

(3) Cross drains, dips, or water bars shall be constructed, and

(4) The road surface shall be shaped to as near a natural contour as practicable and be stabilized.

(g) *Reclamation.* Upon exhaustion of the mineral deposit or at the earliest practicable time during operations, or within 1 year of the conclusion of operations, unless a longer time is allowed by the authorized officer, operator shall, where practicable, reclaim the surface disturbed in operations by taking such measures as will prevent or control onsite and off-site damage to the environment and forest surface resources including:
(1) Control of erosion and landslides;
(2) Control of water runoff;
(3) Isolation, removal or control of toxic materials;
(4) Reshaping and revegetation of disturbed areas, where reasonably practicable; and
(5) Rehabilitation of fisheries and wildlife habitat.
(h) Certification or other approval issued by State agencies or other Federal agencies of compliance with laws and regulations relating to mining operations will be accepted as compliance with similar or parallel requirements of these regulations.

228.13 Bonds.
(a) Any operator required to file a plan of operations shall, when required by the authorized officer, furnish a bond conditioned upon compliance with § 228.8(g), prior to approval of such plan of operations. In lieu of a bond, the operator may deposit into a Federal depository, as directed by the Forest Service, and maintain therein, cash in an amount equal to the required dollar amount of the bond or negotiable securities of the United States having market value at the time of deposit of not less than the required dollar amount of the bond. A blanket bond covering nationwide or statewide operations may be furnished if the terms and conditions thereof are sufficient to comply with the regulations in this part.
(b) In determining the amount of the bond, consideration will be given to the estimated cost of stabilizing, rehabilitating, and reclaiming the area of operations.
(c) In the event that an approved plan of operations is modified in accordance with § 228.4 (d) and (e), the authorized officer will review the initial bond for adequacy and, if necessary, will adjust the bond to conform to the operations plan as modified.
(d) When reclamation has been completed in accordance with § 228.8(g), the authorized officer will notify the operator that performance under the bond has been completed: *Provided, however,* That when the Forest Service has accepted as completed any portion of the reclamation, the authorized officer shall notify the operator of such acceptance and reduce proportionally the amount of bond thereafter to be required with respect to the remaining reclamation.

American Exploration & Mining Association

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June 1, 2016

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Sent via email

Re: CERCLA 108(b) Financial Responsibility SBREFA Pre-panel Outreach

Dear Lanelle and Linda:

This letter is written on behalf of the hardrock mining SERs and concerns the pre-panel phase of the CERCLA 108(b) SBREFA process and the introductory meeting/conference call on Thursday June 9, 2016.

I have been in communication with the SERs and confirmed that they have reviewed and studied the slides presented at the May 17, 2016 public webinar. I also have confirmed that the SERs have reviewed, studied and analyzed the SBREFA slides attached to your May 27, 2016 email advising of the pre-panel introductory meeting. On behalf of the SERs, we are requesting that EPA skip or dispense with the slide presentation and, after introductions, move into addressing questions and comments on the slides and the proposed rule. We believe this will ensure that the introductory meeting is productive, useful for all parties, and an efficient use of everyone's limited time.

Our examination and study of the SBREFA slides raises several questions and a need for additional information which we would like answered/provided prior to the June 9th meeting. These questions and information requests, identified by slide, are attached to this letter. The SERs would appreciate receiving answers and the requested information on or before June 7, 2016. The SERs will not be able to properly fulfill their role as contemplated by SBREFA without the answers and information requested. Receiving answers to these questions and the information requested prior to the June 9 meeting will ensure a more productive, efficient and useful introductory meeting.

In addition, the SERs have developed a list of questions and information absolutely essential to fulfilling the role of SERs under SBREFA in the Small Business Advocacy Review Panel (SBAR) process. A list of those questions and additional information needed also is attached to this letter as Attachment II.

SER Helper

The SERs request approval to bring a SER helper to the introductory meeting to assist the SERs in their review, analysis and comment on the proposed rule. Identifying the proper elements of a CERCLA 108(b) financial assurance responsibility rule and calculating financial assurance is a highly technical, highly specialized field. While the SERs represent a number of important fields of responsibility with respect to environmental management of mine sites and implementing existing federal and state financial assurance requirements, the SERs do not possess the knowledge and expertise to develop and analyze models and the underlying statistical analysis and formulae that make up the model. Therefore, the SERs request approval to engage a SER helper in the CERLA 108(b) Financial Responsibility SBAR process who is an expert in modeling and calculating financial assurance.

Thank you for your timely consideration of these requests. I am available to discuss this with you prior to the June 9 meeting. My telephone number is 509-624-1158 x16; email lskaer@miningamerica.org.

Yours truly,

Laura Skaer

Laura Skaer
Executive Director

Attachments

cc: Sonja Sasseville, Acting Director Program Implementation and Information Division, US Environmental Protection Agency.
Barbara Foster, CERCLA 108(b) Rule Writing Team, US Environmental Protection Agency
Kevin Bromberg, SBA Office of Advocacy
Tayyaba Waqar, SBA Office of Advocacy
Danielle Jones, Office of Management and Budget
All SERs

ATTACHMENT I to June 1 SER letter to EPA

SER Questions Concerning the May 24, 2016 SBREFA Slides

Slide 3 - Background: CERCLA 108(b) Financial Responsibility

- EPA calculations show that, through FY2011, the Agency had spent approximately $4.6 billion to clean up hard rock mines and mineral processors.

Please provide detail for this statement by identifying by name and location the hardrock mine sites and mineral processor sites, the amount spent by EPA at each site, the dates when those monies were spent, and provide a copy of the spreadsheets or documents used to calculate or arrive at $4.6 billion. Also, identify which of those sites are on the NPL.

- EPA also intends for the rule to create financial incentives for improved mining practices that reduce financial responsibility costs where existing practices ultimately may also help reduce risks and costs to the Superfund program.

Question 1 -- Please identify the improved mining practices EPA believes will be incentivized by a CERCLA 108(b) financial responsibility rule.

Question 2 --What mining practices would be different under a CERCLA 108(b) rule than under current BLM, USFS, states' mining and financial assurance regulations?

Slide 6 – CERCLA 108(b) Financial Responsibility Proposed Rule Structure

- CERCLA is a response program that addresses CERCLA Section 107 liabilities – response costs, natural resource damages (NRD), and health assessments – and is distinct from closure and reclamation requirements of federal and state mine permit programs.

The federal land management agency regulations (BLM 43 CFR 3809 regulations (3809.420 and 3809.500 et. seq.), the U.S. Forest Service (USFS) 36 CFR 228A regulations (228.8 and 228.13)),and the states mine regulatory and financial assurance programs (*See* Western Governors' Association (WGA) letter to EPA Administrator McCarthy dated March 29, 2016 and Interstate Mining Compact Commission (IMCC) letter dated May 3, 2016)), focus on minimizing risks to the environment and include requirements, among others, for managing solid waste and water, minimizing acid rock drainage, managing cyanide use, ensuring mine operations comply with all applicable environmental laws and regulations, and providing, where appropriate, long term trusts to ensure post closure treatment and maintenance operations to ensure compliance with Clean Water Act standards.

These requirements directly minimize the risk of a future hazardous substance release and ensure money is set aside to financially cover an adverse event if one should happen. These requirements also are working as evidenced by the BLM's and USFS' response to the March 8, 2011 letter from Senator Murkowski that a combined 3,334 mining plans of operations approved

since 1990 and not one of those sites has been placed on the CERCLA NPL. In other words, the BLM, USFS and states' requirements are the "functional equivalent" of a CERCLA 108(b) financial responsibility rule. For example, BLM's 43 CFR 3809 surface management regulations for hardrock minerals provides at §3809.552(c):

> *(c) 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.*

Question 1 --In view of the fact the federal land management agencies' and states' mine regulatory and financial assurance programs address more than closure and reclamation, please explain how addressing CERCLA § 107 liabilities are "distinct from closure and reclamation requirements of federal and state mine permit programs."

Slide 10 – A Preliminary Clarification: What the Rule Does *Not Do*

As mentioned above, both WGA and IMCC disagree with EPA's assertion that proposed CERCLA 108(b) financial assurance requirements distinctly different from existing state and federal requirements for hardrock mining facilities.

Question 1 -- How is EPA going to address the significant concerns raised by the WGA and IMCC in its proposed rule? It appears from the information presented at the May 17, 2016 webinar and in the SBREFA slides that these concerns have largely gone unaddressed.

Question 2 -- Has EPA this year consulted with the USFS, BLM, or other relevant federal agency/department on the Congressional directive to complete a plan to avoid duplication with existing federal regulations? Will there be an interagency review of any proposal before it is finalized so the USFS, BLM, the Nuclear Regulatory Commission and any other appropriate federal department or agency has an opportunity to review the proposal and provide comments before it is finalized?

Question 3 -- What financial responsibility requirements will be different under a CERCLA 108(b) rule than under current BLM, USFS and state requirements?

Question 4 -- How is EPA going to factor in reductions for compliance with existing state and federal laws and regulations? For example, if a facility has a financial assurance instrument that covers $50 million in long-term water quality treatment and monitoring, will EPA reduce the CERCLA 108(b) financial assurance requirement commensurate (dollar for dollar) with that other existing obligation?

Slide 11 – Universe of Facilities to be Regulated

- EPA would also include in the proposed rule primary processing activities located at or near the mine site that are under the same operational control as a regulated mine.

Question 1 --Is EPA proposing to apply a CERCLA 108(b) financial responsibility rule to inactive mine operations, either those that are in the process of or have been closed or are co-located with operating facilities?

Question 2 --Does EPA intend to apply a CERCLA 108(b) financial responsibility rule to closed, inactive or abandoned mine site not collocated with an active mine site or facility?

Question 3 --Does processing include beneficiation?

Slides 13 & 14 – Financial Responsibility Scope and Amount

- To determine the amount of financial responsibility required for response costs, the Agency is developing a formula that would identify an amount of financial responsibility to reflect the primary site conditions and characteristics that would affect the costs of removal or remedial action.

Question 1 -- Please provide the formula, details and any spreadsheets EPA will use to determine the amount of financial responsibility that reflects primary site conditions and characteristics and how those primary site conditions and characteristics were determined.

Question 2 -- What equations are built into the spreadsheets? Please identify and list. Please provide a copy of the equations and spreadsheets.

- The formula would assign dollar 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).

Question 3 -- What is EPA using as its data source for the formula? Is EPA using mine sites on the NPL? Is EPA using data from active mines sites? How was this data obtained? Please provide a copy of the underlying data. Is EPA using certain databases or documents to pull this information and assign dollar values to the various facilities in the formula? Please identify these sources and provide a copy of the sources and data used to assign dollar values in the formula.

Question 4 -- There are a number of legacy mining and mineral processing sites on the Superfund NPL that involve sites constructed and operated tens to a hundred years prior to modern environmental laws, regulations and financial responsibility requirements. Those sites were not designed, built and operated to minimize impacts to the environment and prevent release of hazardous substances during operation and at closure. EPA in its "Phase 1" study reviewed NPL sites listed during or after 1990 and then confirmed whether the on-site activities occurring during or after 1990 contributed to the contamination. According to EPA:

> The intent of filtering sites in this manner was to control for the effect of 'legacy' waste management practices by removing sites that are on the NPL only because of legacy activity. This step was taken under the assumption that, by 1990, regulatory programs were sufficiently in place to limit the risks posed by some industry practices.

In developing the formula and selecting appropriate data, has EPA again used a similar filtering technique to ensure that legacy sites are not used to develop the formula and the cost inputs, and thus grossly overestimating the liability risk? If not, please explain what type of filtering technique the agency is using in developing the formula.

- The Agency is considering a fixed amount of financial responsibility for health assessment costs and a fixed percent of aggregate financial responsibility for natural resource damages, that would be required at all facilities.

Question 5 -- Health assessment costs and natural resource damages are very site-specific depending on the type of release. How can EPA create a one-size-fits-all amount for these costs when CERCLA 108(b) only allows for financial assurance "consistent with the degree and duration of risk associated" with the various activities on a site? How is EPA going to ground truth these "fixed" and "fixed percent" amounts so as not to violate the statute and impose an unnecessary financial burden on facilities?

Slide 15 – Relationship of Section 108(b) Financial Responsibility to State, Tribal and Local Government Law

- In particular, Section 108(b) financial responsibility is designed to assure that funds are available to pay for CERCLA liabilities, whereas EPA's review of state law financial responsibility requirements to date indicates many are designed to assure compliance with state regulatory requirements, and thus are not "in connection with liability for the release of a hazardous substance" under Section 114(d).

Question 1 --See statements and questions under **Slide 6.** In view of the fact the states' mine regulatory and financial assurance programs address more than closure and reclamation, *i.e.*, minimize adverse impacts to the environment and assure long term water quality, please explain in detail how state mine regulatory and financial responsibility programs are not "in connection with liability for the release of a hazardous substance" under Section 114(d).

Slide 16 - Relationship of Section 108(b) Financial Responsibility to Other Federal Law

- EPA has evaluated the applicability of Section 108(b) requirements at facilities where other federal financial responsibility requirements apply.

Question 1 --Please list the facilities EPA evaluated and include whether the facilities are currently regulated by BLM, USFS, a state or a combination of these.

- EPA believes that Section 108(b) requirements, established to address CERCLA liabilities, are distinct from federal closure and reclamation bonding requirements imposed under other statutes.

Question 2 --*See* statements and questions under **Slide 6.** Please explain in detail how § 108(b) requirements "are distinct from federal closure and reclamation bonding requirements imposed under other statutes."

- It is important to note that EPA intends the Section 108(b) financial responsibility amount to account for environmentally protective practices already in place, including those required by other regulations.

Question 3 --How is EPA accounting for environmentally protective practices required by existing federal and state environmental laws and regulations, including the BLM 3809 regulations, the USFS 228A regulations and applicable state requirements? How is EPA assigning a value to those requirements and practices? How is EPA calculating those reductions? Please provide a copy of the data used to assign values and calculate reductions.

Slide 17 – Market Study

Question 1 --Who has the agency consulted with in the financial and insurance sectors? Please provide the names of individuals and their companies and the dates of those meetings or consultations.

Question 2 --Is EPA continuing that consultation process as it develops the rule? Please provide the date or dates when EPA intends to meet with representatives of the financial and insurance sectors and the names of the representatives and their companies with whom EPA intends to continue the consultation process.

Question 3 --Did EPA provide the insurance, surety, and other appropriate financial sectors with the formula/model EPA is developing, the cost assumptions and calculations, and potential duration of the obligation in advance of writing the draft report? Did EPA seek the advice of these sectors on these details? If not, how is EPA going to ground-truth its report on market capacity? Will EPA be releasing this information to the Senate?

Question 4 **--**A key component of the rule that will significantly impact the capacity of the market to provide necessary and affordable financial responsibility instruments is the length of time in which a company is obligated to provide financial assurance and when that obligation will cease. For example, a requirement to secure financial assurance for a duration of 10 years past closure is far less onerous than a requirement to secure financial assurance for 30 or 50 years past closure. What timeframes has the agency provided to the financial and insurance sectors for their evaluation of market capacity?

Slide 18 – Financial Responsibility Scope and Amount – HRM Financial Responsibility Formula

- The baseline could then be reduced through demonstrating that current controls at the facility are in place.

Question 1 -- How is EPA determining which controls warrant reductions in the baseline calculation? What sources is EPA using to make these decisions? What are the selection criteria used to extract the data from the sources? How is EPA determining how to calculate the reductions (i.e., how is EPA choosing which technologies get what reduction)?

Question 2 -- Is EPA consulting with industry, the federal land management agencies and the states on the operational controls and best management practices currently used at facilities to ensure the list is inclusive of these controls and practices?

Slide 19 – EPA has identified several categories it is currently analyzing to obtain statistically-derived factors for use in the formula, including components:

Please provide a complete list of the basis and assumptions used to obtain the "statistically-derived factors."

Slide 20 – HRM Financial Responsibility Formula: Examples of Expected Formula Inputs

Question 1 -- How did EPA identify these site features for inclusion in the model? What data sources did EPA use? What are the selection criteria used to extract the data used from the data sources? Is this intended to be a complete and exhaustive list?

Slide 21 - HRM Financial Responsibility Formula: Examples of Expected Formula Reductions

- EPA is looking at current engineering controls as the basis for reductions to the baseline amount

Question 1 -- How is EPA determining which controls warrant reductions in the baseline calculation? What sources is EPA using to make these decisions? How is EPA determining how to calculate the reductions (i.e., how is EPA choosing which technologies get what reduction)?

Question 2 -- Is EPA consulting with industry, BLM, USFS and the states on the operational controls and best management practices currently used at facilities to ensure the list is inclusive of these controls and practices?

Slide 27 - SBA defined Small Mine Example and Slide 28 - SBA defined Small Mine Example compared with Two large Mines Examples

Question 1 --How did EPA calculate the amount of CERCLA 108(b) financial responsibility prior to giving credit for engineered controls and best practices? Were those amount obtained from engineering handbooks? If so, please list the handbooks used.

Question 2 --We understand EPA has identified 64 mining and mineral processing sites from which cost response data was obtained. Please identify those sites and the selection criteria used to identify those sites. How many of those sites are on the NPL? Which sites are mining sites? Which sites have co-located mineral processing or beneficiation activates? Which sites, if any, are stand-alone mineral processing of beneficiation sites?

Question 3 -- Please describe in detail how EPA came up with the credit reductions for best practices? What data sources were used and how are the calculations done? What are the selection criteria used to extract the data from the sources?

Question 4 --Is there a list of engineered controls and best practices? Please provide that list. With whom did EPA consult to develop a list of engineered controls and best practices? Will industry be able to add to that list? Will the list be peer reviewed in this rulemaking process?

Question 5 --How is the agency reducing a CERCLA 108(b) financial responsibility obligation to take into consideration the bonding requirements (either state or federal) that cover the same type of long-term liabilities? For example, if a facility already has a $50 million trust for long-term water quality and maintenance will the agency reduce any CERCLA 108(b) liability by the amount of the trust fund?

Question 6 -- How did EPA choose the types of instruments that would be available for each financial responsibility obligation? How did EPA calculate annualized instrument cost for each instrument?

Slide 29 - Request input from Potential SERs on issues related to:

- An identification, to the extent practicable, of all relevant Federal rules which may duplicate, overlap or conflict with the proposed rule

Response 1 --Please see the Federal Land Policy and Management Act section 302(b) (43 U.S.C. 1732(b) last sentence); BLM 43 CFR 3809 Regulations and the USFS 36 CFR 228A regulations. BLM Surface Management Handbook, H-3809-1; USFS *Training Guide for Reclamation and Administration,* adopted in April 2004; USFS Forest Service Manual 2800; July 24, 2015 memo from USFS Chief Tom Tidwell concerning USFS authority to require long term trusts to address post closure liabilities; Nuclear Regulatory Commission rules at 10 CFR Part 40, Appendix A, criterion 9.

- A description of any significant alternatives to the proposed rule which accomplish the stated objectives of the applicable statutes and which minimize any significant economic impact of the proposed rule on small entities

Response 2

A. Defer to the existing federal land management agencies' and states' environmental regulations and financial responsibility programs because there is complete overlap and a separate CERCLA 108(b) financial responsibility rule is unnecessary to protect the taxpayer and the Superfund. The federal land management agencies' and states' regulatory programs are designed to minimize adverse impacts to the environment and prevent releases of hazardous substances and their financial responsibility programs are the functional equivalent of a CERCLA 108(b) financial responsibility rule.
B. Identify if there are any serious gaps in the existing federal and state requirements and allow the federal land management agencies and states to address and fill those gaps.
C. Additional ideas to be provided as the SBAR process develops.

Attachment II to June 1 SER letter to EPA

The hardrock mining SERS respectfully request that EPA answer the following questions and provide the requested information prior to the June 9 pre convening conference. Answering these questions and providing this information prior to the June 9 will help ensure a more productive meeting and efficient use of our limited time.

1. Please provide the model EPA will use to calculate CERCLA 108(b) financial responsibility.
2. EPA has indicated it is developing statistically-derived factors to use in the formula. Please identify in detail the basis and assumptions EPA is using in obtaining the statistically –derived factors.
3. Please provide the cost data, engineering data, and underlying formulae that the model will use or otherwise inform the model; Where did EPA obtain the costs and data? Is EPA using costs from Superfund cleanup of pre-regulated mines?
4. How is the HAA amount determined? What is justification for a fixed amount when each mine site is unique?
5. How is the NRD percentage determined? What is justification for a fixed amount when each mine site is unique?
6. Please provide a complete list of BMPs considered under the proposed rule as model inputs or otherwise used to determine credit reductions in the amount of required financial responsibility.
7. Please provide a complete list of engineering controls considered under the proposed rule as model inputs or otherwise used to determine credit reductions in the amount of required financial responsibility.
8. Please provide a complete list of site features inputs used in developing the model. We understand EPA has identified 64 mining and mineral processing sites from which cost response data was obtained. Please identify those sites and the selection criteria used to identify those sites. How many of those sites are on the NPL? Which sites are mining sites? Which sites have co-located mineral processing or beneficiation activates? Which sites, if any, are stand-alone mineral processing or beneficiation sites?
9. Where in the mine life cycle would CERCLA 108(b) financial responsibility attach? Does it have to be in place before operations in an approved plan of operations begin? EPA has indicated that one of the acceptable financial responsibility instruments is Trust Funds. Will EPA allow trust funds to be funded over the life of the mine or will EPA require full funding at the beginning of operations? Is the amount negotiable or appealable? To whom?
10. Please provide details on the evaluation and timing of release of CERCLA 108(b) financial responsibility instruments. How would it work? How long after a facility closes?

11. Financial assurance capacity study—who did EPA consult? What did EPA provide the companies? Is the study ongoing? Did EPA inquire about collateral requirements in order to obtain a financial responsibility instrument? What will EPA do if the financial assurance and insurance industries are unwilling or unable to offer financial instruments that comply with a CERCLA 108(b) rule?
12. Please demonstrate in detail how CERCLA 108(b) requirements are different than BLM/USFS/states' reclamation, closure, water and waste management financial assurance requirements.
13. The BLM & USFS follow an adaptive management protocol that requires monitoring to collect data the agencies and companies can use to determine 1) if their facility is functioning properly and complying with permit requirements and limits; and 2) to provide an early warning system to indicate if a problem may be developing so that a proper response can be developed and implemented. Both BLM and USFS have ample statutory and regulatory authority to increase financial assurance in response to identified problems. For example, BLM's surface management regulations at 43 CFR §3809.552(c)provides:

    > *(c) 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.*

    Has EPA considered and discussed with BLM and USFS their adaptive management response to mine site monitoring data?
14. Has EPA conducted a credit rating survey for the range of entities, including small businesses that will be subject to a CERCLA 108(b) financial responsibility requirement? Please provide a copy of that survey.
15. Is EPA assuming that all currently operating mines and all future mines pose a risk of Section 107 liabilities, Natural Resource Damages and Human Health Assessment costs? How does EPA reconcile this with the fact that no mine permitted on federal land since 1990 has been added to the NPL? Do this mean the risk has been reduced to the point that no additional financial assurance is required?
16. What is EPA's budget for implementing and administering any CERCLA 108(b) rule? This information is needed to assure timeliness and responsiveness to small businesses.

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July 7, 2016

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Sent via email

Re: CERCLA 108(b) Financial Responsibility SBREFA Pre-panel Outreach

Dear Lanelle and Linda:

This letter supplements our June 1 letter, and the questions and requests for information contained in that letter and attachments I and II. While we appreciate the information provided by email on June 28, it is not what the SERs need in order to effectively comment on the model or the formulae. The table summarizing features and statistics of the mines modeled is useless. It omits critical information the SERs require, including the 64+ mine sites modeled, the selection criteria used, the dates the mines began operating and whether they are operating today. The SERs also need the formulae and/or spreadsheets in order to understand how the financial responsibility amount outputs are calculated. This information also is necessary to determine if the sites chosen by EPA for analysis and model creation align with the sites EPA has chosen for regulation per the draft definition related to the scope of the rule.

We must reiterate our request for all of the information requested in our June 1 letter as it is absolutely necessary to providing constructive comments to EPA. Please answer the questions and provide the information requested in our June 1 letter before convening the SBAR Panel. It would be premature to convene the SBAR panel before answering the questions and providing all of the information previously requested.

June 16, 2016 FLMA & State Presentations

On Thursday, June 16, 2016, the two federal land management agencies (FLMAs) and three states provided detailed presentations of their mine regulatory and financial assurance programs. South Dakota provided a PowerPoint of its program with examples but did not present. Each presentation revealed comprehensive regulatory and financial assurance programs designed to prevent the release of hazardous substances and to provide financial assurance in the event the operator is unable to complete reclamation and closure or take corrective action if and when necessary.

The six presentations revealed:

- Site specific, complex programs that take into account the unique geology, geography, terrain, climate, mining methods, engineering controls and management practices attributable to an individual mine.

- That the FLMAs and states' regulatory and financial assurance programs for hardrock mining clearly cover the release of hazardous substances, provide financial assurance post closure, and demonstrate the functional equivalent of a CERCLA 108(b) rule.

- That the only way a hardrock mining financial assurance program can work is if it is calculated on a site-specific basis. A nationwide financial assurance program and/or a one-size-fits-all formula will not work. Therefore, the use of a general formula for all mines is arbitrary and capricious.

- That in several states, different regulatory agencies cover different aspects of mining, milling and processing, but together they provide complete coverage. This inter-agency approach works. A review of some of the draft reports of state hardrock mining regulatory and financial assurance programs prepared by EPA's contractor indicates that the contractor did not consider an inter-agency approach.

- That the Bureau of Land Management (BLM), the U.S. Forest Service (USFS) and the states have the authority and regulatory tools to address unanticipated events at any time. They adapt to changing conditions or circumstances to prevent the release of hazardous substances and increase financial assurance. They have the authority, using monitoring data, to require plan modifications and increase financial assurance. This is the principle of adaptive management.

- The fact BLM holds almost $3 billion in financial assurance in addition to the value of long-term trust funds for post closure water quality monitoring and treatment demonstrates clearly that its regulatory and financial assurance programs cover more than reclamation and closure, and is not distinct from a CERCLA 108(b) program.

- That a CERCLA 108(b) rule would be duplicative and appears to completely overlap existing federal and state financial assurance programs.

- That the expertise and experience to calculate financial assurance for hardrock mines resides with the states and the FLMAs, and that EPA lacks this experience and expertise. The states and FLMAs have been calculating financial assurance on a site-by-site basis for more than 25 years.

- That the FLMAs and states are in the best position to prevent the release of hazardous substances and to ensure adequate financial assurance to protect the taxpayer.

- That any CERCLA 108(b) program must be site specific. A nationwide bonding standard is unworkable. It would be arbitrary and capricious to calculate financial assurance at one site based on data from another site. There is no room for a one-size-fits-all formula. It would be arbitrary to apply credits applicable at one site to a different site.

- That neither the FLMAs nor the states see any basis for EPA moving forward with a CERCLA 108(b) rule.

It is clear there would be substantial if not complete overlap between the FLMA and state programs and an EPA CERCLA 108(b) program based on the information provided by EPA to date. Contrary to EPA's position that CERCLA 108(b) regulations are significantly different as compared to existing requirements for hardrock mining facilities, the FLMA and state regulatory requirements, financial assurance requirements and long-term trust funds ensure not only permit compliance, they also *prevent the release of hazardous substances* and ensure post-closure water quality. There is nothing left for EPA to cover. The taxpayer is protected.

Given the comprehensive and robust hardrock mining regulatory and financial assurance programs of the FLMAs and states, we believe the burden is on EPA to show where and how a CERCLA 108(b) rule would not duplicate the state and FLMA programs. The burden is on EPA to identify if there are any gaps in the states' and FLMAs' hardrock mining regulatory and financial assurance programs that would justify a CERCLA 108(b) rule. If EPA is able to demonstrate gaps in any of the FLMA or state programs, then a 108(b) rule should be limited to identifying those gaps and allowing existing FLMA and state programs to fill those gaps.

Information provided by email dated June 28, 2016

Mining Practices Currently Under Consideration for the Formula

The GARD Guide contains practices focused on the prevention and control of acid rock drainage (ARD). However, not all mines pose a risk of ARD, e.g., mines in a limestone ore body, and not all of these engineering controls/practices will be applicable to all mines. While many of the GARD Guide recommendations are applicable to mines without ARD issues, it is clear that one cannot look to a single guide or code to determine appropriate engineering controls or best practices. Since each mine is unique in its geology, metallurgy, geography, topography, and climate; the engineering controls and best management practices for protecting the environment, ensuring compliance with federal and state environmental laws and regulations, and preventing the release of hazardous substances must be determined on a mine by mine, site-specific basis.

The list of engineering controls explicitly and indirectly accounted for in the cost formula provided by EPA is a small sample of the engineering controls and best practices utilized at modern mines and must be expanded. In addition to the GARD Guide, the International Cyanide Management Code (Cyanide Code) provides engineering controls and best management practices for mines using cyanide in the production of gold. The FLMA and state mine regulatory programs governing hardrock mining include many design controls and requirements to minimize the likelihood of a release of a hazardous substance and the enforcement

mechanisms to deal with an unplanned release or system upset, e.g., BLM's 43 CFR 3809.420 performance standards. While EPA stated in the SBREFA slides and at the June 9, 2016 pre-panel outreach meeting that the amount of financial responsibility a facility is obligated to cover will "account for environmentally protective practices already in place, including those required by other regulations," to date EPA has not provided a list of these EPA approved practices or the criteria used to identify these practices. The SERs cannot assess the financial impacts to their businesses or recommend regulatory alternatives without this information. AEMA requests EPA provide this information prior to convening the formal SBAR panel.

In addition, the SERs need to know how the engineering controls and best practices will be factored into the financial responsibility calculations. The hypothetical mine examples in the SBREFA slides do not contain the information needed to assess financial impacts to small businesses. Not only do the SERs need to know the complete list of engineering controls and best practices, the SERs also need to know the corresponding percentage reduction for *each* practice (not just a total as provided in the hypotheticals) and the basis for those percentage reductions (i.e., the criteria, source data, assumptions, and calculations). This must be done on a site-specific basis. To understand the financial impact, a SER must be able to beta-test the formula and input its own site-specific features, operational controls, and best practices. EPA must provide the SERs this opportunity prior to or during the convening of the formal SBAR panel.

<u>Draft Definition(s) related to the Scope of the Rule with Respect to Mine Operation Status</u>

Thank you for clarifying the scope of the rule. We believe EPA has correctly concluded that CERCLA 108(b) requirements, if any, would apply only to mines operating or authorized to operate on or after the effective date of the rule (if a rule is promulgated). We interpret the draft definition to mean that EPA does not intend to apply a CERCLA 108(b) rule to abandoned, inactive or legacy sites unless those sites are covered by a current or future operating permit. We believe this definition is correct and consistent with CERCLA's statutory language and legislative intent.

We are unaware of any mines that might be operating without required authorization or permits.

Now that EPA has concluded that a CERCLA 108(b) rule will be applied only to mines operating on or after the effective date, or idle but authorized to operate on or after the effective date, it is unreasonable, arbitrary and capricious for EPA to assume that all currently operating mines and mines which will be authorized in the future pose a risk of releasing hazardous substances to the environment. There is no evidence that a CERCLA 108(b) rule is necessary because there are no modern mines sites permitted since 1990 on the CERCLA National Priorities List as confirmed by BLM and USFS responses to Sen. Lisa Murkowski's March 8, 2011 letter to Secs. Salazar and Vilsack.

Sen. Murkowski asked each secretary to answer questions concerning the BLM and USFS financial assurance programs respectively, and also asked if any hardrock mining and beneficiations plans of operation approved since 1990 have been placed on the CERCLA NPL.

The BLM answered 659 and 0; The USFS answered 2,685 and 0. These answers demonstrate that modern mine regulatory and financial assurance programs together with modern mining practices and engineering controls are working and that a CERCLA 108(b) rule is unnecessary. Copies of Sen. Murkowski's March 8, 2011 letter and BLM and USFS responses are attached to this comment letter and incorporated by reference. Note that in 2011 BLM stated that they held $1.7 billion in financial assurance and on June 16 BLM stated that it held over $2.9 billion in financial assurance (in addition to long term trusts), a 71% increase in just 5 years. This is additional evidence that BLM's financial assurance program provides the authority and flexibility for BLM to increase financial assurance to cover increased costs or modifications in mine plans of operation.

List of Insurance, Surety, and Banking Companies and Organizations with whom EPA has met and dates of those meetings

These four meetings and four follow-up telephone calls over a three month period do not represent a good faith effort "to collect and analyze information from the commercial insurance and financial industries regarding the use and availability of a necessary instruments (including surety bonds, letters of credit, and insurance) for meeting any new financial responsibility requirements" as required by the FY2016 Omnibus Appropriations Act. We have been in contact with company representatives who attended one or more of the meetings described by EPA. They expressed frustration with the lack of information necessary to evaluate the risk and determine whether or not financial responsibility instruments would be available to meet any new financial responsibility requirements of a CERCLA 108(b) rule.

In addition, during the May 17, 2016 public webinar question and answer period, EPA admitted the insurance, surety and banking companies expressed concern with the "direct action" provision of CERCLA 108(c) and that a direct action requirement would be a hindrance to issuing financial responsibility instruments and, may in fact, prevent these companies from offering financial responsibility instruments. Has EPA continued a dialogue with these entities to address these concerns? If so, has EPA developed alternative regulatory approaches to lessen this burden on instrument providers? If so, please provide these alternatives in the materials for the formal panel.

EPA also admitted that it has completed a "draft study [that] examines both the current state and future outlook of the markets for financial responsibility instruments based on publically available and attributable data (from the US Treasury, GAO, Standard & Poor's, industry, and non-profit institutions)" and that this draft is currently undergoing internal agency review. AEMA is extremely concerned that this "draft study" is not rooted in reality, given that the U.S. Treasury, GAO, industry, and others were provided no concrete details on the formula that is at the heart of this rulemaking or the duration of the obligation. Even if there is excess market capacity today, that does not mean there will be market capacity once hundreds of facilities begin to procure instruments to cover tens to hundreds of millions of dollars of liability coverage under the rule. What limited capacity there is today will be completely overwhelmed and wiped out by this new regulatory obligation. The impact on small mining businesses will be devastating.

AEMA requests that EPA provide the "draft study" to the SERs during the formal SBAR panel process for review and comment.

The presumed lack of available financial responsibility instruments from the insurance, surety and banking companies will leave cash as the only available instrument. Small mining companies will be unable to raise the cash required to meet any CERCLA 108(b) requirements. A CERCLA 108(b) rule without the ability to purchase insurance or other financial responsibility instruments at a reasonable cost will price most small mining companies out of business.

Exploration and junior mining companies will not be able to raise the necessary capital to explore for and develop mineral deposits knowing there will be a cash requirement for duplicative financial assurance under a CERCLA 108(b) rule. This will have an adverse effect on the mining industry food chain as most producing mines begin as an exploration project by an exploration company, junior mining company or other small mining company. The result will be fewer high paying jobs and increased dependence by the United States on foreign sources of minerals necessary for national defense and economic security.

Modeled Universe Summary Statistics

The table EPA provided is useless to an understanding of the mine sites EPA analyzed for preparing the model and determining inputs in the examples contained in the SBRFA slides. This summary table omits critical information required including the approximately 64 mine sites modeled, the selection criteria used, the dates the mines began operating, and whether they are operating today. The SERs need the formula and/or spreadsheets in order to understand how the financial responsibility amount outputs are calculated. These are critical omissions.

The SERs must know whether the mines summarized in this table are currently operating mines, modern mines; or are they older mines that pre-date modern environmental regulatory and financial responsibility requirements. Are any of the mines on the NPL? The fact the mean size for an open pit is only 407 acres suggests that the sample size includes many small and perhaps older mines.

Now that EPA has agreed that a CERCLA 108(b) rule would apply only to mines operating or authorized to operate on or after the effective date, it is important to know the identity of each mine that makes up this summary table. We must know that the sites used to justify a proposed CERCLA 108(b) rule and to build the model are the same sites which will be subject to the rule. If not, then EPA is building a model that has no relevance to modern mines subject to modern environmental regulation and financial responsibility requirements.

Draft Summaries of 21 state and 3 FLMA financial responsibility programs prepared by EPA's Contractor

Thank you for providing these summaries. Given the fact that these summaries are 4-6 years old, we are disappointed to learn that EPA does not plan to have their contractor review, update and finalize these summaries. We have just begun our review of these summaries for completeness

and accuracy and are finding that some of the summaries are incomplete, inadequate and out of date. An example is Alaska. We asked our members operating in Alaska to review and comment on the summary. A copy of the Alaska summary with comments in Track Changes accompanies this letter. Another example is Idaho. Last year Idaho increased the *minimum* cost per acre from $2,500 to $15,000.

We are continuing our review of the other summaries and may have additional comments to submit.

Other Comments

Economic Harm

Our small entity members are telling us a duplicative CERCLA 108(b) rule calculating financial assurance according to the examples in the SBREFA slides will chill access to investment capital and prevent companies from raising the capital necessary to develop their projects into a producing mine or to expand an existing mine. A CERCLA 108(b) rule would increase the cost of doing business to our member companies without providing any benefits to the company, the environment, or the taxpayer.

EPA Must Provide a Gap Analysis

Based on the information EPA has provided to date, and the FLMA and state presentations of their mine regulatory and financial assurance programs, EPA's proposal duplicates and overlaps FLMA and state financial assurance requirements and potentially pre-empts state regulation. If EPA perceives there are gaps in FLMA and state financial assurance requirements, EPA must identify those gaps. The burden is on EPA.

Natural Resource Damages

Natural resource damages belong to "the trustees." They are in essence tort claims against an alleged polluter. They are not, in any case, a taxpayer liability. Please explain EPA's legal authority to require financial assurance for potential claims that belong to other parties such as states and tribes. In addition, please provide the "fixed percentage of aggregate financial responsibility for natural resource damages" the EPA is currently considering for inclusion in the rule. Without this information, the SERs cannot assess the financial impacts to their operations.

Incomplete SER Representation

For CERCLA 108(b) purposes, EPA has modified the commonly understood meaning of hardrock mining and beneficiation (locatable minerals under the 1872 Mining Law) to include certain leaseable minerals (e.g. phosphate, gypsum, sulfur and asbestos). The 15 company potential SERs mine locatable minerals and do not mine leaseable non-metallic, non-fuel minerals. AEMA has members that mine phosphate, but those members do not meet the SBA definition of Small Entity for SBREFA purposes. AEMA does not have members that mine

gypsum, sulfur, asbestos or other non-metallic, non-fuel leaseable minerals. There are no potential SERs that mine the leaseable non-metallic, non-fuel minerals included in EPA's definition of hardrock mining and beneficiation.

Regulatory Alternatives

EPA should consider the following alternatives that will lessen the economic, compliance, record keeping and cost burden on small entities consistent with the requirements of CERCLA 108(b).

1. We believe the record demonstrates clearly that a CERCLA 108(b) rule as contemplated by EPA in the SBREFA slides and additional materials provided will duplicate and overlap existing FLMA and state financial assurance programs that are the functional equivalent of a CERCLA 108(b) rule. Therefore, EPA should conclude that CERCLA 108(b) rule is unnecessary and publish that finding in the Federal Register.

2. EPA should defer to the existing FLMA and state mine regulatory and financial assurance programs.

3. EPA should exempt mine sites that are covered by existing FLMA and state financial assurance programs that are designed to prevent the release of hazardous substances and provide evidence of financial responsibility consistent with the degree and duration of risk associated with the production, transportation, treatment, storage, or disposal of hazardous substances.

4. EPA should identify gaps, if any, in existing FLMA and state programs and allow those programs to fill the gaps instead of proposing a new regulatory and financial assurance program that will increase the costs to small entities.

Information required prior to convening the SBAR panel

In preparation for the formal SBAR panel, AEMA reiterates that prior to formally convening the SBAR Panel the following critical information must be provided to ensure an effective Panel:

1. The selection criteria used to identify the 64+ mining and mineral processing sites used in the model/formula.

2. The names of the 64+ mining and mineral processing sites and the information (i.e., site characteristics, risk evaluations, dates of operation and other relevant information) from these sites that is used in the model/formula.

3. The criteria for identifying engineering controls and best management practices that will be assigned reduction values in the model/formula.

4. The complete list of engineering controls and best management practices the agency is currently considering for reductions in the total financial responsibility obligation,

including those controls and practices EPA intends to include that are currently required under state and federal regulatory programs.

5. The corresponding reduction percentages/values for each engineering control and best management practice and the criteria, formula, and assumptions used to determine these numbers.

6. The formula, calculations, and assumptions, including spreadsheets, used to determine the annualized instrument costs to obtain the hypothetical financial responsibility amounts in the SBREFA slides, including the costs for insurance policies, trust funds, and letters of credit, as well as information on costs for surety bonds (not provided in the slides or at the June 9, 2016 meeting).

7. The fixed percentage EPA is currently considering for natural resource damages. The fixed amount EPA is currently considering for health assessment costs. The criteria used to determine or calculate those amounts.

8. The duration of the obligation is currently unknown. Instead, EPA has only shared that it would "evaluate the facility and the continued financial responsibility, and would adjust the level of financial responsibility required, or release the owner or operator from the requirement to obtain financial responsibility." EPA must provide more detail on this evaluation process, how it will work and what criteria EPA will rely on to base its ultimate decision to continue or release companies from the obligation.

9. The draft market capacity study.

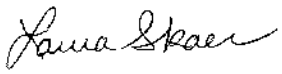
Summary

EPA's CERCLA 108(b) rulemaking for hardrock mining and beneficiation is a classic "*solution in search of a problem*;" a problem that clearly does not exist. The hardrock mining states and the federal land management agencies have comprehensive, robust regulatory programs in place that address financial assurance requirements associated with mining and beneficiation, reclamation, closure and post-closure issues. These programs substantially reduce, if not eliminate, the risk that a mine will have a release of hazardous substances. The states and FLMAs have the expertise and staff to calculate the appropriate amount of financial assurance based on the unique circumstances and features, including geochemistry of the rock, for each mining operation and to adjust financial assurance as required over the life of the operation, including post-closure.

The FLMA's and state's comprehensive, robust regulatory programs are designed to prevent the release of hazardous substances and assure sufficient financial assurance is in place to protect the taxpayer in the event of bankruptcy or an event that requires corrective action. The fact no hardrock mining or beneficiation plan of operation approved by the BLM or USFS since 1990 has been added to the CERCLA NPL demonstrates that the "degree and duration of risk" for

hardrock mining is too small to regulate. This is the conclusion EPA should publish as a proposed rule on December 1, 2016.

Yours truly,



Laura Skaer
Executive Director

From:	Laura Skaer
To:	Wiggins, Lanelle; Allen Biaggi; Brad Moore; Debbie Lassiter; Debra Struhsacker; Eric Struhsacker; Frank Ongaro; Harold Roberts; Jeff Parshley (HELPER); Joe Bardswich; Lucy Hill; Patrick Rogers; Paul Goranson (pgoranson@energyfuels.com); Rachel Yelderman; Richard Brown; Ron Rimelman; Tim Dyhr; Tim Havey; William Scales; Jim Butler (jbutler@parsonsbehle.com)
Cc:	Waqar, Tayyaba; kevin.bromberg@sba.gov; Barr, Linda; Krueger, Anna; Jones, Danielle Y. EOP/OMB; Laura Skaer
Subject:	Questions for 8-31 CERCLA 108(b) SBAR Panel Meeting
Date:	Monday, August 29, 2016 8:49:48 PM

Lanelle,

Thank you for the additional information and especially the 11 mine slides. When the SBAR Panel convenes with the SERs on August 31, we would like to utilize the 4 hours allotted to address questions and issues raised by the SERs on the two slide presentations (Aug. 23 and 11 mines) and to discuss alternatives proposed by the SERs. Like you did in June at the pre-panel outreach, we would prefer to dispense with slide presentations and get right to the questions and issues raised by the various SERs.

Set forth below are some initial comments and questions AEMA has concerning the August 23 SBREFA slide presentation you have provided. Questions concerning the 11 mine slides will follow. These questions are in addition to the questions asked in our June 1 and July 7 letters. Many of those questions remained unanswered and we hope they will be addressed on August 31.

1. Slide 6 – Thank you for providing the CERCLIS IFMS 2011 data which appears to support the $4.6 billion EPA said it has spent cleaning up approximately 331 "hardrock mines and mineral processors." Unfortunately, this spreadsheet is very misleading because a substantial number of sites on the spreadsheet are not hardrock mines or mineral processors and almost all of them are legacy sites not relevant to modern mines permitted under current regulatory requirements and subject to current FLMA and state financial assurance requirements. There are mines that haven't been mined in decades, aluminum plants, chemical plants, a pottery factory, a mobile home park, a mosaic tile dump , the Savanah River site, cement plants, vermiculite operations, railroad sidings, glass companies, historic mining districts, fertilizer plants and lots of sand & gravel operations. Of the 10 sites that account for more than one-half of the $4.6 billion (Bunker Hill, Libby Asbestos, Summitville Mine, Tar Creek, Denver Radium, Omaha Lead, Iron Mountain Mine, U.S. Radium, Oronogo-Duenweg Mining Belt, Sharon Steel Corp (Midvale Tailings), only Summitville is worth discussing. Most are associated with human health protection from threats that could never happen under current laws.

   EPA also intends for the rule to create financial incentives for improved mining practices that reduce financial responsibility costs where existing and certain future practices ultimately may also help reduce risks and costs to the Superfund program. Please identify and describe the improved mining practices EPA believes the rule will incentivize? How do these practices differ from current modern mining practices utilized at current operating mines? How are they different from what current FLMA and state regulatory programs require?

2. Slide 9 – *CERCLA is a response program that addresses Section 107 liabilities – response costs, natural resource damages (NRD), and health assessments – and is*

distinct from closure and reclamation requirements of federal and state mine permit programs.

We believe this statement is incorrect because state and FLMA mine permit programs include financial assurance to address Section 107 liabilities. A component of required state and FLMA financial assurance is response costs—financial assurance is required to pay for the permitting agency's response to an unplanned release in the event the mine operator does not take action. Furthermore, current FLMA and state mine regulatory programs are designed to prevent the release of hazardous substances, minimizing and in comes case eliminating release which could lead to CERCLA liability. This is especially true with respect to NRD and HHA where the FLMA and State programs take the risk of NRD and HA costs to near zero.

We have a semantics issue which leads to a distinction without a difference. While the FLMA and State mine regulatory and financial assurance programs may not use the same terms as CERCLA, it is clear that the FLMA and State programs address section 107 liabilities and provide financial assurance to enable the permitting agency to respond to a release in the event there is a release. The FLMA and State financial assurance requirements are the functional equivalent of a 108(b) rule.

3. Slide 14 -- *EPA's proposed Section 108(b) regulations will be stand-alone financial responsibility requirements. There are significant differences between these requirements and other existing requirements for hardrock mining facilities. In particular:*

   CERCLA is primarily a response program that does not establish a permitting regime and thus the proposed regulation would operate differently from other financial responsibility programs;
   The proposed rule does not include technical requirements regulating the operation, closure, or reclamation of hardrock mining facilities;
   For purposes of Section 108(b), EPA intends to develop only those requirements that are appropriate for the limited purpose of demonstrating evidence of financial responsibility under CERCLA; and,
   The proposed rule does not provide financial responsibility to ensure closure or reclamation requirements made applicable to hardrock mining facilities through a permit.

   As indicated above, these are distinctions without a difference. The FLMA and State financial assurance programs include monies to cover interim O & M as well as short and long term O & M and to respond to a release in the unlikely event a release does occur and the operator is unable to respond.

4. On slides 15 & 17, there is a discussion of 184 hardrock mining facilities derived from MSHA Mine Data Retrieval System & Mineral and USGS Commodity Surveys data. Please provide a list of those 184 mines as soon as possible and before the August 31 meeting.

5. Slides 20 - 22 – As stated above, EPA is emphasizing a distinction without a difference. As the FLMA and State presentations on June 16 clearly demonstrated, FLMA & State mine regulatory and financial assurance requirements not only prevent the release of hazardous substances, they include monies to respond to a release in the

event a release occurs and the operator is unable or unwilling to respond. Thus, the FLMA & State financial assurance programs are "in connection with liability for a release of a hazardous substance." The FLMA and State financial assurance requirements are the functional equivalent of a CERCLA 108(b) requirement. Federalism comments filed by WGA, ECOS, IMCC and the states of Alaska, Arizona, Florida, Nevada, South Dakota and Utah confirm this.

6. Slide 23 – Please provide the market study.

7. Slide 24 – Please provide the legal authority to support EPA's position that it has the authority to require financial assurance for natural resource damages (NRD) which are 3rd party claims against a facility that releases hazardous substances.

8. Slide 25 -- *To incorporate response costs into the formula, EPA identified activities at hardrock mining facilities undertaken by Superfund in the past, based on historical Superfund data, then estimated the current costs of those actions based primarily on data from current situations.*

   Activities undertaken by Superfund in the past, based on historical Superfund data bear little relevance to modern mines permitted under modern mine regulatory programs. Modern mines are designed, built and operated for closure and preventing the release of hazardous substances. Historical or legacy mines were not. This will have a significant impact on the type and extent of response actions with respect to modern mines compared to mines on the Superfund NPL or listed in CERLIS IFMS database.

9. Slide 29 – Please provide the names of the 63 current facilities and 3 historical sites described in this slide.

10. Slide 35 – Using natural resource damages from historical NPL and non-NPL sites do not accurate reflect modern mining sites that are designed, built and operated for closure to prevent the release of hazardous substances before, during and after closure. Using a fixed percentage of aggregate financial responsibility to determine NRD is arbitrary and capricious. If the aggregate financial responsibility after credits is zero, is the amount calculated for NRD equal to zero?

11. Slide 36 – If the aggregate financial responsibility after credits is zero, is the cost for HA zero?

12. Slide 49 – What are the estimated costs for EPA to implement a CERCLA 108(b) rule? How is EPA going to pay the costs of the program? The FLMA and States have provided evidence that their mine regulatory programs and financial assurance requirements were developed over a period ranging from 25 to 40 years and that they have developed substantial expertise in regulating mine sites to prevent the release of hazardous substances and in calculating financial assurance on a site-specific, mine by mine basis. Unlike the states and FLMAs, EPA has no experience regulating hardrock mines and calculating financial assurance for hardrock mines. How is EPA going to obtain and pay for the experience and expertise to implement and oversee a new financial assurance program created out of whole cloth?

13. Slides 52 & 53 – Barite Hill and Formosa are outliers and not representative of modern

mines. The Formosa Mine is a 76 acre site located on Silver Butte in Douglas County near Riddle, Oregon. It was first operated as a copper-zinc mine from 1910-1937. It was abandoned and continued to leak contaminated waters into Middle Creek and the South Fork of Riddle Creek (headwaters of the Umpqua River), adversely affecting some 13-18 miles. In 1984, patented and unpatented claims and some fee lands on and around the site were consolidated by Vancouver mining entrepreneur Kuang Ine Lu. In 1989, Formosa Exploration, Inc. (FEI) determined to mine and mill copper, zinc, and thorium ores at a rate of around 400 tpd. They went through the DOGAMI permitting process, obtained a state approved reclamation and closure plan, filed a $500,000 bond, and commenced operations. The reclamation plan included removal of waste from the creek, encapsulation of waste materials on-site, backfilling of openings with mine waste, and adit bulkheads

In late 1992, a state inspection revealed that FEI was not following its mine plan, was producing more than permitted, and had dumped waste materials into the creek. DOGAMI issued a CnD, closed the operation, and brought FEI to the table with an increased bond to $1 million. Reclamation began in 1994. When it was evident that the closure plan was not working, FEI liquidated, leaving the state and BLM with the closure and remediation. At the time the mine was permitted, the Oregon regs capped reclamation at $10,000 per acre. DOGAMI and FEI both believed that the plan would work. FEI added additional monies to the bond as noted when it became apparent it was failing. Oregon regs were strengthened significantly following the incident. Bonding now is actual cost or $100,000 per acre whichever is lowest for float mill operations and "credible accident" for cyanide leach operations. A number of other elements in the regs also were toughened. DOGAMI presently is trying to remove the $100,000 limit and go strictly with actual cost.

Questions on the 11 mines slides:

1. Please identify by name and location each of the 11 mines depicted in these slides.

2. Some of the amounts in columns C & E on some of the slides do not add to the total response amount in row 14. Please explain.

3. EPA states that Row 15 **Total Financial Responsibility** is the sum of (1) the response component amount, adjusted using multipliers such as state and regional variations in labor and material costs and engineering design/redesign; (2) the health assessment amount; and (3) the natural resource damages amount.
    a. Please separate the response cost amount adjusted for state and regional variations in labor and material costs and engineering design/redesign from the health assessment amount and the natural resource damages amount and list each separately for each of the 11 mines.

4. It is impossible to evaluate the validity of the formula EPA is using without knowing how columns C and E are calculated.
    a. Please provide the underlying formulae for calculating columns C & E.
    b. Why is the FR for Solid/Hazardous Substance Disposal $2.6 million for each mine? What is the source of this amount? Using the example of solid/hazardous waste disposal, if the current required bond covering this is, for example, $107,000, how much credit will EPA be providing from its

baseline maximum FR amount?

5. Please provide the source for the reductions under consideration in Column D. How did EPA verify that these practices or controls are in place? Did EPA obtain these from the permits? And/or from the FLMA or State regulatory authority? Were they verified with the mine operator or FLMA/State permitting authority? More generally, how does the facility establish the basis for credit reductions – does it provide copies of the permit conditions and the related bond, and the bond calculations?
    a. Does "No" in Column D mean that there are no controls in place or that EPA did not complete its research on each mine? We ask because we are not familiar with any currently operating mine requiring water treatment that does not have water treatment controls in place (row 11), Short-term O & M/Monitoring (Row 12) or Long-term O & M/Monitoring and financial assurance, including long term trusts, to cover those costs.

6. If the Total Response Amount (row 14) in Column E totals zero, is the Total Financial Responsibility (row 15) also zero? If not, why not?

7. Who calculates the credit reductions – the facility, the mining regulatory authority or EPA?

Thank you. We look forward to a productive meeting with EPA, OMB and SBA Office of Advocacy on Wednesday.

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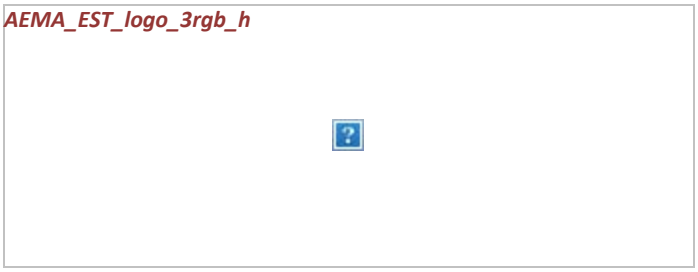
IT ALL STARTS WITH MINING



The Fertilizer Institute
Nourish, Replenish, Grow

Andrew T. O'Hare, CAE
Vice President, Public Policy

July 13, 2016

VIA Electronic Mail

Mr. Barnes Johnson
Director, Office of Resource Conservation and Recovery
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RE: Follow-up From June 9, 2016 Meeting: CERCLA § 108(b) Financial Responsibility at "Hardrock" Mines, Docket No. EPA-HQ-SFUND-2009-0265

Dear Mr. Johnson:

The Fertilizer Institute ("TFI") and its members thank you and your staff for arranging our June 9, 2016, meeting to discuss the U.S. Environmental Protection Agency's ("EPA" or "Agency") rulemaking[1] identifying "hardrock" mining facilities as a "priority" class for the development of financial responsibility requirements pursuant to Section 108(b) of the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA").[2] We hope that the Agency now has a better understanding of the phosphate mining industry and will seriously consider our position that phosphate mining and manufacturing should be excluded from this rule.

As discussed during our meeting, and presented in more detail below, EPA has neither justified nor supported the inclusion of phosphate mining and those phosphate fertilizer manufacturing facilities "at or near" a phosphate mine[3] within the "classes of facilities" comprising "hardrock" mining for purposes of the CERCLA § 108(b) financial responsibility requirements. As such, the Agency should expressly exclude these sectors under this rulemaking as it already appropriately has done for 59 other sectors, which are similar in nature to phosphate mining. In the alternative, EPA should defer a decision on the inclusion of phosphate mining and phosphate fertilizer manufacturing facilities in the "hardrock" mining CERCLA § 108(b) rulemaking until

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1 74 Fed. Reg. 37,213 (July 28, 2009).
2 42 U.S.C. § 9608(b)(1).
3 At our meeting, we learned that EPA intends to include mineral "processing activities" located "at or near" a mine site and "under the same operational control" as the mine within the "classes of facilities" subject to the "hardrock" mining CERCLA § 108(b) financial assurance requirements.

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the Agency performs a risk evaluation of those operations and presents the results for public comment.

EXECUTIVE SUMMARY

EPA's focus in the Priority Notice is on metal mining and associated processing facilities. Both the Priority Notice and rulemaking docket fail to contain any specific information on phosphate mining and phosphate fertilizer manufacturing facilities, and in no way do EPA's bare references justify such facilities' inclusion as classes of facilities comprising "hardrock" mining.

Had EPA performed the requisite risk evaluation of phosphate mining, it would have concluded that this sector presents significantly lower risk than traditional "hardrock" (*i.e.*, metals) mining, and such risks are managed effectively by modern phosphate sector operational procedures, reclamation methods, and regulatory structures. EPA's administrative docket includes only six documents referring to phosphate mining, most of which contain only a passing reference to phosphate mines in the context of much larger discussions of metals mining. To the contrary, any risks presented by phosphate mining are more similar to those of the 59 sectors (such as aggregates mining) that the Agency proposed for exclusion from the rulemaking than any risks presented by metal mining. Like the excluded sectors, phosphate mining (1) involves shallow mining, (2) utilizes physical, rather than chemical, separation methods, (3) does not involve land-based production units requiring the use of sulfuric acid or sodium cyanide application to generate solutions for further beneficiation, (4) has no, or limited, chemical use, (5) has no sites listed on the National Priority List ("NPL"), and (6) with very minor exceptions, has not needed CERCLA funds for remedial actions at phosphate mines.

Phosphate fertilizer manufacturing's relationship to "hardrock" mining is even more attenuated. EPA has failed to explain how proximity to the phosphate mine, or being under the same operational control as a mine, warrants their inclusion in a rulemaking focused on the potential risks of *mining*. Further, EPA has wholly failed to recognize that any risks at these manufacturing facilities have already been, or will be, addressed through the Agency's nation-wide enforcement "initiative" against this sector pursuant to the Resource Conservation and Recovery Act ("RCRA"), which includes a significant financial assurance component.

Thus, as explained further below, EPA has failed to properly evaluate phosphate mining — and has conducted no evaluation in any fashion of phosphate fertilizer manufacturing facilities — for purposes of including them within the classes of facilities comprising "hardrock" mining. Any attempt by the Agency to impose CERCLA § 108(b) financial responsibility on these sectors is unsupported by the administrative record and is therefore arbitrary.

DISCUSSION

Before evaluating EPA's proposed inclusion of phosphate mines and phosphate fertilizer manufacturing facilities within the "classes of facilities" in "hardrock" mining subject to the

rulemaking, below is a brief discussion of phosphate mining in the United States and a summary of EPA's Priority Notice of Action ("Priority Notice").[4]

I. Phosphate Mining and Fertilizer Overview

Phosphorus is an essential nutrient for all plant, human, and animal life. In young plants, phosphorus provides rapid and extensive root growth necessary for plants to flourish. The primary source of phosphorus to plants is phosphate fertilizers.

There are 10 active phosphate mines in the United States (in Florida, Idaho, North Carolina, and Utah), operated by 5 companies. Phosphate is mined in relatively shallow surface mines where the phosphate matrix is separated from the sand and clays using physical separation. The sand and clays are stockpiled for future reclamation of the mine site, or contemporaneously placed in the mined area as the first stage of reclamation. Reclamation of the mine sites is secured by financial instruments required by federal, state, and local agencies.

During the beneficiation process, some TFI members use no chemicals to consolidate the phosphate, while others use some minimal chemicals (primarily in the flotation process) to facilitate separation. The beneficiation process occurs in tanks and vessels.

After beneficiation, the phosphate is conveyed to a fertilizer manufacturing facility and processed into phosphoric acid which is then used to produce phosphate fertilizers. Phosphoric acid production and phosphate fertilizer manufacturing do not occur at the mine site or at a co-located manufacturing facility; rather, the beneficiated phosphate ore is transported by conveyor, truck, barge or rail to the phosphate fertilizer production facility. In some instances, the phosphate entering the phosphate fertilizer manufacturing facility originates from outside of the United States. Further, phosphate fertilizer manufacturing facilities may not only receive phosphate from a mine that is owned or operated by the same entity; they receive, or can receive, phosphate from a variety of sources.

The United States is the second largest producer of phosphate fertilizers in the world. Both phosphate ore and phosphate fertilizers are traded globally; thus, production costs are important to the economic viability of the industry.

Unlike outside of the United States, the phosphate mining and fertilizer industries are heavily regulated federally by numerous agencies and states, EPA, the U.S. Army Corps of Engineers, the U.S. Mine Safety and Health Administration ("MSHA") (for phosphate mines), and the U.S. Occupational Safety and Health Administration ("OSHA") (for phosphate fertilizer manufacturing facilities). In addition, mining on federal lands is regulated by the U.S. Forest

[4] *See generally* 74 Fed. Reg. 37,213 (entitled "Identification of Priority Classes of Facilities for the Development of CERCLA Section 108(b) Financial Responsibility Requirements").

Service ("USFS") and the Bureau of Land Management ("BLM"). These operations are also subject to state and local regulations.

II. CERCLA § 108(B) FINANCIAL RESPONSIBILITY PROGRAM

A. CERCLA § 108(b) Authorizes Adoption of Financial Responsibility Requirements Only for The Highest Risk Classes of Facilities

CERCLA § 108(b) requires EPA to promulgate regulations requiring "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."[5] Unto itself, CERCLA § 108(b) does not prioritize the "classes of facilities" for financial responsibility. Rather, EPA must do so based on "the degree and duration of risk" that they represent, and first develop and promulgate regulations for "those classes of facilities, owners, and operators, which [EPA] determines present the highest level of risk of injury."[6] The Priority Notice addresses EPA's initial obligations in this regard, which are limited to facilities presenting the *highest* risk level.

In promulgating requisite financial responsibility to protect against that "risk," EPA must consider "the payment experience of the [Superfund], commercial insurers, court settlements and judgments, and voluntary claims satisfaction."[7] Thus, priority "classes" must be established based on "risk," and "risk" must be evaluated by considering payment experience from the Superfund, commercial insurers, settlements/judgments, and voluntary efforts.

Despite this clear mandate, as explained in Sections III and IV of this letter, respectively, EPA has failed to establish that the risk presented by phosphate mining and fertilizer manufacturing facilities justifies the inclusion of these sectors in this rulemaking. Instead, EPA has inappropriately proposed inclusion of the phosphate sector within the "hardrock" mining rulemaking based on data and information pertaining to other readily distinguishable classes of facilities with high risk profiles.

B. EPA's Priority Notice Has Neither Appropriately Distinguished Nor Considered Phosphate Sector Risks

On July 28, 2009, EPA published a Priority Notice wherein the Agency: (1) established the factors it would use to evaluate the "degree and duration of risk" associated with "classes of facilities;" and, (2) determined that particular classes of hardrock mining facilities presented the "highest level of risk of injury," and applied its factors to some of those classes of facilities.[8]

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5 42 U.S.C. § 9608(b)(1).
6 *Id.*
7 *Id.*
8 74 Fed. Reg. at 37,213-18.

1. EPA's Definition of "Hardrock" Mining

For purposes of the Priority Notice, EPA improperly and arbitrarily defines "hardrock" mining beyond its traditional and well-understood meaning of metals mining to include both metals mining *and* certain non-metallic, non-fuel minerals mining.[9] As discussed in Section III of this letter, EPA fails to provide any specific facts upon which to base a decision to include phosphate mining within the definition of "hardrock" mining, and disregards the fact that phosphate mining is not considered "hardrock" mining under any other EPA programs.

Instead, in this rulemaking, EPA identifies the "classes of facilities" within "hardrock" mining subject to the Priority Notice "as the extraction, beneficiation or processing of metals (*e.g.*, copper, gold, iron, lead, magnesium, and zinc) and non-metallic, non-fuel minerals (*e.g.*, asbsestos, gypsum, phosphate rock, and sulfur)."[10] As a purported justification for including these broad "classes of facilities" under the rubric of "hardrock" mining, EPA asserts in a broad brush fashion that "because of the ways that the facilities covered by this notice fit together, and because of the range of activities that they cover, EPA believes hardrock mining is properly identified as a group and considered to include multiple classes of facilities."[11]

Although EPA broadly identified "hardrock" mining as encompassing both metals mining and certain non-metallic, non-fuel minerals mining, the Agency identified 59 sectors for which the CERCLA § 108(b) rulemaking will not apply.[12] Many of these sectors, as explained in Section III.C, are very similar to phosphate mining. Among other reasons it invokes to justify its decision to exclude these 59 sectors, EPA concluded that none of the 59 sectors have been placed on the CERCLA NPL.[13]

2. EPA's Criteria for Identifying "Risk"

EPA's risk evaluation of "hardrock" mining purported to evaluate 8 factors: (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 and non-NPL sites); (6) government expenditures; (7) projected cleanup expenditures; and, (8) corporate structure and bankruptcy potential.[14]

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[9] Specifically, EPA identifies copper, gold, iron, lead, magnesium, molybdenum, silver, uranium, and zinc as examples of metal mining sectors considered "hardrock" mining and subject to the Priority Notice, and asbestos, gypsum, phosphate rock, and sulfur as examples of non-metallic, non-fuel mineral mining sectors considered "hardrock" mining and subject to the Priority Notice. *Id.* at 37,214.

[10] *Id.*

[11] *Id.* at 37,215.

[12] Memorandum from Stephen Hoffman and Shahid Mahmud, EPA re: "Mining Classes Not Included in Identified Hardrock Mining Classes of Facilities" (June 29, 2009) (Dkt. No. EPA-HQ-SFUND-2009-0265-0033) (hereinafter, "*Excluded Sectors Memorandum*").

[13] *Id.* at 3.

[14] 74 Fed. Reg. at 37,214.

In its 2011 comments on the Priority Notice, TFI criticized EPA's concurrent announcement of the risk factors, and the Agency's application of them to "hardrock" mining.[15] From the outset, EPA should have first announced the risk factors for public comment, finalized them based on the comments received, then proceeded to evaluate and rank sectors based on "risk" for purposes of prioritizing sectors for CERCLA § 108(b) financial responsibility. Although TFI continues to have concerns with how the Agency has approached its CERCLA § 108(b) mandate, for purposes of this letter, in Section III.B.2 below, TFI summarizes EPA's application of each of these factors to "hardrock" mining and demonstrates why phosphate mining does not present the same risks as metals mining.

III. EPA'S INCLUSION OF PHOSPHATE MINING IN ITS RULEMAKING DEFINITION OF "HARDROCK" MINING IS WHOLLY UNSUPPORTED IN THE ADMINISTRATIVE RECORD AND, THEREFORE, IS ARBITRARY

As discussed with EPA staff on June 9th and in *TFI's Comments*, EPA has failed to justify the inclusion of phosphate mining as "hardrock" mining for purposes of imposing CERCLA § 108(b) financial responsibility on this sector. In particular, EPA has failed to conduct any meaningful or independent review of phosphate mining required to identify and evaluate the risks associated with this sector. Instead, the Agency has inappropriately concluded, inaccurately and without support, that phosphate mining presents the same level of risk as unrelated "hardrock" mining facility classes. Further, EPA has failed to conduct a meaningful survey or evaluation of state reclamation and related regulatory structures governing phosphate mining, including current reclamation bonding and other financial assurance mechanisms already in place at active, modern phosphate mining facilities.

A. EPA's Inclusion of Phosphate Mining as "Hardrock" Mining Is an Inexplicable Departure from Longstanding Federal Regulatory Definitions

EPA has failed to explain or support its departure from longstanding federal agency definitions of "hardrock" mining, which exclude phosphate mining. EPA must explain and justify this departure before it can proceed to regulate phosphate mining under CERCLA § 108(b).

As an example, the BLM regulations applicable to the leasing of solid minerals on federal lands define "hardrock" minerals as "base metals, precious metals, industrial minerals, and precious or semi-precious gemstones."[16] Phosphate is specifically excluded from the definition of "hardrock" minerals.[17]

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[15] Letter from William C. Herz, TFI, to Ben Lesser, EPA (Apr. 13, 2011) (Dkt. No. EPA-HQ-SFUND-2009-0265-0054) (hereinafter, "*TFI's Comments*").

[16] 43 C.F.R. § 3501.5.

[17] *Id.*

Further, the U.S. Census Bureau, through the North American Industry Classification System ("NAICS"), does not consider phosphate mining to be "hardrock" mining. NAICS overarching code 2122, defined as "Metal Ore Mining," includes more specific codes for iron ore mining (212210), gold ore mining (21221), silver ore mining (21222), lead ore and zinc ore mining (212231), copper ore and nickel ore mining (212234), and all other metal ore mining, which includes molybdenum ore mining (212299).[18] These industries inherently focus on extracting, concentrating, and purifying naturally-occurring metal ores into refined metal products. EPA's focus in the Priority Notice and docket materials is on these sectors, with particular emphasis on gold, copper, and molybdenum.[19]

By contrast, NAICS overarching code 2123, defined as "Nonmetallic Mineral Mining and Quarrying," includes phosphate mining (212392).[20] Notably, NAICS code 2123 includes the sectors proposed by EPA for exclusion from the CERCLA rulemaking, such as dimension stone mining and quarrying (212311), crushed and broken limestone mining and quarrying (212312), crushed and broken granite mining and quarrying (212313), construction sand and gravel mining (212321), industrial sand mining (212322), and kaolin and ball clay mining (212324).[21]

Finally, EPA's own regulations do not consider phosphate mining to be "hardrock" mining. As an example, pursuant to its Clean Water Act authority, EPA has established effluent limitation guidelines ("ELGs") for industrial sectors and regulates the discharge of pollutants to surface waters specific to these regulated sectors. ELGs for "hardrock" mining are set forth in 40 C.F.R. Part 440 (entitled "Ore Mining and Dressing Point Source Category") and regulate discharges from traditional "hardrock" mines included within overarching NAICS code 2122, entitled "Metal Ore Mining."[22]

One such source category is for copper, lead, zinc, gold, silver, and molybdenum ores (Subpart J), the "hardrock" mines EPA focused on in the Priority Notice. This source category identifies regulated pollutants based on certain types of releases or operations, namely mine drainage, mill discharges, and leaching processes.[23] These types of releases are identified by EPA in the Priority Notice as concerns associated with "hardrock" mining.[24] Similarly, Subpart J

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18 *See* U.S. Census Bureau Website re: "North American Industry Classification System – Introduction to NAICS" (last visited July 5, 2016), http://www.census.gov/eos/www/naics/.

19 *See, e.g.*, 74 Fed. Reg. at 37,215; Memorandum from Elaine Eby, EPA re: "Toxic Release Inventory (TRI) Releases from Hardrock Mining Operations" (June 29, 2009) (Dkt. Nos. EPA-HQ-SFUND-2009-0265-0032 and -0036) (hereinafter, "*Eby Memorandum*"); Memorandum from James R. Berlow, EPA re: "Release of Draft CERCLA 108(b) Financial Responsibility Reports," at 1-1 (July 2, 2009) (Dkt. EPA-HQ-SFUND-2009-0265-0020) (hereinafter, "*Phase II Analysis*").

20 *See supra* note 18.

21 *See id.*; *see also Excluded Sectors Memorandum.*

22 EPA's website identifies "hardrock" mining as subject to the 40 C.F.R. Part 440 regulations. *See* EPA Website re: "Mineral Mining and Processing Effluent Guidelines" (last visited June 21, 2016), https://www.epa.gov/eg/mineral-mining-and-processing-effluent-guidelines.

23 40 C.F.R. § 440.100.

24 74 Fed. Reg. at 37,215.

specifies limits for contaminants identified in the Priority Notice such as copper, zinc, lead, and mercury.[25]

By contrast, phosphate mining (NAICS code 212392) is included within ELGs associated with mining proposed by EPA for exclusion from the CERCLA rulemaking, stone (NAICS code 21231), gypsum (NAICS code 212319), asphalt (NAICS code 212321), and asphalt, sand and gravel (NAICS code 212399).[26] For phosphate mining, discharges are regulated for total suspended solids and pH, only.[27]

B. Neither EPA's Priority Notice Nor The Administrative Record Support the Inclusion of Phosphate Mining as a High Risk Sector of "Hardrock" Mining

TFI's review of the Priority Notice and administrative record found only two general statements by EPA that attempt, but fail, to explain why phosphate mining should be included in the category of "hardrock" mining. First, in the Priority Notice, without any discussion, EPA asserts that the types of "hardrock" mining identified in the Notice "share common characteristics, and are thus being identified as a group."[28] However, EPA does not discuss the "common characteristics" that phosphate mining shares with metals "hardrock" mining, or why phosphate mining is considered high "risk," much less the *highest* "risk" (*i.e.*, the threshold question that must be met to include phosphate mining, and thereby impose financial responsibility requirements).

Second, in the *Phase II Analysis*, after discussing in detail gold, copper, and molybdenum mining, EPA summarily concludes that "[t]he extraction and beneficiation of other hardrock minerals such as . . . phosphate may lead to similar environmental releases."[29] Again, this conclusion is not explained in the *Phase II Analysis* or the other docket materials, and no relevant risk evaluation is present. Thus, EPA has not demonstrated that phosphate mining is a high risk sector for inclusion in the Agency's overly-broad definition of "hardrock" mining.

1. EPA's Focus Indisputably Is Metal Mining, Not Phosphate Mining

Despite the administrative record being replete with TRI release data at metal mines,[30] CERCLA NPL information on metal mines,[31] and EPA expenditures responding to releases from

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25 40 C.F.R. § 440.102(a); 74 Fed. Reg. at 37,215.
26 40 C.F.R. Part 436; *Excluded Sectors Memorandum*.
27 40 C.F.R. § 436.182.
28 74 Fed. Reg. at 37,214.
29 *Phase II Analysis* at 1-2.
30 *See Eby Memorandum.*
31 *See infra* notes 53-57; *Phase II Analysis.*

metal mines,[32] TFI's review of the administrative record located only six instances where phosphate mining is even *mentioned*:

(1) EPA Office of the Inspector General, "Evaluation Report: National Identification of Hardrock Mining Sites" (Report No. 2004-P-00005) (March 31, 2004) (Dkt. No. EPA-HQ-SFUND-2009-0265-0002) (hereinafter, "*OIG Report*");

(2) EPA, "Cleaning Up the Nation's Waste Sites: Markets and Technology Trends" (2004 ed.) (Dkt. No. EPA-HQ-SFUND-2009-0265-0004) (hereinafter, "*Market Trends Report*");

(3) EPA, "Office of Compliance Sector Notebook Project, Profile of the Metal Mining Industry" (Sept. 1995) (Dkt. No. EPA-HQ-SFUND-2009-0265-0005) (hereinafter, "*Metal Mining Sector Profile*");

(4) *Southerland Data, "Total Expenditures at Non-NPL AML Removal Sites*" (Dkt. No. EPA-HQ-SFUND-2009-0265-0007);

(5) EPA, "National Hardrock Mining Framework, App. A (Mining Industry Profile)" (Sept. 1997) (Dkt. No. EPA-HQ-SFUND-2009-0265-0012) (hereinafter, "*Hardrock Mining Framework*"); and,

(6) *Phase II Analysis* (Dkt. No. EPA-HQ-SFUND-2009-0265-0020).

The discussion of phosphate mining is, at best, fleeting and does not support a finding that phosphate mining represents a high level of risk, much less the *highest* level of risk that EPA purports to address in this rulemaking. For example, in the *Market Trends Report*[33] and *Hardrock Mining Framework*,[34] EPA merely mentions phosphate mining in the discussion of "hardrock" mining without any discussion of why phosphate mining is considered "hardrock" mining or a discussion of the "risks" associated with phosphate mining operations. In the *Metal Mining Sector Profile*, which EPA describes as applying to Standard Industrial Classification ("SIC") code 10, Metal Mining,[35] EPA merely discusses a waste minimization program at a phosphate mine.[36]

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[32] *See* Letter from Elizabeth Southerland, EPA, to Robert Nazzaro, U.S. Government Accountability Office (undated) (Dkt. No. EPA-HQ-SFUND-2009-0265-0007) (hereinafter, "*Southerland Data*").

[33] *Market Trends Report* at 11-9.

[34] *Hardrock Mining Framework* at A-1, A-9, A-10.

[35] The SIC is the predecessor to the NAICS. While SIC code 10 applies to copper ore mining (102101), gold mining (104100), and molybdenum mining (106103), it does not apply to phosphate mining. Rather, phosphate mining is found in SIC code 14 (Mining and Quarrying of Nonmetallic Minerals, Except Fuels), specifically code 147500. *See* NAICS Association Website (last visited June 21, 2016), https://www.naics.com/sic-codes-industry-drilldown/.

[36] *Metal Mining Sector Profile* at 68.

Finally, in the remaining three documents, EPA (1) generally discusses projected, theoretical environmental cleanup liabilities at 22 phosphate mining sites in Florida without explaining how or to what degree Superfund funds might be required to address cleanup obligations (*OIG Report*),[37] (2) identifies expenditures of $659,972 at the Southeast Idaho Selenium Project (primarily the P4 Production, LLC mines), representing 0.02 percent of the total EPA expenditures of $2.7 billion (*Southerland Data,* "*Total Expenditures at Non-NPL AML Removal Sites*"),[38] and (3) again summarily asserts that "extraction and beneficiation of other hardrock minerals such as . . . phosphate rock may lead to similar environmental releases" as those identified in the gold, copper and molybdenum mining sectors (*Phase II Analysis)*.[39]

These passing, conclusory references to phosphate mining, and the identification of only 0.02 percent of EPA's total expenditures of $2.7 billion at "hardrock" mine sites which are linked to phosphate mines, do not justify a conclusion that phosphate mines present a high level of risk for purposes of imposing financial responsibility on their owners and operators. To include phosphate mining within "hardrock" mining, EPA must perform an analysis of phosphate mining, specific to contemporary phosphate mining.

2. Application of EPA's Risk Factors to Phosphate Mining Demonstrates That Phosphate Mining Does Not Present a High Level of Risk

As previously discussed, EPA articulated 8 factors that the Agency would use to evaluate the risks posed by various sectors, and applied these to conclude that "hardrock" mining represents the highest risk. However, the absence of any meaningful data relating to phosphate mining in the administrative record supports the conclusion that phosphate mining *does not* present a high level of risk when viewed according to EPA's risk factors.

Instead, a specific analysis of these factors as applied to phosphate mining is set forth below. It clearly demonstrates that phosphate mining does not present a high risk.

- ***Hazardous Substances Released*:** EPA evaluated 2007 TRI data only for the "metals" mining industry (*e.g.*, gold, silver, lead, zinc, copper, and nickel), concluding that "nearly" 1.15 billion pounds of TRI chemicals were reported as "released" from these sectors.[40] Phosphate mining is not included in the TRI program and, thus, is not subject to TRI reporting. Accordingly, none of the billions of pounds of toxic chemicals reported via TRI that EPA is relying on as having been released to the environment in support of designating "hardrock" mining as high risk were from phosphate mining.

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37 *See, e.g.*, *OIG Report* at 25, 49, 69.

38 Specifically, $659,972 ÷ $2.7 billion = 0.02%.

39 *Phase II Analysis* at 1-2.

40 74 Fed. Reg. at 37,215; *see also Eby* Memorandum. The NAICS codes evaluated by EPA are: (1) gold – NAICS code 212221; (2) silver – NAICS code 21222; (3) lead – NAICS code 212231; (4) zinc – NAICS code 212231; (5) copper – NAICS code 212234; (6) nickel – NAICS code 212234; and, (7) all other metal ore mining – NAICS code 212299. All of these codes correspond to the overarching NAICS code 2122, **Metal** Ore Mining.

Further, TFI questions the use of TRI reported "releases" as an indicator of risk. Under EPA's TRI regulations, a "release" is broadly defined as "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment . . . of any toxic chemical."[41] This broad definition is meaningless in the context of evaluating the risk associated with various operations. Many — perhaps most — of the reported "releases" under the TRI program are associated with the movement of overburden, or occur pursuant to permits or other legal requirements, which ordinarily take into account the risk associated with such "releases." As such, reliance on TRI data does little to evaluate "risks," and offers no basis to compare risks between different sectors and will only serve to inappropriately exaggerate the magnitude of perceived risk.

Instead, to put phosphate mining in the proper context, it currently only occurs in four states: North Carolina; Florida; Idaho; and, Utah. Constituents of interest associated with phosphate mining include cadmium (North Carolina), radionuclides (Florida), and selenium (Idaho). All are *naturally occurring in the phosphate matrix*. No chemicals are used in the extraction process; rather, simple physical separation is used to separate overburden (sand and clay) from the phosphate-containing ore matrix (consisting of phosphate, sand, and clay) or overburden. The overburden is stockpiled for future reclamation of the mine site, or contemporaneously placed in the mined area as the first stage of reclamation.

In North Carolina, cadmium is a monitored constituent in groundwater around that mine, and cadmium releases are controlled through mine reclamation practices. The U.S. Army Corps of Engineers have recognized these controls as sufficient to protect the environment. For example, in a June 3, 2009, Record of Decision responding to a request by PotashCorp to expand its existing phosphate mine, the U.S. Army Corps of Engineers concluded: "Based on the information available to me I find that with the implementation of the proposed special conditions, the project will not adversely effect [sic] or significantly degrade surface waters, ground waters or the terrestrial environment through the introduction of contaminants."[42]

In Florida, land disturbance activities such as mining and reclamation can redistribute naturally occurring radionuclides closer to the surface. The State of Florida has monitored radioactivity on pre- and post-mined lands since 1986. The concentration of naturally occurring radionuclides found in Florida soils is among the lowest in the nation, including

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41 40 C.F.R. § 372.3.

42 U.S. Army Corps of Engineers, "Record of Decision" (June 3, 2009) (addressing "Potash Corporation of Saskatchewan Phosphate Division, Aurora Operation"), *available at* https://www.epa.gov/foia/potash-corporation-saskatchewan-phosphate-deivision-record-decision.

in areas where phosphate ore exists.[43] In 2013, the U.S. Army Corps of Engineers prepared an areawide Environmental Impact Statement for the Central Florida Phosphate District, concluding that naturally occurring radionuclides on mined lands have no impact, to a minor degree of impact, related to radiation, and have no adverse health impacts.[44]

In Idaho, selenium at historical mine sites is addressed through Consent Orders between the appropriate regulatory agencies (including, in some instances, EPA) and the phosphate mine owner/operator. These orders require remedial investigations/feasibility studies ("RI/FS"), remedial action, and post-closure monitoring in accord with CERCLA protocols. Active mines address selenium through permit obligations, best management practices, and reclamation practices designed to prevent the potential for selenium releases.

In the Southeastern United States (Florida and North Carolina), water from an on-site recirculation system is used to convey the matrix (a mix of sand, clay and phosphate) to the beneficiation plant typically located within a few miles of the mine site. At the beneficiation plant, water is used to wash the matrix to separate some of the clay in the matrix for deposition in clay settling areas. Larger phosphate particles are screened and separated and the finer portion proceeds to the floatation section of the beneficiation plant. The flotation occurs in tanks and vessels to further separate the phosphate from the sand. The flotation process uses fatty acids, fuel oil, amine, and soda ash. All reagents are stored within secondary containment and Spill Prevention, Control and Countermeasures Plans in place for the area. At the completion of the beneficiation process, a small amount of sulfuric acid is used to rinse off the reagents. The phosphate is held in a stockpile. The sand and clay are used to reclaim the mine site.

In the Western United States (Idaho and Utah), the phosphate matrix is taken by truck to a stockpile for either beneficiation, or loaded onto a train and, from there, the matrix is hauled by rail to a beneficiation plant. At the beneficiation plant, the phosphate is separated from the matrix primarily using mechanical and gravitational separation methods with only water as the input, with flotation used at one mine. The material removed during beneficiation is routed to a tailings management area.

Unlike gold and copper mining, no land-based production units such as leach pads are used in the beneficiation process. Also, unlike gold beneficiation, there is no leaching of the matrix using sodium cyanide, and unlike copper beneficiation, there is no leaching with sulfuric acid.

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[43] *See generally* Joseph S. Duval, John M. Carson, Peter B. Holman, and Arthur G. Darnley, "Terrestrial Radioactivity and Gamma-ray Exposure in the United States and Canada" (2005) (U.S. Geologic Survey Open File Report 2005-1413), *available at* http://pubs.usgs.gov/of/2005/1413/.

[44] *See* U.S. Army Corps of Engineers Website re: "U.S. Army Corps of Engineers releases Areawide Environmental Impact Statement addressing phosphate mining in Central Florida Phosphate District" (last visited June 21, 2016), http://www.saj.usace.army.mil/Media/News-Releases/Article/479889/us-army-corps-of-engineers-releases-areawide-environmental-impact-statement-add/.

- ***Number of Facilities in Active Operation*:** EPA estimates that, in 2004, there were 1,000 metal and non-metal mineral mines and processing facilities in the U.S.[45] There are only 10 active phosphate mines in the United States. These 10 mines are owned by 5 well-established companies.

- ***The Physical Size of The Operation*:** EPA describes the "hardrock" mining industry as "typically operat[ing] on a large scale," but does not quantify the "scale" it used or explain its size comparisons[46] TFI does not know what criteria EPA is using to contrast "hardrock" mining from other industries based on operating scale. However, unlike open pit metals mining (which can occur at depths of up to 4,000 feet[47]), phosphate mining is shallow surface mining (typically occurring at depths of 15-300 feet).

  EPA relates evaluations of risk to considerations of the probability of a release, including its potential scale and scope. If, as is the case with phosphate mining, there is a low probability of a release due to (at most) minimal chemical use in the mining operations, then the resultant risk is also low regardless of the physical size of the mine property or its operations.

  In the Southeast United States, the sand, clay, and gypsum (North Carolina only) from the overburden and phosphate matrix are used to reclaim the mine areas. The reclamation process is highly regulated, subject to state and/or county requirements, and designed to prevent the potential for cadmium (North Carolina) releases. Conservation easements are used to protect sensitive habitats.

  In the Western United States, reclamation plans are developed in cooperation with federal and state agencies prior to mining, and are specifically designed to prevent the potential for selenium releases by the use of soil or synthetic caps to control water infiltration. The topsoil removed prior to mining is replaced, and native vegetation planted.

- ***The Extent of Environmental Contamination*:** Based on 2007 TRI data for metals mines, EPA estimates "hardrock" mining facilities generate between one to two billion tons of mine waste annually.[48] According to EPA, TRI data for "hardrock" mine sites show "releases" of large quantities of hazardous substances, including ammonia, benzene, chlorine, hydrogen cyanide, hydrogen fluoride, toluene, and xylene, as well as heavy

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45 74 Fed. Reg. at 37,215.
46 *Id*.
47 *See* Kennecott Website re: "Kennecott Utah Copper's Bingham Canyon Mine Teacher Guide" (last visited July 5, 2016), http://www.kennecott.com/library/media/TeacherGuide.pdf.
48 74 Fed. Reg. at 37,216.

metals and their compounds.[49] EPA describes "[t]he principal environmental protection concern with in-situ mining [as the] control and containment of the leach solutions."[50]

Phosphate mines and beneficiation plants do not present "[t]he principal environmental protection concern" identified by EPA for "hardrock" mines — namely, the "control and containment of leach solutions."[51] Leach solutions are generated at copper and gold mines through the beneficiation process wherein sulfuric acid and cyanide, respectively, are applied to the metal ore in land-based production units. These solutions are captured and routed to beneficiation plants. Such unit processes do not exist at phosphate beneficiation plants. And, at phosphate beneficiation plants, any chemicals used are in tanks or vessels. Thus, the potential for environmental contamination is minimal at phosphate ore beneficiation plants.

As previously discussed, phosphate mines are not subject to TRI reporting and, in any case, TFI questions EPA's reliance on TRI data for its risk evaluation. Nonetheless, the naturally-occurring elements related to phosphate mining (cadmium, radionuclides, and selenium discussed above) are addressed through mine permits, state monitoring, and existing regulatory programs.

- ***The Number of Sites on The CERCLA Inventory*:** EPA reports it evaluated cleanups and expenditures at 82 non-NPL "hardrock" mine sites and 84 NPL "hardrock" mine sites.[52] EPA's administrative docket for the Priority Notice contains information on actions at the following six "hardrock" NPL sites: (1) a molybdenum mine (Molycorp, Inc. molybdenum mine in Taos County, New Mexico);[53] (2) three gold mines (Brewer Gold Mine in Chesterfield County, South Carolina;[54] Gilt Edge Superfund Site in Lawrence County, South Dakota;[55] and, Summitville Mine Superfund Site in Rio Grande County,

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49 *Id.*

50 *Id.* at 37,215.

51 *Id.*

52 *Id.* at 37,216-217; *Phase II Analysis*.

53 *In re* Molycorp, Inc. Site, Taos County, New Mexico, "Administrative Order on Consent for Remedial Investigation/Feasibility Study" (undated) (Dkt. No. EPA-HQ-SFUND-2009-0265-0009); Molycorp, Inc., "Molycorp Remedial Investigation Report – Section 3" (Nov. 10, 2008) (Dkt. No. EPA-HQ-SFUND-2009-0265-0023).

54 EPA, "EPA Superfund Record of Decision: Brewer Gold Mine, EPA ID: SCD987577913 OU 01, Jefferson, SC" (Sept. 29, 2005) (Dkt. No. EPA-HQ-SFUND-2009-0265-0044).

55 CDM, "Gilt Edge Superfund Site Lawrence County, South Dakota, Feasibility Study for the Gilt Edge Superfund Site Operable Unit 1 (OU1)" (May 2008) (Dkt. No. EPA-HQ-SFUND-2009-0265-0018); EPA, "EPA Superfund Record or Decision: Gilt Edge Mine, EPA ID: SDD987673985 OU 03, Lead, SD" (Aug. 30, 2001) (Dkt. No. EPA-HQ-SFUND-2009-0265-0026); EPA, "Gilt Edge Superfund Site, Remedial Investigation Report Available to the Public" (Feb. 2008) (Dkt. No. EPA-HQ-SFUND-2009-0265-0039); EPA, "Gilt Edge Superfund Site Lawrence County, South Dakota, Record of Decision for the Gilt Edge Superfund Site Operable Unit 1 (OU1)" (Sept. 2008) (Dkt. No. EPA-HQ-SFUND-2009-0265-0047).

Colorado[56]); and, (3) two copper mines (Kennecott in Magma, Utah and Copperton, Utah[57]). In addition to these sites, EPA's *Phase II Analysis* identified three additional gold mine sites on the NPL: (1) Captain Jack Mill; (2) Smeltertown Site; and, (3) Stibnite/Yellow Pine Mining Area.[58] EPA then goes on to summarily conclude that "[t]he extraction and beneficiation of other hardrock minerals such as . . . phosphate may lead to similar environmental releases."[59] EPA provides no support for this broad, and incorrect, conclusion.

In the *Southerland Data*, EPA presents Agency response costs (as of October 2007) at NPL and non-NPL "hardrock" mine sites. Only a single phosphate mine entry is present in the *Southerland Data* – a non-NPL site identified as the Southeast Idaho Selenium Project – with Agency expenditures of $659,972.[60] It is TFI's understanding that the Southeast Idaho Selenium Project comprises primarily three inactive P4 Production, LLC (Monsanto) mines in Idaho.[61] In 2009, P4 Production entered into an Administrative Settlement and Order on Consent with EPA, USFS, BLM, Idaho Department of Environmental Quality ("IDEQ"), and the Shoshone-Bannock Tribes to perform a RI/FS at each of the mine sites and address identified contamination.[62]

Although EPA's administrative record only identifies a single non-NPL phosphate mine entry, there are phosphate mines in the Comprehensive Environmental Response, Compensation, and Liability Information System ("CERCLIS"). These mines are located in Florida and Idaho; no phosphate mines are identified in CERLCIS within North Carolina, Utah, or Montana (where phosphate mining occurred in the past). In Florida and Idaho, where there are phosphate mines identified in CERCLIS, these phosphate mines are either being addressed under state authority, or pursuant to agreements between the mine owner/operator and the responsible oversight agencies.

For example, in Florida, there are 27 phosphate-related sites in CERCLIS. In large part, the sites were placed in CERCLIS as part of reporting in response to a survey of waste

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56 EPA, "EPA Superfund Record of Decision: Summitville Mine, EPA ID: COD983778432 OU 5, Rio Grande County, CO" (Sept. 28, 2001) (Dkt. No. EPA-HQ-SFUND-2009-0265-0025).

57 EPA, "EPA Superfund Record of Decision: Kennecott (North Zone), EPA ID: UTD070926811 OU 08, Magna, UT" (Sept. 26, 2002) (Dkt. No. EPA-HQ-SFUND-2009-0265-0027); EPA, "EPA Superfund Record of Decision: Kennecott (South Zone), EPA ID: UTD000826404 OU 03, 06, 07, Copperton, UT" (Sept. 28, 2001) (Dkt. No. EPA-HQ-SFUND-2009-0265-0043).

58 *Phase II Analysis* at 1-1.

59 *Id.* at 1-2.

60 *Southerland Data, "Total Expenditures at Non-NPL AML Removal Sites."*

61 *See* IDEQ Website re: "Ballard, Henry, and Enoch Mines" (last visited June 21, 2016), http://www.deq.idaho.gov/regional-offices-issues/pocatello/southeast-idaho-phosphate-mining/ballard-henry-and-enoch-mines/.

62 *See In re* Enoch Valley Mine, Henry Mine, Ballard Mine, "Administrative Settlement Agreement and Order on Consent/Consent Order" (Sept. 2009), *available at* https://www3.epa.gov/region10/pdf/sites/se_id_mines/p4_final_aoc_sept2009.pdf.

disposal practices in the *chemical* industry.[63] As such, all of the CERCLIS sites in Florida have been investigated by EPA and many were placed on the "No Further Remedial Action Planned" list. In January 2014, EPA and the State of Florida reached agreement to address all phosphate related sites in CERCLIS under state, not federal, programs in the event that actions are needed to address environmental impacts at those sites.[64]

In Idaho, there are 14 phosphate mines in CERCLIS.[65] All of these mines are legacy mines, reflecting historical, not current, mining practices. Notably, these mines are subject to binding agreements (through, for example, Administrative Settlements and Orders on Consent[66] and Consent Orders[67]) to characterize and address any contamination resulting from operations. Various federal, state and tribal agencies are involved, including EPA, USFS, BLM, IDEQ, and the Shoshone-Bannock Tribes. In addition, government expenditures at these sites reflect government-agency "potentially responsible party" status based on outmoded mining and reclamation practices mandated by the U.S. Government and no longer employed by industry.

No phosphate mines are on the CERCLA NPL. Further, EPA's administrative record only identifies a single phosphate mine entry wherein the Agency incurred response costs. Nowhere in the record is there a discussion regarding the risks posed by phosphate mining based on application of this factor, or how this single entry places phosphate mining on equal footing with metal mining for purposes of EPA's risk evaluation. Rather, EPA's only justification for the inclusion of phosphate mining, when compared to the metal mines identified and discussed by the Agency, is the blanket statement that "[t]he extraction and beneficiation of other hardrock minerals such as . . . phosphate may lead to similar environmental releases."[68] This justification is both conjectural and inaccurate, and therefore plainly arbitrary.

- ***Government Expenditures*:** The *Southerland Data* estimates that there were $2.7 billion in EPA expenditures between 1988 to 2007 at "hardrock" mining sites subject to EPA's

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63 H.R. Comm. on Interstate and Foreign Commerce, 96th Cong., "Waste Disposal Site Survey: Report together with Additional Views and Separate Views by the Subcommittee on Oversight and Investigations" (Oct. 1979), *available at* https://archive.org/details/wastedissit00unit.

64 Letter from Franklin E. Hill, Director, EPA Superfund Division, to Jorge Caspary, Director, Division of Waste Management, Florida Department of Environmental Protection (Jan. 14, 2014).

65 Specifically, these mines include the Ballard, Henry, Enoch, Champ, Conda, Gay, Georgetown Canyon, Mountain Fuel, North Maybe, Smoky Canyon, South Maybe, South Rasmussen, South and Central Rasmussen Ridge mines.

66 *See, e.g.*, *supra* note 62.

67 *See, e.g.*, IDEQ Website re: "Update: Phosphate Mine Site Investigations and Cleanup in Southeast Idaho" (May 2016) at 7 (discussing a 2012 Consent Order with P4 Production regarding the South Rasmussen Mine) (last visited June 21, 2016), http://www.deq.idaho.gov/media/60178549/phosphate-mine-site-investigations-cleanup-southeast-idaho-fact-sheet.pdf.

68 *Phase II Analysis* at 1-2.

removal and remedial authorities.[69] According to EPA, of this $2.7 billion, $2.4 billion was spent at 84 NPL sites.[70]

As previously noted, no phosphate mines are on the NPL. Thus, EPA could not report any expenditures at phosphate mine NPL sites in support of this rulemaking because there are none.

The *Southerland Data* present EPA expenditures at both NPL and non-NPL sites, totaling $2.7 billion through October 2007. The only phosphate mining entry in the *Southerland Data* for non-NPL sites is the Southeast Idaho Selenium Project, where EPA incurred oversight, not response, costs. These costs totaled $659,972, or 0.02 percent of EPA's total reported expenditures at "hardrock" mine sites.[71] The Administrative Settlement and Order on Consent entered into by P4 Production requires it to reimburse EPA for future response costs at the mines.[72] Thus, although EPA may continue to have oversight expenditures at these mines, any EPA future response costs will be reimbursed by P4 Production.

Also, EPA should be incurring neither unreimbursed response nor oversight costs for the phosphate mines in Florida and Idaho in CERCLIS. For the phosphate mines in CERCLIS in Florida, EPA should neither incur response costs nor oversight costs as those sites have been transitioned to State of Florida for oversight. For the phosphate mines in Idaho, characterization is being performed by the mine owners/operators, and the various settlement documents require, to the extent EPA is involved, that the Agency's oversight costs be reimbursed by the phosphate mine owner/operator.

Further, the Southeast Idaho Selenium Project phosphate mines and the phosphate mines in Florida listed in CERCLIS reflect prior mining and reclamation practices. It is TFI's understanding that the CERCLA § 108(b) rulemaking is forward-looking, focused on unanticipated releases from active, post-1990 mining. Hence, none of the expenditures reported by EPA at phosphate mines is appropriate for evaluating the risk presented by the phosphate mining facility class.

- ***Projected Clean-Up Expenditures*:** EPA estimates costs to remediate all "hardrock" mining sites between $20 and $54 billion (should such remediation be needed), based on current annual expenditures of $100 to $150 million annually.[73] The Agency's administrative record *fails to identify a single instance* where EPA has incurred costs to

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69 74 Fed. Reg. at 37,217; *Southerland Data*. The *Southerland Data* includes EPA expenditures (as of October 24, 2007) at sites proposed, listed, and deleted from the NPL, and sites with Superfund alternative approach agreements in place.

70 74 Fed. Reg. at 37,217.

71 *Southerland Data,* "*Total Expenditures at Non-NPL AML Removal Sites.*" $659,972 ÷ $2.7 billion = 0.02%.

72 *See supra* note 67 (¶¶ 23.1, 23.3).

73 74 Fed. Reg. at 37,217.

remediate a phosphate mine, or where it might be called upon to engage in remediation. Further, EPA has not identified any phosphate mines where it may need to commence a clean-up because of the failure of the owner/operator to engage in reclamation.

- ***Corporate Structure and Bankruptcy Potential*:** EPA reports concerns with federal expenditures at "hardrock" mine sites due to (1) complex mine ownership that may shield the ultimate parent corporation from liability, (2) mining interests located outside of the United States, with federal government difficulty in obtaining jurisdiction over them, and (3) "a pattern of failed operations," requiring significant government expenditures.[74]

  EPA is improperly conflating perceived problems within the traditional "hardrock" mining industry with the phosphate mining industry. However, neither the Priority Notice nor the administrative record identify a single instance where EPA was unable to compel a phosphate mine owner/operator to perform response actions.

  The 10 active phosphate mines in the United States are operated by 5 companies (The Mosaic Company, PotashCorp, Agrium Inc., J.R. Simplot Company, P4 Production, LLC) or their subsidiaries. The risk of future federal government expenditures at phosphate mines is low, and EPA has not identified in the administrative record any financial concerns with the owners/operators of these mines. The 5 companies (or their parent, in the case of P4 Production) are large, well-funded corporations that represent a low risk of insolvency.

  EPA has failed to demonstrate how its corporate structure and bankruptcy factor, when applied to the owners/operators of phosphate mines, demonstrates that phosphate mining is a high risk sector.

3. EPA's "Gap Filling" Rationale Does Not Support the Inclusion of Phosphate Mining as a High Risk Sector

In EPA's *CERCLA Section 108(b) Hardrock Mining Rule Structure Overview* ("*CERCLA 108(b) Framework*") document, the Agency asserts as another ostensible basis for the "risk" from hardrock mining a lack of coverage in existing federal, state and tribal financial assurance regulatory programs addressing hazardous substances remediation, natural resource damage, and third-party exposure.[75] However, EPA has failed to perform an evaluation of these existing requirements. As a result, the Agency fails to specifically identify the "deficiencies" requiring "gap filling" under CERCLA § 108(b) for traditional "hardrock" mining, in general, or phosphate mining, in particular.[76]

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74 *Id.* at 37,217-18.

75 *In re* Idaho Conservation League, D.C. Cir. No. 14-1149, "Supplemental Submission of Respondent United States Environmental Protection Agency," App. A ("Supplemental Declaration of Barnes Johnson"), Att. 1 (filed Aug. 31, 2015).

76 *Id.*

Notably, the Western Governors' Association ("WGA") sent a letter to EPA expressing concern with EPA's representations that CERCLA § 108(b) is needed to "gap fill" deficiencies in state mining financial assurance programs.[77] In its letter, the WGA identified several concerns with EPA's contemplated imposition of financial responsibility at "hardrock" mine sites, namely, (1) duplication with existing state financial assurance requirements and (2) the inappropriate hampering of effective state programs.[78] Regarding the second point, the WGA appropriately concluded that "EPA has not indicated to states what, if any, problems or gaps the agency perceives in state financial assurance requirements."[79] Further, the WGA pointed out that "EPA has likewise failed to indicate that modern, state-driven standards necessitate any alternative program."[80] As correctly pointed out by the WGA, state-based reclamation and closure bonding reflect "the unique circumstances of each mining operation, the local ecology and post reclamation land use," not a generic "model" based on metal mining as contemplated by EPA.[81]

TFI's members with phosphate mines are subject to reclamation obligations at the federal, state, and local level that reflect, as noted by the WGA, the "unique circumstances of each mining operation."[82] For example, in Idaho, the reclamation requirements include the use of soil or synthetic caps to prevent water infiltration and water management to prevent selenium releases.

As pointed out in *TFI's Comments*, in 2011, one TFI member company operating four phosphate mining operations in a single state had existing financial assurance obligations under multiple state and federal programs directed at reclamation in amounts totaling $53.2 million, $53.5 million, $84.1 million, and $100.9 million.[83] Another TFI member with six facilities in a single state reported, again in 2011, existing financial assurance obligations under currently applicable state and federal regulations for reclamation totaling $25.7 million, $81.8 million, $110.9 million, $185.6 million, $215.7 million, and $395.4 million.[84]

TFI has queried its members and updated the requisite financial assurance amounts for reclamation. Based on members' responses, financial assurance estimates for future reclamation activities exceed several hundred million dollars for its phosphate mining operations. Of course, the specific amounts required for reclamation at specific facilities will depends on a variety of site-specific factors.

Despite the unfounded concerns reflected by EPA with existing financial assurance requirements, EPA is developing a model that will be used to determine the amount of financial

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77 Letter from Matthew H. Mead, Governor of Wyoming, and Steve Bullock, Governor of Montana, to the Honorable Gina McCarthy (March 29, 2016), *available at* http://www.westgov.org/letters-testimony/346-mining/1152-letter-governors-highlight-concerns-over-epa-financial-assurance-requirements.

78 *Id.* at 2.

79 *Id.*

80 *Id.*

81 *Id.*

82 *See id.*

83 *TFI's Comments* at 4.

84 *Id.*

assurance required under the rule.[85] This model should be disclosed and subject to public notice and comment before EPA proceeds with this rulemaking, or otherwise attempts to give legal force to the model. Based on available information, the model inputs are based on metal mining operations, which (as previously explained) are different than phosphate mining. It is inappropriate for EPA to apply the same model to phosphate mining operations without completing the necessary analysis of the phosphate mining sector.

The considerable financial assurance amounts obtained by TFI's members to ensure proper mine reclamation, and the WGA letter describing the robust state financial assurance programs already in place, demonstrate that there is no justifiable "gap filling" needed for phosphate mines.

C. Had EPA Performed a Risk Assessment of Phosphate Mining, It Would Have Concluded that Phosphate Mining is More Like The 59 Mining Sectors Proposed for Exclusion from the Rulemaking

The administrative record contains an *Excluded Sectors Memorandum* that purports to evaluate 59 sectors against the 8 risk factors, concluding that these sectors do not present a level of risk to warrant their inclusion in the "hardrock" mining sectors subject to the CERCLA rulemaking. Had EPA evaluated phosphate mining under its 8 risk factors, it would have concluded that phosphate mining is more like the sectors proposed for exclusion from the rule than metal mining proposed for inclusion.

There are many meaningful similarities between phosphate mining and the mining sectors already excluded. First, the excluded sectors, similar to phosphate mining, are found in NAICS code 2123, defined as "Nonmetallic Mineral Mining and Quarrying," not NAICS code 2122, defined as "Metal Ore Mining." Second, like phosphate mining, and unlike metals mining, these sectors (1) engage in shallow mining, (2) employ physical separation methods, (3) do not have land-based production units requiring the use of sulfuric acid or sodium cyanide application to generate solutions for further beneficiation, (4) have limited chemical use, (5) have no sites listed on the NPL, and (6) have not required the use of CERCLA public funds for remedial activities.[86]

In addition, there are important distinctions between the already excluded sectors and phosphate mining that particularly support excluding phosphate mining. For example, EPA notes that there are significantly more excluded sector mining operations than "hardrock" mines. In particular, while there are approximately 1,000 "hardrock" mines, there are (based on 2007 data), 6,700 sand and gravel mines, 3,620 crushed stone quarries, and 830 clay pits or quarries.[87] Nonetheless, EPA proposed these sectors for exclusion from the CERCLA rulemaking.[88] By comparison, there are only 10 active phosphate mines in the United States. Given the similarities

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85 *CERCLA § 108(b) Framework* at 2-3.
86 *Excluded Sectors Memorandum* at 2-3.
87 *Id.* at 2.
88 *Id.*

between phosphate mining and mining by the excluded sectors, if the order of magnitude greater number of excluded sector mines compared to "hardrock" mines does not lead EPA to conclude that the CERCLA rulemaking should apply to them, it certainly does not suggest a need to regulate phosphate mines, which number two orders of magnitude less than EPA's estimate of "hardrock" mines and three orders of magnitude less than the number of excluded sector mines.

Also, EPA does not appear to be concerned that it may become responsible for cleaning up abandoned mines in these 59 sectors, despite the conclusion that "most of the 59 commodities are produced by small or medium sized businesses."[89] By comparison, the 10 phosphate mines are operated by 5, well-established and sound companies. The risk that these companies cannot perform their reclamation and cleanup obligations is much less than with small or medium-sized businesses, which may not be adequately capitalized to implement cleanups.

Without performing a risk evaluation of phosphate mining, EPA cannot justify its conclusion that this sector should be included as "hardrock" mining for purposes of the CERCLA rulemaking. Had EPA performed such an evaluation, it would have concluded that phosphate mining presents a low risk and, as such, should be included in the list of proposed sectors excluded from financial assurance requirements under this rulemaking.

IV. PHOSPHATE FERTILIZER MANUFACTURING FACILITIES SHOULD NOT BE INCLUDED AS A CLASS OF "HARDROCK" MINING FACILITIES FOR PURPOSES OF THE CERCLA § 108(B) RULEMAKING

In the Priority Notice, EPA states that the rulemaking applies to "extraction, beneficiation or processing of metals . . . and non-metallic, non-fuel minerals . . . ."[90] The *CERCLA 108(b) Framework* tempers this overbroad application of the Priority Notice to processing facilities by stating that the rulemaking "would also include primary processing activities located *at or near* the mine site that are *under the same control* as the mine."[91] Beyond these simple statements, the Priority Notice fails to explain why processing facilities associated with "hardrock" mines should be included in the rulemaking, in general, or why phosphate fertilizer manufacturing facilities should be included, in particular. Like with phosphate mining, EPA has not performed any evaluation of phosphate fertilizer manufacturing operations to conclude that this class of facilities presents a high risk warranting the imposition of CERCLA financial responsibility.

A. EPA's "Proximity" and "Control" Criteria Have No Demonstrable Relationship to Risk Associated with Mining

EPA's Priority Notice sweeps mineral processing operations into the high risk classes of facilities comprising "hardrock" mining without discussing any rationale for their inclusion.

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89 *Id.*

90 74 Fed. Reg. at 37,214 (emphasis added).

91 *CERCLA 108(b) Framework* at 2 (emphasis added).

Further, EPA's "proximity" and "control" criteria are of no relevance to a risk calculus.[92] In addition, the Agency fails to provide any certainty to entities whether or not their mineral processing facilities would be covered under the contemplated rulemaking because the "proximity" threshold for inclusion is not provided (*i.e.*, is it co-located, within 50 feet, or some other arbitrary distance?). Finally, EPA does not provide any information for comment on what is meant by common "control" of the mine and mineral processing facility. Quite simply put, EPA has failed to provide any demonstrable basis to include mineral processing facilities in the CERCLA "hardrock" mining rulemaking and has failed to allow for meaningful comment on its rationale for inclusion based on proximity and common control.

B. EPA's Administrative Record Does Not Support The Inclusion of Phosphate Fertilizer Manufacturing as a High Risk Class of Facilities within "Hardrock" Mining

Phosphate fertilizer manufacturing facilities are designated in NAICS code 325312 (Phosphatic Fertilizer Manufacturing), distinct from phosphate mining (NAICS code 212392).[93] Phosphate fertilizer manufacturing facilities are primarily engaged in manufacturing phosphoric acid, superphosphates, or other phosphatic fertilizer materials from beneficiated phosphate ore.

EPA's "proximity" criterion for including a mineral processing facility in the hardrock financial responsibility program is an inappropriate and arbitrary criterion. Further, it is not relevant to phosphate fertilizer manufacturing operations. Phosphate fertilizer manufacturing operations are neither located at the phosphate mine nor co-located with the mine, and in some instances they may be located in different states. The phosphate ore is typically pumped by pipeline, transported by conveyor, trucked, railed, or barged from the mine (sometimes from outside of the United States) to the fertilizer manufacturing facility. Further, new domestic mines will be more remote from the manufacturing facilities as the mines migrate to the phosphate source, while the manufacturing operations are fixed.

Also, EPA's "same operational control" criterion does not make sense for phosphate fertilizer manufacturing facilities. Most phosphate fertilizer manufacturing facilities can, and do, receive phosphate from sources other than the phosphate mine that may (or may not) be under the same operational control as the fertilizer manufacturing facility. Even if under the same operational control, the phosphate mine is subject to regulation by MSHA, while the manufacturing facility is subject to regulation by OSHA. These agencies recognize the distinct differences between mining and manufacturing.

EPA's discussion of mineral processing facilities focuses on smelting (NAICS code 331419) and electroplating (NAICS code 332813).[94] Major NAICS code 331 corresponds to Primary Metal Manufacturing, defined as the "smelting and/or refin[ing] of ferrous and nonferrous

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92 *Id.*

93 *See supra* note 18.

94 *See, e.g.*, *Phase II Analysis* at 2-1.

metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques."[95] Major NAICS code 332 corresponds to Fabricated Metal Product Manufacturing, defined as "transform[ing] *metal* into intermediate or end products, other than machinery, computers and electronics, and metal furniture, or treat[ing] metals and metal formed products fabricated elsewhere."[96] Both of these sectors start with metal ore, or metal, and make something from it. They are logical outgrowths of the traditional "metal" mining nomenclature of "hardrock" mining. Unlike these sectors, phosphate fertilizer manufacturing starts with phosphate ore, a non-metallic ore.

In addition, the *Eby Memorandum* provides 2007 TRI data for mineral processing operations tied to metal ores. The TRI data identify releases associated with primary aluminum production (NAICS code 331312), primary smelting and refining of copper (NAICS code 331411), and primary smelting and refining of nonferrous metals, except copper and aluminum (NAICS code 331419).[97] Nowhere in the record is there data on NAICS code 325312, which is subject to TRI reporting.

The *Southerland Data* provides nominal EPA expenditures (as of October 2007) at certain phosphate fertilizer manufacturing sites. For example, EPA reports expenditures of (1) $3,753,571 at the Eastern Michaud Flats Contamination in Pocatello, Idaho, (2) $813,609 at the Monsanto Chemical Co. in Soda Springs, Idaho, (3) $107,831 at the Ashepoo Phosphate/Fertilizer Works in Charleston, South Carolina, and (4) $164,640 at the Mulberry Phosphates Inc. site in Mulberry, Florida.[98] These expenditures total $4,839,651, *or 0.2 percent of EPA's total reported expenditures at "hardrock" mineral processing sites* that EPA is relying upon for purposes of this rulemaking.[99] This small fraction of reported expenditures provides no support for imposing new obligations at facilities that are related to phosphate mines, as none of EPA's cited examples are located in close proximity to the phosphate mines associated with their operations. Further, with the exception of the Mulberry Phosphates, Inc. site, the remaining three sites are already being addressed by the responsible parties with merely oversight by EPA. In addition, at the Eastern Michaud Flats Contamination site, it is TFI's understanding that EPA obtains cost recovery from the potentially responsible parties, so there are no unreimbursed EPA expenses. Regarding Mulberry Phosphates, Inc., it is TFI's understanding that remediation work is being performed and funded by the state, not EPA.

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95 *See* U.S. Census Bureau Website re: "North American Industrial Classification System, 2012 NAICS Definition, 331 Primary Metal Manufacturing" (last visited June 21, 2016) (emphasis added), http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=331&search=2012 NAICS Search.

96 *See* U.S. Census Bureau Website re: "North American Industrial Classification System, 2012 NAICS Definition, 332 Fabricated Metal Product Manufacturing" (last visited June 21, 2016) (emphasis added), http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=332&search=2012 NAICS Search.

97 *See Eby Memorandum.* As before, TFI questions the utility of TRI data when evaluating the risk posed by certain industries.

98 *See Southerland Data,* "*Total Expenditures at Final NPL AML Sites*" and "*Total Expenditures at Non-NPL AML Removal Sites*."

99 Specifically, $4,839,651 ÷ $2,700,000,000 = 0.2%.

During our meeting on June 9, 2016, EPA stated that a central concern it intended to address through this rulemaking is preventing another CERCLA cleanup like the one currently underway at the Mississippi Phosphates Corporation phosphate fertilizer manufacturing facility in Pascagoula, Mississippi. However, as explained during the meeting, the Mississippi Phosphates facility had neither a phosphate mine on-site nor a co-located mine. Rather, the company imported its phosphate ore from Morocco. Thus, this facility would not meet EPA's threshold criteria for inclusion of its processing facility in the proposed financial responsibility requirements for "hardrock" mining. In turn, EPA's proposed rulemaking would not require a facility like the Mississippi Phosphates site to have *any financial assurance*. Accordingly, it lends no support for EPA's proposal to target phosphate fertilizer manufacturing facilities in this rulemaking.

Until EPA refines its criteria for the inclusion of processing operations associated with "hardrock" mines for CERCLA § 108(b) purposes, and evaluates the inclusion of phosphate fertilizer manufacturing facilities under these criteria, the Agency should not include phosphate fertilizer manufacturing operations in NAICS code 325312 as part of its CERCLA rulemaking. EPA has simply not justified such an action.

C. "Gap Filling" is Unnecessary for Phosphate Fertilizer Manufacturing Facilities

EPA's "gap filling" rationale for identifying mineral processing facilities as a class of facilities for purposes of the "hardrock" mining CERCLA § 108(b) financial responsibility is not relevant to phosphate fertilizer manufacturing facilities. First, EPA has not performed a "gap" analysis of the phosphate fertilizer manufacturing industry, which is a prerequisite for considering the need for additional financial assurance at these facilities.

Second, had EPA performed such an evaluation, it would have concluded that phosphate fertilizer manufacturing facilities are, or will be, subject to adequate financial assurance in light of an EPA National Enforcement Initiative for Mining and Mineral Processing. Under this Initiative, EPA performed inspections at all 20 operating phosphate fertilizer manufacturing facilities to ascertain compliance with RCRA and the Agency's implementing regulations.[100] EPA asserted that these facilities were inappropriately commingling exempt and non-exempt waste in surface impoundments and other land-based units.[101]

Settlements in these cases are comprehensive, imposing extensive operational requirements, corrective action standards, design and closure requirements, and post-closure standards for each facility's phosphogypsum stack system. The requirements include RCRA-like financial assurance requirements to backstop the owner's commitments to close and provide long-

[100] *See* EPA Website re: "National Enforcement Initiative: Reducing Pollution from Mineral Processing Operations" (last visited July 5, 2016), https://www.epa.gov/enforcement/national-enforcement-initiative-reducing-pollution-mineral-processing-operations.
[101] *See id.*

term care for each stack system. cost estimates to perform such work must be periodically reviewed and, as necessary, revised (and funded by adequate financial assurance to meet the obligations).

To date, EPA has reached a settlement with one fertilizer manufacturer and has other settlements lodged or entered with respect to a second. In August 2010, CF Industries, Inc. ("CF") settled alleged RCRA violations with EPA and the Florida Department of Environmental Protection ("FDEP"), and agreed to provide $163.5 million in financial assurance to support the closure and long-term care of its gypsum stack system at a facility in Florida.[102] In addition, if needed, CF agreed to perform corrective action, and to update its financial assurance to perform these obligations.

As another example, in 2015, Mosaic Fertilizer, LLC settled alleged RCRA violations with EPA and FDEP at five phosphate fertilizer manufacturing facilities in Florida, and with EPA and the Louisiana Department of Environmental Quality at two facilities in Louisiana.[103] Under the settlements, which remain subject to court approval, Mosaic agreed to place $630 million into trust, and issue a $50 million letter of credit to support the closure and long-term care of gypsum stack systems at those facilities. Beyond those commitments, Mosaic's parent company (The Mosaic Company) is providing a parent guarantee to cover the difference between the amounts held in trust and the estimated closure and long-term care costs. Like the CF Consent Decree, the Mosaic Consent Decrees require modification of the financial assurance amounts to address any needed corrective action.

Further, TFI understands that EPA is in settlement negotiations with PCS Phosphate, Agrium Inc., and J.R. Simplot Company to resolve the government's RCRA allegations related to sites associated with those entities. TFI also understands that financial assurance for purposes of future closure of each company's gypsum stack system will be one of the focal points for those settlements.

Thus, any purported need to "gap fill" existing financial assurance obligations at phosphate fertilizer manufacturing facilities is unfounded. The comprehensive nature of the RCRA settlements, including comprehensive operational, closure, long-term care, and corrective action components, are intended to minimize releases from these facilities, ensure the gypstack systems are properly closed and managed, and require the owners/operators to address any discovered releases. Moreover, the gypstack system closure and long-term careobligations are backed by financial assurance to ensure that they are performed. Presumably, similar conditions will be included in subsequent settlements with the remaining owners and operators of phosphate fertilizer manufacturing facilities as part of the enforcement "initiative," if needed.

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[102] *See* EPA Website re: "CF Industries, Inc. Settlement" (last visited July 5, 2016), https://www.epa.gov/enforcement/cf-industries-inc-settlement.

[103] *See* EPA Website re: "Mosaic Fertilizer, LLC Settlement" (last visited July 5, 2016), https://www.epa.gov/enforcement/mosaic-fertilizer-llc-settlement.

CONCLUSION

EPA has failed to articulate any rational basis for the inclusion of phosphate mining and phosphate fertilizer manufacturing operations in the classes of high risk facilities within the "hardrock" mining sectors targeted by EPA's current rulemaking process. Instead, based on only a cursory understanding of the industry, EPA has hastily swept phosphate mining into the "hardrock" mining sector solely for purposes of imposing unnecessary CERCLA financial responsibility obligations. The economic implications for the industry will be profound, and for no environmental benefit.

During our meeting, EPA staff discussed the tight deadline that the Agency is under to propose a rule by December 1, 2016, and finalize a rule by December 1, 2017. Although we are sensitive to the schedule that EPA agreed to with environmental petitioners challenging the Agency's failure to meet its statutory obligations, and adopted by the Court, we are extremely concerned with any proposal by the Agency to proceed with a rulemaking that includes phosphate mining and phosphate fertilizer manufacturing operations without an adequate risk evaluation of these industries. Therefore, TFI urges EPA in the forthcoming CERCLA § 108(b) proposed rule either to:

(1) exclude phosphate mining (NAICS code 212392) and phosphate fertilizer manufacturing facilities (NAICS code 325312) from the scope of "hardrock" mining facilities subject to CERCLA § 108(b) financial responsibility (like those set forth in the *Excluded Sectors Memorandum*); or

(2) alternatively, defer a decision on the inclusion of phosphate mining and phosphate fertilizer manufacturing facilities in the "hardrock" mining CERCLA § 108(b) rulemaking until EPA is able to perform a risk evaluation on these industries and present the results for public comment.

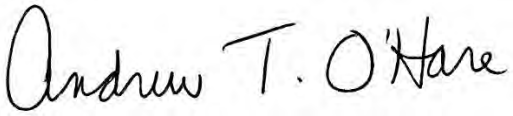
TFI and its members appreciate the opportunity to submit these comments as a means of continuing the dialogue with EPA. In addition, we strongly urge EPA staff working on the rulemaking to take the time to visit a phosphate mine and phosphate fertilizer manufacturing facility as the first step of necessary fact-finding to evaluate the risks posed by these sectors and to understand why they should not be considered part of the "hardrock" mining classes of facilities for purposes of CERCLA § 108(b). This is particularly relevant where, as here, the rule will impose substantial regulatory and cost obligations on the industries without any environmental benefit. If only as a first step, such a tour is necessary prior to the Agency making any final decisions about whether to include phosphate mines and phosphate fertilizer manufacturing facilities in the "hardrock" CERCLA § 108(b) rulemaking.

In addition, TFI urges EPA Office of Resource Conservation and Recovery staff working on the CERCLA rulemaking to consult with EPA Office of Enforcement and Compliance

Assurance staff assigned to the mineral processing enforcement "initiative" to gain a better understanding of the comprehensive settlements under the "initiative" that include corrective action and financial assurance components. These RCRA settlements obviate the need for imposition of CERCLA financial responsibility requirements on phosphate fertilizer manufacturing facilities.

I will contact you within the next week to discuss potential dates and tour locations. In the interim, please contact me at (202) 515-2704, or by email at aohare@tfi.org, if you have any questions regarding the information presented in our letter.

Sincerely yours,



Andrew T. O'Hare
Vice President of Public Policy

Cc: Danielle Jones, White House Office of Management and Budget

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August 17, 2016

Honorable Gina McCarthy
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W. (1101A)
Washington, D.C. 20460

Dear Administrator McCarthy:

The Western Governors' Association (WGA) appreciates the opportunity to provide comments on the Environmental Protection Agency's (EPA) federalism assessment for the agency's pending rulemaking under section 108(b) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) for the hardrock mining industry.

STATEMENT OF INTEREST

WGA represents the Governors of 19 western states and three U.S.-flag islands. The Association is an instrument of the Governors for bipartisan policy development, information exchange and collective action on issues of critical importance to the western United States.

As stated in WGA Policy Resolution 2014-07, *Bonding for Mine Reclamation*,[1] all western states in which mining occurs have staff dedicated to ensuring that ongoing mine operations develop and follow appropriate reclamation plans. It is in Western states' legal and economic interest to assure hardrock mining facilities are designed, constructed and operated to minimize risks to the environment and ensure reclamation objectives will be completed. State regulators ensure proper mine closure on both private and public lands, and they coordinate with federal land management agencies to ensure financial assurance is adequate.

Western Governors understand EPA will soon publish a notice of proposed rulemaking (NOPR) under section 108(b) of CERCLA, pursuant to a D.C. Circuit court approval of a negotiated settlement between EPA and several non-governmental organizations.[2] Western Governors and state regulators have ongoing concerns regarding substantive and technical aspects of EPA's pending NOPR. Those matters are likely to be addressed in individual state and mining industry comments. This comment letter focuses on concerns surrounding the process by which EPA has approached this rulemaking.

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[1] Attached and incorporated by reference.

[2] Order *In re: Idaho Conservation League, et al.*, No. 14-1149 (D.C. Cir. Jan. 29, 2016).

Rule Development Process Concerns

WGA Policy Resolution 2014-09, *Respecting State Authority and Expertise*,[3] articulates Western Governors' view of meaningful federal-state consultation. Governors believe federal agencies should consult with them and their regulators on a substantive basis at the earliest stages of problem identification and federal decision-making, prior to the publication of policy proposals. Consultation and engagement should continue through formal rulemaking and policy-making processes and during the implementation phase. While publication of this NOPR is mandated, EPA has not offered to engage in substantive consultation with Western Governors since late January.

The agency has recently chosen to engage with state partners on a perfunctory basis. EPA has not, however, engaged in substantive discussion of the pending proposed rule. The agency has been unwilling or unable to share a draft of the proposed rule or information regarding the formula EPA will use to calculate required financial assurance amounts.

Western Governors, the Interstate Mining Compact Commission (IMCC), the Environmental Council of the States (ECOS), and the Association of State and Territorial Solid Waste Management Officials (ASTSWMO) have requested pre-publication review of EPA's proposed rule. Absent such review, these groups have requested from EPA substantive information on the proposed rule. That information has not been provided. EPA did not address concerns expressed or substantive questions posed in WGA's March 29, 2016 letter to your attention[4] during the May 18, 2016 federalism consultation meeting in Washington, D.C.; in EPA's June 9, 2016 response letter to WGA;[5] or in either of the "short-term working group" calls held with states on July 7 and 19, 2016.

In the March 29 WGA letter to EPA, Western Governors requested substantive consultation well before launch of a formal rulemaking. Western Governors further requested that they – and state regulators – be afforded an opportunity to review EPA's proposal before submission to the White House Office of Management and Budget for finalization. In addition, Western Governors requested EPA provide the following information:

- A detailed state consultation timeline and plan for obtaining individual state comments from Governors and state regulators;

- All technical and scientific materials and analyses used to support any proposed rule and an indication of whether such materials were peer-reviewed;

[3] Attached and incorporated by reference.
[4] Attached and incorporated by reference.
[5] Responding to the March 29, 2016, WGA letter.

- A statement indicating how EPA solicited ideas about alternative methods of compliance and potential flexibilities in order to reduce the economic burden placed on affected entities;

- A statement indicating how EPA solicited information from Governors and state regulators as to whether or not the proposed rule will duplicate similar state requirements;

- A copy of a federalism assessment or the reason why EPA did not complete a federalism assessment;

- Explanation of the reason existing state programs are insufficient to address the concerns and an analysis of any conflicts in the proposed rule with state programs; and

- Analysis of financial assurance instruments that would satisfy any proposed EPA requirement.

EPA has not provided this information to Western Governors. To date, Governors and state regulators have been afforded only assurances that EPA's rule will not duplicate or preempt existing state regulations. EPA has, for example, expressed a, "belie[f] that the approach to the proposed rule that is currently under consideration will address the issues," raised by Governors.[6] Despite ongoing requests, no draft language has been provided to Western Governors to clarify EPA's approach. The Governors believe that EPA should provide Governors and state regulators an opportunity to review a pre-publication copy of the draft rule, model and formula for calculation of financial assurance amounts as that is the only manner to ensure EPA's engagement with states will be substantive and meaningful.

Federal Preemption of State Law

Western Governors remain concerned that EPA's pending financial assurance regulation for the hardrock mining industry may preempt existing state regulations. This concern was raised in the March 29 WGA letter on this subject and has been consistently reiterated to the agency in subsequent communications. While we appreciate EPA's consistent expression of its intent not to pursue regulation having a preemptory effect,[7] absent clear communication from EPA regarding the substance of its planned rule proposal, our concerns remain substantively unaddressed.

[6] June 9, 2016 letter from EPA to Western Governors, page 1.
[7] *Id*. at page 2.

State Letters

EPA has cited the following four letters, addressed to Jim Berlow, Director of the Program Implementation and Information Division of the EPA Office of Resource Conservation and Recovery, as evidence that agency action under section 108(b) of CERCLA will not preempt existing state law:

- February 11, 2011 letter from the Office of the Alaska Attorney General;
- February 24, 2011 letter from the Water Quality Division of the Arizona Department of Environmental Quality;
- February 28, 2011 letter from the Office of the Colorado Attorney General; and
- February 28, 2011 letter from the New Mexico Environment Department.

EPA's use of these letters is evidence that five years ago the agency sought substantive state input for a then-contemplated CERCLA financial assurance rulemaking. These letters do not – in and of themselves – indicate that EPA's pending proposal will not be preemptive. While these letters are still valid and are not antiquated, EPA is taking them out of context. Western Governors view EPA's use of these letters as problematic for several reasons, including:

- The 2011 state letters were written to express four states' concerns over potential preemption and not as expressions of the states' beliefs that EPA financial assurance regulations would be patently non-preemptive in nature.
- The letters were not written in response to a draft EPA rule. They merely opine on existing state regulation and the need for EPA to avoid preempting state law.
- These letters establish that differences exist between various states' financial assurance regulations. EPA should view these differences as evidence that a blanket regulatory scheme is not workable. Further, due to the differences of states' regulations, pre-publication review of a draft rule would be useful to identify areas of potential preemption.
- These letters represent only four states. It is inappropriate for EPA to view them as representative of all western states.

Federalism Consultation Meeting

EPA held a Federalism Consultation for CERCLA 108(b) meeting on May 18, 2016, consistent with Executive Order 13132.[8] This meeting was attended by representatives from WGA, ECOS, IMCC and ASTSWMO. We appreciate EPA's willingness to hold such a meeting, despite the agency's classification as an independent regulatory agency. Section 3, *Federalism Policymaking Criteria*, of President Clinton's Executive Order 13132 states in part:[9]

> "When undertaking to formulate and implement policies that have federalism implications, agencies shall:
>
> - Encourage [s]tates to develop their own policies to achieve program objectives and to work with appropriate officials in other states;
>
> - Where possible, defer to [s]tates to establish standards;
>
> - In determining whether to establish uniform national standards, consult with appropriate [s]tate and local officials as to the need for national standards and any alternatives that would limit the scope of national standards or otherwise preserve [s]tate prerogatives and authority; and
>
> - Where national standards are required by [f]ederal statutes, consult with appropriate [s]tate and local officials in developing those standards."

We would contend that the Federalism Consultation meeting did not constitute substantive consultation with the states. Specific aspects of EPA's proposal were not discussed. When asked during this meeting whether EPA would provide draft language to states prior to publication, EPA staff were adamant in their response that they were not "allowed" to do so. EPA staff did not, however, state what statute or regulation precluded distribution of the draft to state partners.

Governors expect EPA's consultation process to respect states as sovereigns and full partners, not simply as stakeholders or members of the public. Western Governors believe that providing them a draft rule, model and formula for calculation of financial assurance amounts in the pre-publication stage is appropriate and the only manner to ensure the engagement of states is substantive and meaningful.[10]

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[8] Executive Order 13132 – Federalism (August 4, 1999).
[9] *Id*. at section 3(d)(1)-(4).
[10] WGA Policy Resolution 2014-09: *Respecting State Authority and Expertise*, section B(4)(b).

Additional Industry Sectors

The January 29, 2016 D.C. Circuit court order directed EPA to determine by December 1, 2016 whether to issue notices of proposed rulemaking on CERCLA 108(b) financial assurance requirements for (a) chemical manufacturing; (b) petroleum and coal products manufacturing; and (c) electric power generation, transmission and distribution industries. During the May 18 federalism consultation meeting, EPA indicated the agency plans to utilize that meeting not only as satisfying state consultation regarding the hardrock mining industry, but also the other three industries for which EPA may seek to establish financial assurance requirements. The possibility that EPA would deem the May 18 meeting to satisfy consultation for all industries is unacceptable.

Given the importance of these industries for state economies – and the expectation that states will be respected as sovereign and full partners – Western Governors again request that substantive consultation with state partners be pursued by EPA in the manner set forth in WGA Policy Resolution 2014-09. This substantive consultation should far exceed that provided for the pending hardrock mining rule and should involve state review of draft language prior to any rule's proposal.

CONCLUSION

Development of – and consultation with state partners regarding – EPA's pending financial assurance rule for the hardrock mining sector has proven unsatisfactory. Though EPA has initiated opportunities for engagement between federal, state and industry partners regarding this proposal, those opportunities have not been transparent, participatory, or collaborative. State engagement opportunities have lacked the substantive depth necessary to alleviate concerns over potential preemption and duplication of state programs.

We request EPA provide Western Governors answers to the questions posed in the March 29 WGA letter to EPA, and reiterated herein, and that EPA provide Governors and state regulators with the draft rule, model and formula for calculation of financial assurance amounts for the hardrock mining financial assurance rule before its publication. Similarly, we request EPA substantively consult with states – in a manner consistent with WGA Policy Resolution 2014-09 – with regard to potential financial assurance regulation of the (a) chemical manufacturing; (b) petroleum and coal products manufacturing; and (c) electric power generation, transmission and distribution industries well in advance of rule publication.

Sincerely,

Steve Bullock
Governor of Montana
Chair, WGA

Dennis Daugaard
Governor of South Dakota
Vice Chair, WGA

WESTERN GOVERNORS' ASSOCIATION

Western Governors' Association
Policy Resolution 2014 - 07

Bonding for Mine Reclamation

A. BACKGROUND

1. All Western states in which mining occurs have staff dedicated to ensuring that ongoing mine operations develop and follow appropriate reclamation plans.

2. An important component of a state's oversight of mine reclamation is the requirement that mining companies provide financial assurances in a form and amount sufficient to fund required reclamation if, for some reason, the company itself fails to do so. These types of financial assurances, often referred to generically as "bonding," protect the public from having to finance reclamation and closure if the company goes out of business, or fails to meet its reclamation obligation.

3. All Western states have developed regulatory bonding programs to evaluate and approve the financial assurances required of mining companies. The states have developed the staff and expertise necessary to calculate the appropriate amount of the bonds, based on the unique circumstances of each mining operation, as well as to make informed predictions of how the real value of current financial assurance may change over the life of the mine, and even post-closure.

4. Section 108(b) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. § 9608(b), requires EPA to promulgate financial responsibility requirements for industrial facilities that take into account the risks associated with their use and disposal of hazardous substances. After the Sierra Club sued EPA for failing to timely comply with this section of CERCLA, a federal District Court in California ordered EPA to do so.[1]

5. In response to the Court's ruling, EPA announced in July, 2009 that it had selected hard-rock mining as the first industry sector for which it would undertake an analysis of whether federal bonding requirements under CERCLA Sec. 108[2] were needed.

6. Since EPA's 2009 announcement, Western Governors have expressed concern that any bonding requirements that EPA may develop for the hard-rock mining industry could be duplicative of state requirements, and could even pre-empt them entirely. The Governors have also questioned whether EPA has the resources to implement

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1 *See* Sierra Club v. Johnson, 2009 WL 2413094 (N.D. Cal. 2009)

2 *See* 74 Fed. Reg. 37213 (July 28, 2009).

reclamation bonding for hard-rock mines, since bond calculations usually reflect very site-specific reclamation needs, tasks and costs.

7. State mining agencies provided detailed comments to EPA in August 2011 on the structure and extent of each state's hard rock mining financial assurance requirements. EPA has yet to indicate if or what problems or gaps the agency has found in existing state requirements. Recently, EPA indicated that a rulemaking on this issue is not likely for at least another year.

B. GOVERNORS' POLICY STATEMENT

1. Because mine reclamation is needed primarily to protect adjacent waters, it is both appropriate and consistent with Congressional intent to recognize the states' lead and primary role in regulating water related impacts of mine reclamation, including the associated bonding. See Clean Water Act, Sec. 101(b), 33 U.S.C. § 1251(b).

2. Western states have a proven track record in regulating mine reclamation in the modern era – including for hard rock mines -- having developed appropriate statutory and regulatory controls, and are dedicating resources and staff to ensure responsible industry oversight.

3. In contrast, EPA currently has no staff dedicated to oversight of mine reclamation, or to the approval of bonding associated with mine reclamation. As a consequence, if EPA proceeds to promulgate bonding requirements for the hard-rock mining industry under CERCLA Sec. 108, it will have to create a new federal regulatory program -- an unnecessary investment of federal funds -- at a time when the federal government is trying to get its fiscal house in order.

4. Western Governors believe that states currently have financial responsibility programs in place that are working well, and that functional programs should not be duplicated or pre-empted by any program developed by EPA pursuant to Section 108(b) of CERCLA.

C. GOVERNORS' MANAGEMENT DIRECTIVES

1. The Governors direct the WGA staff, where appropriate, to work with Congressional committees of jurisdiction and the Executive Branch to achieve the objectives of this resolution.

2. Furthermore, the Governors direct WGA staff to develop, as appropriate and timely, detailed annual work plans to advance the policy positions and goals contained in this resolution. Those work plans shall be presented to, and approved by, Western Governors prior to implementation. WGA staff shall keep the Governors informed, on a regular basis, of their progress in implementing approved annual work plans.

WESTERN GOVERNORS' ASSOCIATION

Western Governors' Association
Policy Resolution 2014-09

Respecting State Authority and Expertise

A. BACKGROUND

1. Governors have significant responsibilities for the condition of land, air, forest, wildlife, and water resources, as well as energy and minerals development, for the lands within their state's borders.

2. States derive a number of independent rights and responsibilities under the U.S. Constitution. The 10th Amendment details the division of power between the federal government and states. "The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people."

3. Further, the U.S. Congress has, by statute, provided for the delegation to states of authority over certain federal program responsibilities. Many federal environmental programs are statutorily authorized to be delegated to states that wish to undertake those responsibilities.

4. According to the Environmental Council of the States (ECOS), states have chosen to accept responsibility for 96 percent of the primary federal environmental programs that are available for delegation to states. States currently execute the vast majority of natural resource regulatory tasks in America, including 96 percent of the enforcement and compliance actions and collection of more than 94 percent of the environmental quality data currently held by the U.S. Environmental Protection Agency.

5. Over time, the strength of the federal-state partnership in resource management has diminished. Federal agencies are increasingly challenging state decisions, imposing additional federal regulation or oversight and requiring unnecessary and often duplicative documentation. In many cases, these federal actions encroach on state prerogatives, especially in natural resource management. These federal actions neglect state expertise and diminish the statutorily-defined role of states in exercising their authority to manage delegated environmental protection programs.

6. The current fiscal environment exacerbates the tensions between states and federal agencies. Increasingly, states are required to expend their limited resources to operate regulatory programs over which they have less and less strategic control.

B. GOVERNORS' POLICY STATEMENT

1. Except as mandated by Congress, the management of resources through the establishment of environmental standards and natural resource planning goals, as well as the means of achieving those standards and goals, should be left to the states.

2. Western Governors support early, meaningful and substantial state involvement in the development, prioritization and implementation of federal environmental statutes, policies, rules, programs, reviews, budget proposals, budget processes and strategic planning. The U.S. Congress and appropriate federal agencies should provide expanded opportunities for such involvement, particularly where states are working to help their federal partners to improve management of federal lands within their states' borders.

3. When a state is meeting the minimum requirements of a delegated program, the role of federal agencies should be limited to the provision of funding, technical assistance and research support. States should be free to develop implementation and enforcement approaches that make sense within their jurisdictions, without intervention by the federal government.

4. Prior to any intervention in state-run programs, federal agencies should consult with states in a meaningful way, and on a timely basis.

    a. **Predicate Involvement:** Federal agencies should take into account state data and expertise in development and analysis of underlying science which serves as the legal basis for federal regulatory action. Accordingly, states merit greater representation on all relevant EPA Science Advisory Board (SAB) Committees and other panels advising the agency on scientific, technological, social and economic issues that inform its regulatory process.

    b. **Pre-Publication / Federal Decision-making Stage**: Federal agencies should engage in early (pre-rulemaking) consultation with Governors and state regulators. This should include substantive consultation with states during development of rules or decisions and a review by states of the proposal before a formal rulemaking is launched (i.e. before such proposals are sent to the White House Office of Management and Budget for finalization).

    c. **Post-Publication / Pre-Finalization Stage**: As they receive additional information from state agencies and non-governmental entities, Governors and other state officials should have the ability to engage with federal agencies on an ongoing basis to seek refinements to proposed federal regulatory actions prior to finalization.

d. **Rule / Policy Implementation**: Significant deference – as provided for by Congress in various enacting statutes (including the Clean Air Act, Clean Water Act, Resource Conservation and Recovery Act, among others) -- should be granted to states in formulation of state plans designed to implement delegated programs.

5. Western Governors have identified several specific areas where state environmental and natural resource management prerogatives are diminished by federal agencies' settlement of litigation without consultation with states. Where their roles and responsibilities are impacted states should, at a minimum, be consulted during settlement negotiations.

C. GOVERNORS' MANAGEMENT DIRECTIVE

1. The Governors direct the WGA staff, where appropriate, to work with Congressional committees of jurisdiction and the Executive Branch to achieve the objectives of this resolution.

2. Furthermore, the Governors direct WGA staff to develop, as appropriate and timely, detailed annual work plans to advance the policy positions and goals contained in this resolution. Those work plans shall be presented to, and approved by, Western Governors prior to implementation. WGA staff shall keep the Governors informed, on a regular basis, of their progress in implementing approved annual work plans.

WESTERN GOVERNORS' ASSOCIATION

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March 29, 2016

Honorable Gina McCarthy
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W. (1101A)
Washington, D.C. 20460

Dear Administrator McCarthy:

Many western states rely on the hard rock mining industry for economic development and employment. Western states where mining occurs have staff dedicated to mine permitting and compliance. They ensure that hard rock mining facilities are designed, constructed and operated to minimize risks to the environment and ensure reclamation. State regulators ensure proper mine closure on both private and public lands when the time comes. They coordinate with federal land agencies to ensure bonding is adequate.

A recent D.C. Circuit court decision approved a settlement agreement negotiated by the Environmental Protection Agency (EPA) and several non-governmental organizations. It requires EPA to publish a notice of proposed rulemaking pursuant to section 108(b) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) for the hard rock mining industry by December 1, 2016.[1]

Western Governors are concerned that EPA may impose additional financial assurance requirements on the hard rock mining industry. As stated in section A(3) of WGA Policy Resolution 2014-07, *Bonding for Mine Reclamation* (attached to these comments and incorporated by reference), western states have developed regulatory bonding programs to evaluate and approve financial assurance requirements for hard rock mining operations. Each western state has also developed detailed design, construction, operating, monitoring and permitting standards for hard rock mining facilities.

Governors have specific concerns with the potential introduction of EPA bonding requirements including:

- *Duplicative Federal Regulations* – Proposed federal requirements would duplicate existing state financial assurance requirements and could preempt existing state requirements for hard rock mining operations. They would require compliance with federal design, construction and

[1] Order *In re: Idaho Conservation League, et al.*, No. 14-1149 (D.C. Cir. Jan. 29, 2016).

operating standards, to the exclusion of proven state standards. These additional financial assurance requirements would impair western economies and the hard rock mining industry in America. Section B(2) of WGA Policy Resolution 2015-09, *National Minerals Policy*, reinforces the importance of the mining industry to both local and national economies. Reliable supplies of American minerals play a critical role in meeting national security needs.

- *Inappropriately Hampering Effective State Programs* – EPA has not indicated to states what, if any, problems or gaps the agency perceives in state financial assurance requirements. EPA has likewise failed to indicate that modern, state-driven standards necessitate any alternative program. Western states have the staff and expertise necessary to ensure environmental compliance, reclamation and site closure. Reclamation and closure bonding calculations are based on the unique circumstances of each mining operation, the local ecology and post reclamation land use. Local expertise allows for informed decisions on financial assurances required – based on real values over the life of the mine and after its closure. Many of the hard rock mines in the Western U.S. are on private or public lands, and at times on both. Only state regulatory agencies can oversee bonding and closure on sites with dual ownership and split mineral estate.

- *Failure to Recognize States' Primacy Role in Water Management* – Hard rock mine reclamation and bonding are required to protect water resources. States are identified under the Clean Water Act as the primary regulators of water. It is appropriate to recognize the lead and primary role of states in regulating water-related impacts incident to mine reclamation – including associated bonding requirements.

The referenced D.C. Circuit court order directed EPA to determine by December 1, 2016 whether to issue notice of proposed rulemaking on CERCLA 108(b) financial assurance requirements for (a) chemical manufacturing; (b) petroleum and coal products manufacturing; and (c) electric power generation, transmission and distribution industries. We note similar concerns regarding EPA's introduction of bonding requirements for these industries.

Prior to publishing a notice of proposed rulemaking for any of these industries EPA should consult with Governors and engage state regulators. This should occur early in the process – before rulemaking. Substantive consultation during development of rules or decisions should occur well before formal rulemaking is launched. This should include a review by Governors and state regulators of any proposals before they are sent to the White House Office of Management and Budget for finalization.

As part of early consultation on any proposals, we request that EPA provide Governors and state regulators the following:

- A detailed state consultation timeline and plan for obtaining individual state comments from Governors and state regulators;
- All technical and scientific materials and analyses used to support any proposed rule, denoting whether any such materials were peer-reviewed;
- A statement indicating how the EPA solicited ideas about alternative methods of compliance and potential flexibilities in order to reduce the economic burden placed on affected entities;
- A statement indicating how EPA solicited information from the Governors and state regulators as to whether the proposed rule will not duplicate similar state requirements;
- A copy of a federalism assessment or the reason why EPA did not complete a federalism assessment;
- Explanation of the reason existing state programs are insufficient to address the concerns and an analysis of any conflicts in the proposed rule with state programs; and
- Analysis of financial assurance instruments that would satisfy any proposed EPA requirement.

Western states are committed to environmental protection and to responsible and comprehensive regulation and bonding for hard rock mining operations. Western Governors urge you to consider the concerns raised here.

Sincerely,

Matthew H. Mead
Governor of Wyoming
Chairman, WGA

Steve Bullock
Governor of Montana
Vice Chair, WGA

cc: Honorable Lisa Murkowski, Chairwoman, Senate Energy & Natural Resources Committee;
Honorable Maria Cantwell, Ranking Member, Senate Energy & Natural Resources Committee;
Honorable Fred Upton, Chairman, House Energy & Commerce Committee;
Honorable Frank Pallone, Ranking Member, House Energy & Commerce Committee

Interstate Mining Compact Commission
445-A Carlisle Drive, Herndon, VA 20170
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August 16, 2016

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Submitted via Email to: McCarthy.Gina@epa.gov, Kreuger.Anna@epa.gov, Sasseville.Sonya@epa.gov, Barr.Linda@epa.gov, Barbery.Andrea@epa.gov, Hanson.Andrew@epa.gov

Dear Ms. Sasseville and Ms. Kreuger:

This letter constitutes the comments of the Interstate Mining Compact Commission (IMCC) concerning the Environmental Protection Agency's (EPA) anticipated rulemaking to require financial assurance for hardrock mining under Section 108(b) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). The comments are being submitted as part of EPA's consultation with the states pursuant to the terms of the "Federalism" Executive Order (EO 13132), which directs federal agencies to consult with elected state and local government officials, or their representative national organizations, when developing regulations and policies that may impose substantial compliance costs on state and local governments or may preempt current or future state or local laws and regulations. We appreciate the opportunity to provide these comments on behalf of our member states. IMCC has also been collaborating with several state government organizations and non-member states. In this regard, IMCC also endorses the individual comments being submitted by the states of

Nevada, South Dakota, and Utah, and the comments of the Western Governors' Association and The Environmental Council of the States.

The IMCC is a multi-state governmental organization representing the natural resource and environmental protection interests of its 25 member states, several of which implement comprehensive and robust regulatory programs for hardrock mining within their borders, particularly in the West. An important component of state regulatory programs is the requirement that companies provide financial assurances that are sufficient to fund required reclamation, post-closure monitoring and water treatment, and the handling and disposal of hazardous and acid-forming substances resulting from mining processes, should the company for some reason fail to do so in accordance with the state reclamation program requirements.

As noted in IMCC's resolution on "Financial Assurance for Hardrock Mine Reclamation" dated April 20, 2016, the states have acquired extensive expertise on and understanding of the various mining methods and technologies used by their hardrock industries, and have years of experience in evaluating mining operations, calculating bond amounts based on the unique circumstances of each mining operation, assuring that completion of reclamation and proper mine closure takes place, addressing public health risks and environmental risks, regulating hazardous substances utilized in mining, and preventing and remediating hazardous releases. The states have also developed the staff and expertise necessary to make informed predictions of how the real value of financial assurance may change over the life of the mine, including post-closure, and they have the authority to make adjustments to financial assurance requirements over time when necessary. In the West, hardrock mining operations on public lands are also subject to comprehensive regulation and financial assurance requirements under the authority of the U.S. Bureau of Land Management (BLM), and the U.S. Forest Service (USFS), in many cases in cooperation with the states through memoranda of understanding (MOUs).

Under CERCLA 108(b), EPA intends to address financial assurance requirements for hardrock mining operations and processing facilities in the event of a hazardous release, should a company declare bankruptcy or be otherwise unable to conduct necessary response activities. EPA intends to take into account the "degree and duration of risks" associated with the use and management of hazardous substances at these sites. EPA has repeatedly stated that what CERCLA 108(b) would regulate is different from what the states are doing, emphasizing that states' programs are "preventive" in nature and only address mine reclamation and closure requirements, as opposed to addressing releases of hazardous substances. The fact is, state reclamation programs are designed to prevent such releases from ever occurring and to thereby eliminate the risk. Several state programs include financial assurance coverage not only for the handling and treatment of hazardous substances, but also for remediation of hazardous releases, should it become necessary.

Despite EPA's stated good intentions to avoid preemption of state laws and regulations, we remain concerned that, as structured, EPA's anticipated rule appears to duplicate state financial assurance requirements, and that preemption of existing state

programs is a certainty based on the limited information EPA has shared with us to date. This is in direct contradiction to EO 13132, Section 2, *Fundamental Federalism Principles,* which states "(i) The national government should be deferential to the States when taking action that affects the policymaking discretion of the States." Preemption would be devastating for the states' ability to effectively regulate the hardrock mining industry within their borders. As explained in a letter sent to EPA in 2011 by the New Mexico State Attorney General, preemption would create huge gaps in the state's regulatory system. For instance, in situations where a mine operator fails to implement reclamation requirements without resulting in a significant release of hazardous substances, the state might be prompted to call in the financial assurance to correct the violation, whereas EPA would not (under CERCLA 108(b)). If the state law is preempted, the state will no longer have that ability. The same could be true where a state regulates mine contaminants that are not hazardous substances. These scenarios would leave the state with no effective remedy to ensure reclamation.

Based on our analysis, the effect of state programs is to substantially reduce, if not eliminate, the risk that a mine will have a release of hazardous substances that might otherwise result in a National Priorities List (NPL) listing. Therefore, there is no reason to require CERCLA 108(b) financial assurance at mines that have state approved reclamation plans and financial assurance in place. To the extent that EPA perceives that there are gaps in state financial assurance requirements, the agency has failed to clearly identify them, despite repeated requests in past years by the states and Congress to do so. Without more to establish otherwise, the states continue to maintain that their programs for financial assurance are sufficient for purposes of CERCLA 108(b).

Any gap analysis by EPA should follow a thorough understanding of existing state and federal programs. If it is determined that regulatory enhancements are needed in some states or under certain circumstances to address hazardous releases, a much narrower rule should be developed, rather than a nationwide one-size-fits-all rule for which no need has been demonstrated. EPA should also specifically exempt operations from CERCLA 108(b) financial assurance in states where the state program's financial assurance requirements are determined to be sufficient.

The approach above would be consistent with EO 13132, Section 2 (f), which states "The nature of our constitutional system encourages a healthy diversity in the public policies adopted by the people of the several States according to their own conditions, needs, and desires. In the search for enlightened public policy, individual States and communities are free to experiment with a variety of approaches to public issues. One-size-fits-all approaches to public policy problems can inhibit the creation of effective solutions to those problems."

EO 13132, Section 3, *Federal Policymaking Criteria*, also supports this approach:

"(d) When undertaking to formulate and implement policies that have federalism implications, agencies shall:

(1) encourage States to develop their own policies to achieve program objectives and to work with appropriate officials in other States;

(2) where possible, defer to the States to establish standards;

(3) in determining whether to establish uniform national standards, consult with appropriate State and local officials in developing those standards.

EO 13132, Section 6 (c) states that "no agency shall promulgate any regulation that has federalism implications and that preempts State law, unless the agency, *prior to the formal promulgation of the regulation, (1) consulted with State and local officials early in the process of developing the proposed regulation*" (Emphasis added). Should EPA continue to move forward, the states request that as part of the "early consultation," EPA provide the states with a draft of the rule to enable the states to better understand and respond to the potential conflicts with state requirements, as well as preemption impacts. The states also request access to the model and formula being developed to calculate required amounts of financial assurance under CERCLA 108(b). This would include the specific measures and engineering controls being considered for reducing the amounts of financial assurance, the percentages associated with those reductions, and the basis for calculating those percentages. To date, the agency has only shared vague conceptual information and sample scenarios that do not necessarily reflect conditions and characteristics of actual mining operations within the various states. Without having detailed information about the draft rule and model, we can only comment on what we "think" EPA intends to include, and it is impossible to understand and comment on the relationship between the draft rule and existing state programs. As regulators, the states should be given an opportunity to comment substantively on specific provisions of the draft rule and model prior to publication of the rule and the public comment period. This is necessary for a true and meaningful federalism consultation to take place. It is also consistent with EO 13132, Section 4, *Special Requirements for Preemption*, (d) "When an agency foresees the possibility of a conflict between State law and Federally protected interests within its area of regulatory responsibility, the agency shall consult, to the extent practicable, with appropriate State and local officials in an effort to avoid such a conflict."

During a July 19 conference call between EPA and the states, EPA stated the agency will not be looking at state programs that are in place, or legal requirements such as the presence of a required reclamation plan or permit, when calculating reductions in the financial assurance required under the CERCLA 108(b) rule. Instead, EPA will only consider physical controls on the ground, such as individual measures and engineering controls in place at a mining operation. We are concerned that EPA will "miss the forest for the trees" with this approach by not fully understanding, and taking into account, the programs as a whole and how they work together in their entirety to eliminate and reduce risk. Depending on the operation and circumstances on the ground, a particular engineering control may or may not be appropriate and/or result in the same reduction of risk in every case. The states have the expertise and knowledge to determine the appropriateness and likely effectiveness of these controls on a site-specific basis. Mining

and reclamation plans required for state permits are effective ways to reduce risk, along with the associated financial assurance. In addition, many existing state and federal programs go beyond these measures and directly address hazardous substances and hazardous releases. It is essential for EPA to fully understand these programs in order to avoid duplication and preemption. Due to their effectiveness, state programs in their entirety should be taken into account in the formula for reducing, and in many cases eliminating, the amounts of financial assurance that will be required under the model EPA is developing for calculating bond amounts as part of the CERCLA 108(b) rulemaking.

The results of existing state, BLM and USFS programs in eliminating or reducing the risk of hazardous releases are testimony to their effectiveness. These comprehensive programs make Superfund sites like those that occurred in the past extremely unlikely. If the key component of the draft rule is risk, reduction of risk pursuant to state and federal program requirements together with the bond already in place should be taken into account. For example, according to a March 8, 2011 letter sent by Senator Murkowski to Secretaries Salazar and Vilsack, there have been no modern mine sites permitted by BLM or USFS since 1990 added to the CERCLA NPL (e.g. zero out of 659 BLM permitted mine sites, and zero out of 2,685 USFS permitted mine sites have been added to the NPL).

Following are descriptions of some existing state program and financial assurance requirements that demonstrate why we believe these programs are adequate, and how they eliminate or greatly reduce the risk and need for CERCLA 108(b) financial assurance protection. [Note: Italicized sections relate directly to hazardous substances/hazardous releases, though we believe all of the requirements contribute to the reduction of risk.]

Nevada

Nevada reclamation bonding requirements that are designed to be consistent with federal regulations are in place for exploration projects and mining operations with proposed disturbance greater than 5 acres or removing in excess of 36,500 tons of material (ore plus overburden) from the earth per year. The bonds ensure productive post-mining land use and protect waters in the state by ensuring adequate funding is set aside to complete reclamation on privately owned and federal land in the event operators are unable or unwilling to meet their reclamation obligations. Bonds are required for projects on private or public lands. On public lands, bonding is a joint process between the state and federal land managers (BLM and USFS) under a formal MOU, most recently updated in 2014. The bulk of financial assurance is held in surety bonds, but other instruments authorized for use include trust funds, corporate guarantees, letters of credit, insurance, cash, and a State Bond Poll (no CD's). Both the state and federal land managers review and approve the cost estimates when setting bond amounts. Bond release is also coordinated between the agencies. The financial assurance must be in place prior to initiation of any land disturbance activities. Currently over $2.66 billion of financial assurance is posted in Nevada. The bonds may be held by BLM, USFS, or the

state, and the bonds are updated at least once every three years and more often, if needed. The bond amount is calculated to include:

- *Regrading to stable slopes and installing covers to reduce infiltration for: waste rock piles, heap leach pads, and tailings storage facilities.*
- Recontouring and backfilling to establish original topography, including: roads, borrow areas, ponds and yard areas; demolition of buildings; pits must be safe and stable; and revegetation of disturbed areas.
- Closure and reclamation of portals, adits, shafts, and vent raises.
- Plugging of water wells.
- *Disposal of hazardous and mercury-bearing waste products – all hazardous substances, along with ongoing monitoring as needed.*
- *Construction of cover systems for waste rock piles and tailings storage facilities.*
- *Monitoring, sampling, and site maintenance during the mine closure period.*
- *Management of mine impacted waters, including releases, are covered by the bond. Mine impacted waters are defined as any contaminated water resulting from a mining operation requiring stabilization, management, control or treatment to prevent or mitigate degradation of waters of the state. Included are stabilization, management, control, or treatment of mine impacted waters from waste rock piles, open pits, and underground mines. Both short-term impacts during operations and long-term (perpetual) impacts during post-closure are covered.*

Nevada also maintains an Interim Fluid Management (IFM) Fund to fund responses to potential releases at heap leach pad facilities, tailings impoundments, or other fluids management facilities. In the event the mine owner abandons the mine or stops managing fluids at the mine, the state can access the IFM fund to manage fluids while the surety bond forfeiture process proceeds and plans are completed to place the site in permanent closure. Nevada maintains a standby contractor capable of performing interim fluids management. Alternatively, the bond issuer can perform interim fluids management. The cost of interim fluids management is factored into and reimbursed by the bond.

Nevada regulations at NAC 519A.360 (amount of surety required) require the operator to consider the following in determining the cost of executing the plan for reclamation:

- *Process fluid stabilization.*
- *Stabilization, management, control, and treatment of mine-impacted waters.*
- Equipment mobilization and demobilization.
- Removal and disposal or salvage of buildings, structures, equipment, piping, scrap and regents.
- *Activities required to ensure the continuation of post-reclamation stabilization, management, control, and treatment of mine-impacted waters.*

Calculation of the bond is based on what it would cost regulators to reclaim the site. Several tools have been developed that help in the bond calculation process, including:

- The Standardized Reclamation Cost Estimator (SRCE) – a spreadsheet model with an annually updated Cost Data File for earthwork volumetric estimations and surface area calculations.
- *The Heap Leach Draindown Estimator (HLDE), which models the draindown curve and long-term flow. It is used for cost estimating and closure plan development.*
- *The Process Fluid Cost Estimator (PFCE) for estimating process fluid stabilization costs via a multi-phase process from active recirculation to passive fluid management.*

Utah

The Utah minerals regulatory program consists of operations and reclamation standards, and includes requirements for financial assurances and the handling and disposal of deleterious materials (heap leach, tailings, etc.) utilized or created as the result of mining operations. Surface mining and the surface effects of underground and in situ mining are regulated, as are on-site transportation, concentrating, milling, evaporation, and other primary processing. Off-site processing, smelting or refining are not covered under the program's regulations.

The Utah program broadly defines deleterious materials as earth, waste or introduced materials exposed by mining operations to air, water, weather or microbiological processes, which would likely produce detrimental chemicals or physical conditions in soils or water. Substances introduced during any part of the mining process are regulated. Utah's definition of deleterious materials encompasses all hazardous substances under CERCLA. Mining operations are required to have a reclamation plan in place that includes a narrative description identifying any deleterious or acid-forming materials generated and left on site as a result of mining or mineral processing. The plan must include a description of the treatment, location and disposition of the materials, and a map showing the location of the materials upon the completion of reclamation. In addition to plans for reclamation during and after mining to shape, stabilize, revegetate, or otherwise treat the land affected in order to achieve a safe and ecologically usable condition and use consistent with the local environmental conditions and land management practices, *the plans must include any clean-ups of deleterious materials that may become necessary. The Utah operation standards state that all deleterious or potentially deleterious material shall be safely removed from the site or kept in an isolated condition such that adverse environmental effects are eliminated or controlled.*

Financial assurance is required and calculated based on site-specific technical details of the mining and reclamation plans for all mining operations using third-party costs. *The financial assurance cost estimate includes all aspects of the reclamation plan,*

including traditional items such as demolition, grading, and revegetation, but also includes cleanup, disposal, and/or treatment of deleterious materials during and after completion of mining operations.

For small mines (<10 acres), average costs per acre usually apply, and additional costs are added for facilities like portals, processing, and other features. The financial assurance can be in the forms of a letter of credit, surety bond, cash, certificate of deposit, other collateral, or corporate guarantee through a contract with the Utah Board of Oil, Gas and Mining, which oversees the Division of Oil, Gas and Mining.

New Mexico

In New Mexico, two statutes govern hardrock mines: the New Mexico Mining Act (Section 69-36-1 NMSA 1978) implemented by the New Mexico Energy, Minerals & Natural Resources Department; and the New Mexico Water Quality Act (Section 74-6-1 NMSA 1978) implemented by the New Mexico Environment Department. The Acts are designed to eliminate any environmental damage from mining.

Under the New Mexico Mining Act, permit types include: exploration, minimal impact, existing and new mines. Each permit must include a closeout plan to reclaim the permit area and to reestablish a "self-sustaining ecosystem", and must also include financial assurance based on a detailed engineering cost estimate of what it would cost the state, or the state's contractor, to complete the reclamation plan. The bond calculation must include costs for: contract administration, mobilization, demobilization, engineering redesign, profit and overhead, procurement costs, reclamation or closeout plan management, and contingencies. The state allows net present value calculations for long term closures. Types of financial assurance allowed include: cash; trust funds; surety bonds; letters of credit; collateral bonds; and third party guarantees, which are limited to a maximum of 75% of total financial assurance.

Currently, New Mexico holds $692 million in financial assurance at 82 facilities and there have been no significant forfeitures, and only one forfeiture since inception of the New Mexico Mining Act. The state has released over $100 million in financial assurance due to completed reclamation.

Under the New Mexico Water Quality Act a permit is required for the discharge of any water contaminant. Permits must be in place specifying measures to prevent water pollution and financial responsibility may be required for corrective action. Specific rules are required for the copper industry, including requirements for a discharge permit that governs construction and operation of the mine along with a closure plan that includes regrading, cover system, and water management and treatment. Financial assurance is also required in accordance with the closure plan. Financial assurance mechanisms under the Water Quality Act are the same as for the Mining Act.

New Mexico's law requires that financial assurance must not duplicate nor be less comprehensive than federal financial requirements. At mines where both Mining Act and Water Quality Act permits are required, the implementing agencies establish joint financial assurance which avoids duplication and use joint power agreements to administer the requirements. The agencies have MOUs in place with BLM and USFS to avoid duplication where federal land is involved.

Existing New Mexico financial assurance is similar to a performance bond and serves to guarantee the reclamation of the mine. *The draft CERCLA 108(b) rule EPA is developing will serve more as an insurance policy to cover the risk of the mine ending up on the National Priorities List (NPL) under CERCLA. However, CERCLA 114, which requires preemption if the state financial assurance is "in connection with liability for the release of a hazardous substance" does not recognize the distinction between the completely different purposes of the state's bond and the EPA bond. EPA asserts that there is no CERCLA 114 preemption because state financial assurance requirements are not "in connection with liability for the release of a hazardous substance." However, New Mexico has observed that, given the large amounts of financial assurance that would be required in the sample mine scenario examples provided by EPA in a recent webinar, and the lack of credits for state reclamation plans and financial assurance already in place (through which the state is dealing with the prevention of, and in some cases the actual release of, hazardous materials), it is almost certain that when the EPA financial assurance rule is promulgated, New Mexico and other states with similar requirements will be sued under CERCLA 114.*

South Dakota

The South Dakota Department of Environment and Natural Resources (DENR) and the Board of Minerals and Environment (BME), under the South Dakota Codified Law (SDCL) 45-6B, regulate mining operations in the state and require financial assurance. *A Large Scale Mine Permit (SDCL 45-6B) is required for mines that affect more than 10 acres and mine more than 25,000 tons annually or use chemical or biological leaching agents. These mines are complex and difficult to reclaim, and may have long-term water treatment or other costs associated with them.*

There are potentially three different types of bonds required for large scale mining operations in South Dakota. They include a reclamation bond, additional financial assurance for mining operations that employ chemical or biological leaching ("spill bond"), and post-closure financial assurance. By statute, the reclamation bond is required to cover the actual cost of reclamation, which would accrue to the state if a third party contractor had to be hired to reclaim the site. There is no set limit on the bond amount, and it must be submitted prior to the issuance of the mine permit.

The South Dakota DENR has copyrighted a spreadsheet program, called "BondCalc," that was developed in the 1980's to calculate mine permit bonds. The program has been refined and improved over the years. South Dakota also uses Nevada's SRCE bond estimation program. These programs are used to do an engineering cost

estimate based on having a third party contractor do the reclamation work. The cost estimate includes a conservative equipment section based on local rates and equipment availability, actual operating costs and information from other states, and mine site acreages and volumes. Several references are used to identify costs, including the "Caterpillar Performance Handbook" and "Means Cost Data Book" among others. Certain assumptions are made in the calculation, such as a five-year reclamation timeframe. Overhead and indirect costs are also considered, and credit is given for reclamation work already completed.

Large Scale Mine Permit cost calculations include:

- Earthmoving costs, such as reducing waste rock facility slopes, backfilling pits, grading, and topsoil replacement;
- Revegetation including seeding, mulching, and fertilizing;
- Erosion control;
- *Disposal of pond solutions and neutralizing heap leach pads;*
- *In-situ ground water restoration;*
- *Site maintenance during the closure period;*
- *Monitoring and sampling;*
- *Water treatment;*
- *Waste depository caps;*
- *Well plugging;*
- *Building demolition; and*
- *Indirect costs, such as mobilization, performance bond, contractor overhead, contractor profit, state excise tax, inspection and administration, engineering and consulting, scope and bid, and contingencies.*

In addition to the reclamation bond, financial assurance, referred to as a "Spill Bond," is required for mining operations that employ chemical or biological leaching. The Spill Bond covers the cost of responding to and remediating accidental releases of chemical or biological leaching agents. The maximum amount that may be required for a Spill Bond is $1 million. Spill Bond calculations are based on a site-specific engineering cost estimate which assumes a hypothetical spill or leak event, and a third party contractor doing the remediation work.

Mine operators are also required to submit post-closure financial assurance as part of a post-closure plan. Generally, a 30-year post-closure period applies, but the length of the post-closure period can be lengthened or shortened by the state, depending on site conditions. Post-closure bonds are required at the time of reclamation bond release and prior to the start of the post-closure period. These bonds are also calculated based on an engineering cost estimate for a third party contractor to do the work. The calculation includes costs for monitoring and sampling, inspection and maintenance activities, long term water treatment such as for acid rock drainage (ARD), cap maintenance, and overhead and indirect costs. Considering a post-closure bond may be necessary for 30 or more years, a present worth analysis is used to calculate the long-

term bond. A lump sum amount is determined that, if deposited today, will cover costs over the post-closure period.

South Dakota mining statutes and permit conditions allow the state to periodically adjust bond amounts as site conditions change, permits are amended, technical revisions are made, or for other reasons requiring an adjustment. Bond amounts are also adjusted for inflation based on the construction cost index. Bonds are reviewed and adjusted on an annual basis.

South Dakota DENR calculates the proposed bond amount after operators submit cost estimates for mine reclamation and post-closure care in a mine permit application. It also recommends the amount and type of bonding mechanism to the BME which sets the final amount and type of bond. The bond must be submitted before a permit is issued. Bonds may be in the form of cash (certificates of deposit), irrevocable letter of credit, corporate surety, or government securities. Company net worth guarantees are not accepted by the BME.

South Dakota also operates under an MOU with the USFS for operations located on public lands. The state holds the bond, with USFS holding any additional bond it determines is necessary, and both agencies work together on reclaiming lands where bond forfeiture occurs. At this time, the state does not have MOU's in place with any other federal agencies. However, by statute, the BME can consider any surety or cash bond required by an agency of the federal government in determining the amount and duration of reclamation surety required.

Final Comments and Conclusions

During the July 19 conference call between EPA and the states as part of EPA's federalism outreach, an example of two operations in South Dakota that are currently in post-closure was presented. The state is holding 100 year post-closure bonds for two mines for long-term water treatment – one in the amount of $20 million and the second for $42 million. EPA was asked whether mines that are no longer producing, but are in a reclamation or post-closure phase, would be covered under the CERCLA 108(b) rule, and how potential preemption of South Dakota's post-closure regulations would be addressed. EPA was also asked whether the state's "Spill Bond" program would be able to continue without being preempted. EPA responded that the facility would have to submit information to EPA and the agency would review it and determine *at that time* whether financial assurance under CERCLA 108(b) is needed at an adjusted amount. EPA once again stated, based on what the agency has learned about state programs, that states' requirements for closure are different from what the CERCLA 108(b) rule would cover (hazardous releases), and EPA would have to make a determination based on what financial assurance is already in place. However, South Dakota's post-closure bonds and spill bonds address releases of hazardous substances. Therefore, what EPA plans to cover under the CERCLA 108(b) rule may not actually be different from what existing state programs already cover. EPA has clearly adopted a faulty "preemption argument" in concluding state programs are not addressing hazardous releases. In many instances,

as demonstrated above, that simply is not accurate. EPA continued to suggest on the July 19 call that, if there is something within the state programs showing that risk is reduced, EPA would reduce the amount of required financial assurance and the courts would likely take that into consideration regarding preemption. This does not provide much confidence to the states whose programs could be preempted, and it creates great uncertainty for the states and their mining industry.

It would be prudent and effective -- and less costly for EPA, the industry, the states, and ultimately the taxpayers -- if EPA took the time to engage in thorough and substantive consultation with the states prior to publishing a burdensome, and likely unnecessary, nationwide proposed rule. As noted earlier, the states have acquired decades of expertise in regulating and bonding for hardrock mining. Only after EPA fully understands existing state and federal programs will the agency be positioned to identify whether any gaps exist. If so, EPA should work within the states' existing programs to fill those gaps. If deemed necessary, a rule narrower in scope than where EPA is currently headed could help to ensure that preemption of state laws and regulations is averted, rather than later relying on the courts to decide whether state programs have been preempted on a case-by-case basis.

EPA has repeatedly reasoned that, due to the timeframe imposed by the courts to have a proposed draft rule in place by December 1, there is not time to consult with the states on a deeper level. However, we understand the court's ruling allows for further timeline extensions. In order to do its due diligence, we urge EPA to request a time extension to allow for a more meaningful and comprehensive consultation with the states prior to signing and publishing a proposed rule. We request an in-person meeting with EPA and the states to review and compare state program requirements with EPA's approach, and ideally with the draft rule. A Federalism Briefing followed by two one-hour conference calls between EPA and the states are not sufficient for meaningful consultation to occur.

We reiterate our request that EPA provide the draft rule, model and formula for calculation of bond amounts to the states for their review prior to publication of a proposed rule and opening of the public comment period. Considering the comprehensive bonding programs that exist in several states, as demonstrated above, without being able to review the formula or model EPA is developing for calculating financial assurance, it is difficult for the states to provide substantive comments in this area. We also continue to seek responses from EPA to the information requested in our April 20 resolution that was conveyed to Administrator McCarthy by letter dated May 3, 2016 (copy attached).

In conclusion, EPA has not yet adequately demonstrated the need for a CERCLA 108(b) financial assurance rule for hardrock mining. Without evidence to establish otherwise, we maintain that existing state and federal programs for financial assurance are sufficient. EPA has also not provided essential information about the draft rule, calculation model and formula that would allow us to make a complete assessment of the impact it will have on state programs as required by EO 13132. Based on the information

we have been provided, we continue to have serious concerns about the federalism impacts of EPA's current approach. Preemption of effective existing state programs appears certain, which would be devastating to those programs. EPA should therefore simplify and narrow the scope of any proposed rule to take into account the efficacy of existing financial assurance requirements and should include an exemption in the rules for those states that have instituted defined measures to reduce risks associated with the release of hazardous substances.

Thank you for the opportunity to comment on behalf of the states as part of your federalism outreach, and for your serious consideration of these concerns.

Sincerely,

Beth A. Botsis
Deputy Executive Director

Attachment

cc: Gina McCarthy
Linda Barr
Andrea Barbery
Andrew Hanson

Interstate Mining Compact Commission

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May 3, 2016

The Honorable Gina McCarthy
Administrator
Office of the Administrator – Mail Code 1101A
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Dear Administrator McCarthy:

Please find attached a resolution that was unanimously adopted by the member states of the Interstate Mining Compact Commission at its recent annual meeting concerning a rulemaking being undertaken by the U.S. Environmental Protection Agency (EPA) concerning financial assurance requirements under Section 108(b) of the Comprehensive Emergency Response, Compensation and Liability Act (CERCLA). We appreciate the effective working relationship that we have enjoyed with the Office of Land and Emergency Management and look forward to addressing the several concerns set forth in the resolution over the coming months, particularly with regarding to federalism and preemption.

Sincerely,

Gregory E. Conrad
Executive Director

cc. Barnes Johnson

Resolution

Interstate Mining Compact Commission

Re. Financial Assurance for Hardrock Mine Reclamation

BE IT KNOWN THAT:

WHEREAS, the development of our Nation's minerals necessarily involves the surface disturbance of the land and often results in impacts to air and water resources; and

WHEREAS, state and national laws provide for the reclamation of land disturbed by mining and for the protection of human health and the environment related to those disturbances; and

WHEREAS, with regard to hardrock and noncoal minerals development, state governments have largely taken the lead in fashioning regulatory programs that address environmental protection and reclamation requirements; and

WHEREAS, an important component of state regulatory programs is the requirement that mining companies provide financial assurances in a form and amount sufficient to fund required reclamation if, for some reason, the company fails to do so in accordance with the state program. These types of financial assurances, often referred to as bonding, protect the public from having to finance reclamation and closure if the company goes out of business or fails to meet its reclamation obligation; and

WHEREAS, all states have developed regulatory bonding programs to evaluate and approve the financial assurances required of mining companies. States have also developed the staff and expertise necessary to calculate the appropriate amount of bonds, based on the unique circumstances of each mining operation, and to make informed predictions of how the real value of current financial assurance may change over the life of the mine, including post-closure; and

WHEREAS, Section 108(b) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C Sec. 9608(b), requires that the U.S. Environmental Protection Agency (EPA) consider promulgating financial responsibility requirements for industrial facilities that take into account the risks associated with their use and disposal of hazardous substances; and

WHEREAS, pursuant to a federal court decision in California (*Sierra Club v Johnson*, 2009 WL 2413094 (N.D. Cal. 2009)) which ordered EPA to move forward with the rulemaking, EPA announced in July 2009 that it selected hardrock mining as the first industry sector for which it would develop financial responsibility requirements under CERLCA Section 108(b) (74 Fed. Reg. 37213, July 28, 2009); and

WHEREAS, pursuant to a D.C. Circuit court decision (Order *In re: Idaho Conservation League, et al.*, No. 14-1149 (D.C. Cir. Jan. 29, 2016)) approving a settlement agreement between the EPA and several non-governmental organizations, EPA is required to publish a notice of proposed rulemaking regarding CERCLA Sec. 108(b) financial assurance for the hardrock mining industry by December 1, 2016; and

WHEREAS, in preparation for its rulemaking, EPA undertook an analysis of reclamation bonding requirements in approximately 20 state regulatory programs throughout the U.S.; and

WHEREAS, since the initiation of EPA's rulemaking initiative, a number of IMCC member states have expressed concern than any bonding requirements that EPA may develop for the hardrock and noncoal mining industry could be duplicative of state requirements, and could even preempt them entirely under EPA's reading of Section 114(d) of CERCLA. The states have also questioned whether EPA has the resources to implement reclamation bonding for hardrock and noncoal mines, since bond calculations usually reflect site-specific reclamation needs and costs; and

WHEREAS, the states are concerned that EPA may be attempting to fill alleged "gaps" in state reclamation bonding programs that either may not exist or that are unrelated to the purpose of a reclamation bonding program;

NOW THEREFORE BE IT RESOLVED THAT THE INTERSTATE MINING COMPACT COMMISSION:

Recognizes the states' lead and primary role in regulating the environmental impacts associated with hardrock and noncoal mining operations within their borders, including financial assurance requirements for reclamation; and

Affirms that IMCC member states are committed to environmental protection and to responsible and comprehensive regulation and bonding for hardrock mining operations; and

Affirms that the states have a proven track record in regulating mine reclamation, having developed appropriate statutory and regulatory controls and dedicated resources and staff to ensure full and effective implementation of their regulatory programs; and

Believes that the states currently have financial responsibility programs in place that are working well and as such should stand in-lieu of federal requirements under Section 108(b) of CERCLA; and

Recommends that an independent, impartial body (such as the National Academy of Sciences) conduct a study to review financial responsibility requirements under state

regulatory programs to determine their sufficiency, to identify any serious gaps, and to recommend whether a federal rulemaking on the matter is needed; and

Urges the EPA to engage with state regulators through the IMCC prior to publishing a notice of proposed rulemaking regarding CERCLA Sec. 108(b) financial assurance for the hardrock mining industry, which should include substantive consultation with and provision of proposals to state regulators before formal rulemaking is launched; and

Requests that EPA provide to state regulators the following: a detailed state consultation timeline and plan for obtaining individual state comments; all technical and scientific materials and analyses used to support any proposed rule, denoting whether any such materials were peer-reviewed; a statement indicating how the EPA solicited ideas about alternative methods of compliance and potential flexibilities in order to reduce the economic burden placed on affected entities; a statement indicating how EPA solicited information from state regulators as to whether the proposed rule will duplicate similar state requirements; a copy of a federalism assessment or the reason why EPA did not complete a federalism assessment; explanation of the reason existing state programs are insufficient to address financial assurance concerns and an analysis of any conflicts in the proposed rule with state programs; and an analysis of financial assurance instruments that would satisfy any proposed EPA requirement

Issued this 20th day of April, 2016

ATTEST:

Gregory E. Conrad

Executive Director

THE
ENVIRONMENTAL
COUNCIL OF
THE STATES

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Web: www.ecos.org

August 17, 2016

Ms. Anna Krueger
Economist
U.S. Environmental Protection Agency Headquarters
Mail Code 5303P
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Submitted via electronic transmission to:
Krueger.Anna@epa.gov, Sasseville.Sonya@epa.gov, Barr.Linda@epa.gov, Rupp.Mark@epa.gov, Barbery.Andrea@epa.gov, Hanson.Andrew@epa.gov

Dear Ms. Krueger:

ECOS, the nonprofit, nonpartisan association of state and territorial environmental agency leaders, appreciates the opportunity to comment on U.S. EPA's forthcoming rulemaking to require financial responsibility for hard rock mining under Section 108(b) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). These comments are being submitted pursuant to "Federalism" Executive Order E.O. 13132, which directs federal agencies to consult with elected state and government officials, or their representative national organizations, when developing regulations and policies that may impose substantial compliance costs on state and local governments or may preempt current or future state or local laws and regulations. Accordingly, EPA has invited "pre-publication" comments on the federalism implications of EPA's proposed rule.

Over the past several years, the states have acquired extensive expertise and understanding of the various mining methods and technologies used by their hard rock industries, and have gained significant experience in evaluating mining operations, calculating bond amounts based on the unique circumstances of each mining operation, assuring that completion of reclamation and proper mine closure take place, addressing public health and environmental risks, regulating hazardous substances used in mining, and preventing and remediating hazardous releases. The states also have developed the staff and expertise necessary to make informed predictions of how the real value of financial assurance may change over the life of the mine, including post-closure. They have the authority to make adjustments to financial assurance requirements when necessary.

In the course of the Federalism briefings on the forthcoming proposed rule, ECOS members have raised concerns, based on the limited information supplied, that the rule has the potential to duplicate, preempt, and/or weaken state programs and financial assurance requirements. ECOS draws to EPA's attention our resolution entitled *On Environmental Federalism* (attached), reaffirmed in 2015, which expresses opposition to "…preemption of state authority, including preemption that limits the state's ability to establish environmental programs more stringent than federal programs…."

The ECOS resolution goes on to support "early, meaningful, and substantial state involvement in the development and implementation of environmental statutes, policies, [and] rules…." Of particular concern to ECOS is EPA's inability at this time to share details of its formula for calculation of bond amounts, which seeks to adjust the level of CERCLA 108(b) financial responsibility to reflect safer practices. While ECOS understands that EPA is under a tight court-imposed deadline to sign a notice of proposed rulemaking, its members have indicated that a thorough evaluation of EPA's forthcoming proposal is not possible in the absence of the specifics of this calculation. The importance of state evaluation of the formula is only heightened by EPA's stated intention to apply it to other sectors in future 108(b) rulemakings. ECOS thus requests that EPA supply a draft of its formula and allow an opportunity for further consultation with states before issuing a proposed rule.

Thank you for the opportunity to provide early input. ECOS appreciates EPA's consideration of our comments and recommendations. If you have any questions, please contact Lia Parisien, ECOS Executive Project Manager, at (202) 266-4931.

Sincerely,

Alexandra Dapolito Dunn
Executive Director and General Counsel
Environmental Council of the States

Attachment

Resolution 00 - 1
Approved April 12,
2000 Philadelphia,
Pennsylvania

Revised June 13,
2000 By mail vote

Revised April 4,
2003 By mail vote

Revised April 11,
2005 Washington,
DC

Revised September 8,
2005 Kennebunkport,
Maine

Revised September 22,
2008 Branson, Missouri

Renewed September 26,
2011 Indianapolis, Indiana

Revised March 20,
2012 Austin, Texas

Revised March 18,
2015 Washington,
DC

As certified by
Alexandra Dapolito
Dunn Executive
Director

ON ENVIRONMENTAL FEDERALISM

WHEREAS, the states are co-regulators with the federal government in a federal system; and

WHEREAS, the meaningful and substantial involvement of the state environmental agencies as partners with the U.S. Environmental Protection Agency (U.S. EPA) is critical to both the development and implementation of environmental programs; and

WHEREAS, the U.S. Congress has provided by statute for delegation, authorization, or primacy (hereinafter referred to collectively as “delegation”) of certain federal program responsibilities to states which, among other things, enables states to establish state programs that go beyond the minimum federal program requirements; and

WHEREAS, States that have received delegation have demonstrated to the U.S. EPA that they have the independent authority to adopt and they have adopted laws, regulations, and policies at least as stringent as federal laws, regulations, and policies; and

WHEREAS, states have further demonstrated their commitment to environmental protection by taking responsibility for 96% of the primary environmental programs which can be delegated to states; and

WHEREAS, because of this delegation, the state environmental agencies have a unique position as co- regulators and co-funders of these programs; and

WHEREAS, the delegation of new federal environmental rules (issued as final and completed actions and published by the U.S. EPA) to the states to implement increases each year; and

WHEREAS, federal financial support to implement environmental programs delegated to the states has declined since 2005; and

WHEREAS, cuts in federal and state support adversely affects the states' ability to implement federal programs in a timely manner and to adequately protect human health and the environment; and

WHEREAS, states currently perform the vast majority of environmental protection tasks in America, including 96% of the enforcement and compliance actions; and collection of more than 94% of the environmental quality data currently held by the U.S. EPA; and

WHEREAS, these accomplishments represent a success by the U.S. EPA and the states working together in ways the U.S. Congress originally envisioned to move environmental responsibility to the states; and

WHEREAS, the U.S. EPA provides great value in achieving protection of human health and the environment by fulfilling numerous important functions, including; establishing minimum national standards; ensuring state-to-state consistency in the implementation of those national standards; supporting research and providing information; and providing standardized pollution control activities across jurisdictions; and

WHEREAS, with respect to program operation, when a program has been delegated to a state and the state is meeting the minimum delegated program requirements, the role of the U.S. EPA is oversight and funding support rather than state-level implementation of programs; and

WHEREAS, under some federal programs the U.S. EPA grants to states the flexibility to adjust one-size- fits-all programs to local conditions and to try new procedures and techniques to accomplish agreed-upon environmental program requirements, thereby assuring an effective and efficient expenditure of the taxpayers' money.

NOW, THEREFORE, BE IT RESOLVED THAT THE ENVIRONMENTAL COUNCIL OF THE STATES:

Affirms its continuing support for the protection of human health and the environment by providing for clean air, clean water, and proper handling of waste materials;

Affirms that states are co-regulators, co-funders and partners with appropriate federal agencies, including the U.S. EPA, and with each other in a federal environmental protection system;

Affirms the need for adequate funding for both state environmental programs and the U.S. EPA, given the vitally important role of both levels of government;

Affirms that expansion of environmental authority to the states is to be supported, while preemption of state authority, including preemption that limits the state's ability to establish environmental programs more stringent than federal programs, is to be opposed;

Supports the authorization or delegation of programs to the states and believes that when a program has been authorized or delegated, the appropriate federal focus should be on program reviews, and, further, believes that the federal government should intervene in such state programs where required by court order or where a state fails to enforce federal rules particularly involving spillovers of harm from one state to another;

Supports early, meaningful, and substantial state involvement in the development and implementation of environmental statutes, policies, rules, programs, reviews, joint priority setting, budget proposals, budget processes, and strategic planning, and calls upon the U.S. Congress and appropriate federal agencies to provide expanded opportunities for such involvement;

Specifically calls on U.S. EPA to consult in a meaningful, timely, and concurrent manner with the states' environmental agencies in the priority setting, planning, and budgeting of offices of the U.S. EPA **as** these offices conduct these efforts;

Further specifically calls on U.S. EPA to consult in a meaningful and timely manner with the states' environmental agencies regarding the U.S. EPA interpretation of federal regulations, and to ensure that the U.S. EPA has fully articulated its interpretation of federal regulations prior to the U.S. EPA intervention in state programs;

Believes that such integrated consultation will increase mutual understanding, improve state-federal relations, remove barriers, reduce costs, and more quickly improve the nation's environmental quality;

Noting the extensive contributions states have made to a clean environment, affirms its belief that where the federal government requires that environmental actions be taken, the federal government ought to fund those actions, and not at the expense of other state programs;

Affirms that the federal government should be subject to the same environmental rules and requirements, including the susceptibility to enforcement that it imposes on states and other parties;

Affirms its support for the concept of flexibility and that the function of the federal environmental agency is, working with the states, largely to set goals for environmental accomplishment and that, to the maximum extent possible, the means of achieving those goals should be left primarily to the states; especially as relates to the use of different methods to implement core programs, such as risk-based inspections or multi-media environmental programs, and particularly in the development of new programs which will impact both states and the U.S. EPA; and

Directs ECOS staff to provide a copy of this resolution to the U.S. EPA Administrator.

Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Rick Scott
Governor

Carlos Lopez-Cantera
Lt. Governor

Jonathan P. Steverson
Secretary

August 19, 2016

Linda Barr, Office of Resource Conservation and Recovery
Barnes Johnson, Director, Office of Resource Conservation and Recovery
United States Environmental Protection Agency
Attention: Docket ID Nos. EPA-HQ-SFUND-2009-0265
and EPA-HQ-SFUND-2009-0834
Mailcodes 5305T and 5301P
William Jefferson Clinton Building
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460
Barr.Linda@epa.gov
Johnson.Barnes@epa.gov

RE: Florida Department of Environmental Protection - Federalism Consultation Comments
CERCLA Section 108(b) Docket ID No. EPA-HQ-SFUND-2009-0265 and EPA-HQ-SFUND-2009-0834

The Florida Department of Environmental Protection (Department) is the executive agency for the State of Florida with primary responsibility for implementing land reclamation, surface water, ground water and related environmental protections for phosphate mining and associated land reclamation activities. The Department is also responsible for ensuring cleanup and rehabilitation of sites contaminated with hazardous substances within the state, and for implementing related programs to prevent pollutant discharges and to control exposure and potential risk of exposure to humans and the environment.

The Department appreciates the opportunity to comment on the Office of Resource Conservation and Recovery (ORCR) efforts to develop appropriate and enforceable financial responsibility requirements under the authorities of the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). These comments on EPA's planned rulemaking share details about our concerns with inaccurate risk information that is referenced in the rulemaking's supporting documentation, and the potential for adverse impacts to and preemption of existing state regulatory requirements for phosphate mining in Florida. Our comments also provide you with input for your Federalism Consultation as requested in the July 7, 2016, "CERCLA 108(b) Proposed Rulemaking for Hardrock Mining," call with states.

It is our understanding that EPA is considering including phosphate mining in Florida under proposed regulations that would require financial responsibility for hardrock mining industries,

and that EPA is required to publish a proposed rule by December 1, 2016[1]. The Department appreciates the ORCR's intent to ensure that financial responsibility requirements are provided to address risks from hazardous substances. However, the Department has critical concerns about the decision making basis to include Florida phosphate mining with hardrock mining, and the similar overlap with and preemption of state regulations that are currently providing environmental protections and financial assurances. Such preemption could lead to a reduction in protections for Floridians.

Inclusion of Florida phosphate mining in EPA's financial assurance requirements for the hardrock mining industry would be based on a misunderstanding of and confusion about operations for phosphate extraction, beneficiation, and processing in Florida. Phosphate mining in Florida is not "hardrock mining," nor are the operations and actual risks sufficiently similar to warrant EPA's inclusion under regulations specifically designed to address hardrock mining concerns.

The Department has discovered that relevant supporting information in EPA's records related to operations and risks is inaccurate and mischaracterizes phosphate mining in Florida. Importantly, any risks that do exist, particularly with respect to related mineral processing facilities, are already comprehensively addressed in Florida by a unique combination of existing state and federal laws and regulatory actions.

In addition, inclusion of Florida phosphate mining in the proposed rules presents federalism concerns by interfering with the state's right to implement effective environmental protection programs, and could specifically preempt state's rights given the provisions under Section 114(d) of CERCLA. Given our discovery of the fundamental misunderstanding of operations and associated risk in EPA's supporting information, and our concerns regarding unintended impacts to Florida's laws and existing protections, direct consultation with the Department is warranted and should be done in advance of any proposal of CERCLA financial responsibility rules for any mining activities in Florida.

Attached are Florida's comments summarizing the concerns we have identified to date. Our general comments are included in Attachment A. Attachment B offers comments in response to the questions provided in EPA's July 7, 2016, call with States as part of the Federalism Consultation.

We hope these comments are informative. We appreciate the intent of the proposed rulemaking to provide protections for cleanup liability and related hazardous substance response actions. In this case, we believe that the proposed rule simply is not warranted in Florida, and could negatively impact the comprehensive and rigorous existing requirements under state and federal programs that are currently providing important environmental protections and benefits in this

[1] EPA slides from May 17, 2016, webinar on, "CERCLA Section 108(b) Financial Responsibility," for hardrock mining, from https://www.epa.gov/superfund/superfund-financial-responsibility, July 2016.

state. If you have any questions on these comments, please contact me at your convenience at (850) 245-8709, or by email at john.coates@dep.state.fl.us.

Sincerely,

John A. Coates, P.E., Director
Division of Water Resource Management
Florida Department of Environmental Protection

Attachments: As noted.

cc: Sonya Sasseville, Director, EPA ORCR
Anna Krueger, EPA ORCR
Paula Cobb, Deputy Secretary, Regulatory Programs, FDEP
Joseph Ullo, Director, Division of Waste Management, FDEP
Franklin Hill, Director, Superfund Division, EPA Region 4
Anita Davis, Enforcement Branch Chief, Superfund Division, EPA Region 4

Attachment A
General Comments
Florida Department of Environmental Protection
Federalism Consultation Comments - CERCLA Section 108(b) Docket ID No. EPA-HQ-SFUND-2009-0265 and EPA-HQ-SFUND-2009-0834
Page 1

The Florida Department of Environmental Protection (Department) offers the following general comments and preliminary observations in response to the requested Federalism Consultation:

Inaccurate Information on Risk and Conclusions

- EPA appears to be preparing to regulate phosphate mining in Florida as a type of hardrock mining. The Department strongly believes that this classification is not technically supportable, and is based on a fundamental misunderstanding of Florida phosphate mining and mineral processing risks. The Department also believes it will lead to unintended consequences that could weaken and frustrate Florida's efforts to ensure that phosphate mining in Florida is accountable for both land reclamation obligations, and for operating in a manner that protects our state's land and water resources. Phosphate mining in Florida is conducted by excavation of pebble phosphate deposits and does not involve many of the activities that are primarily associated with the hardrock mining industry. It is critical that EPA acknowledge that phosphate mining in Florida does not involve those activities such as blasting, and in-situ chemical treatments that are often relevant to the evaluation of risk for those activities commonly associated with the hardrock mining sites.
- EPA's 2009 Federal Register (FR) Notice (74 FR 37213) relied on information in an earlier 2004 EPA Office of Inspector General Report that provided background information for EPA's proposed nationwide identification of hardrock mining sites and associated risks[2] (2004 Report). The underlying information is unfortunately incorrect in regards to phosphate mining in Florida. Please note the following concerns:
    - A review of EPA's agency responses in the 2004 Report indicates that there was an incorrect belief that there is a "likelihood of acid mine drainage" at phosphate mining sites in Florida. This represents a critical misunderstanding about these mining sites in Florida. There is no amount or potential for acid mine drainage given the nature of the pebble phosphate deposits that occur and are mined in Florida. Accordingly, any conclusions about potentially elevated risks due to the erroneous conclusion that there is a "likelihood of acid mine drainage" at Florida phosphate mining sites is factually incorrect. As stated previously, phosphate mining in Florida is not hardrock mining and does not involve many of the operations that would commonly be associated with such activities. This is a significant difference where Florida phosphate mining does not have the particular

[2] See "Evaluation Report, Nationwide Identification of Hardrock Mining Sites," Report No. 2004-P-00005, March 31, 2004, United States Environmental Protection Agency Office of Inspector General.

risks that may otherwise be associated with true hardrock mining operations, and as such warrants EPA's reconsideration of whether or not to incorporate Florida phosphate mining in regulations intended for the hardrock mining industry.

- This incorrect information led to additional false conclusions in the 2004 Report, including the belief that hazardous substance related cleanup costs at each phosphate mining site could be on the order of $100 million or more because of the false expectation that there could be acid mine drainage at each of these mines in Florida. Since acid mine drainage is not a possibility, let alone a risk at Florida phosphate mines, assigning risk and any associated cost liability for cleanup of acid mine drainage and any associated hazardous substances responses is fundamentally incorrect.
- Finally, the 2004 Report inappropriately attributes these costs to 22 phosphate mining sites that were then identified in EPA's inventory for Florida, indicating that the total for cleanup costs could range from $2.2 to $11 billion, a difference of $8.8 billion between the low and high end according to EPA's analysis. In reality, there is essentially zero risk and no associated liability for acid mine drainage at Florida phosphate mining sites.

- The plans for proposed rules would also cover beneficiation of phosphate in Florida. However, it is not apparent on review of the underlying information sources referenced in EPA's July 9, 2009 Notice whether EPA has properly evaluated existing information that evaluates the relative risk of phosphate beneficiation in Florida. The Department has conducted its own studies related to the potential or release of hazardous substances from phosphate beneficiation facilities. The Department encourages EPA to further discuss and review this information to better understand the low level of risk and current regulations that are applied to these activities in Florida.

<u>Direct Conflicts with State and Other Federal Laws Relating to Hazardous Substances</u>

- EPA's plans to promulgate CERCLA 108(b) financial assurance regulations for extraction, beneficiation, and processing of phosphate as part of regulations for the hardrock mining industry would adversely impact both state laws and federal requirements related to protections for liability connected to the release of a hazardous substance.
- CERCLA Section 114(d) provides that an owner or operator of a facility which establishes and maintains evidence of financial responsibility under section 108(b) cannot be required under state law, "to establish or maintain any other evidence of financial responsibility in connection with liability for the release of a hazardous substance…" The Department is gravely concerned that EPA's planned rulemaking could adversely impact Florida's state laws, and our existing environmental protections related to such financial responsibility requirements.

- The phosphoric acid processing (aka, mineral processing) facilities in Florida, are separate and distinct operations from phosphate mining sites. Indeed, these mineral processing facilities do have the potential for releases of hazardous substances; however, they are significantly fewer in number and size than phosphate mining sites. As a result of the potential for release of hazardous substances, these mineral processing facilities have been extensively regulated under Florida laws including Sections 403.4154 and 403.4155, F.S. Regulations implemented under these laws include extensive construction, operational, closure and associated financial responsibility obligations under Department rules that are focused on preventing and addressing the liabilities related to potential releases of hazardous substances. Establishment of an overlapping and duplicative CERCLA financial responsibility obligation would at least cause an unnecessary regulatory burden on the State of Florida and the Department when having to resolve conflicts between state and duplicative federal requirements for the same purpose. At worst, the state's existing regulatory programs could be severely restricted or pre-empted by the provisions of CERCLA Section 114(d).
- As correctly noted in the 2004 Report, the State of Florida did determine that its then existing financial assurance requirements needed strengthening after the 2001 bankruptcy of a company that mined and processed phosphate in Florida. In 2005, the State of Florida completed that rulemaking and adopted revised state financial assurance rules that strengthened requirements for financial responsibilities including important provisions to provide more accurate cost estimates for treating hazardous substances and nutrients in acidic process water at these facilities. The Department has not found any evidence in the record to suggest that EPA has reviewed or had any concerns with Florida's revised regulations for financial assurances. Most importantly, without such review, EPA would not be able to accurately evaluate risk for the Florida phosphate mineral processing in the absence of the planned CERCLA Section 108(b) financial responsibility rulemaking.
- In Florida, the mined phosphate rock is utilized in separate phosphoric acid and fertilizer manufacturing facilities where acidic process water is stored and reused in open impoundments. It is apparent that the 2004 Report incorrectly attributed the potential for releases of acidic process water to phosphate mining sites when the consideration would only be relevant for the separate mineral processing facilities. The 2004 Report does not appear to properly differentiate between potential risks at phosphate mining sites and those applicable to mineral processing facilities. This misunderstanding is critical since hazardous substance risks at the mineral processing facilities have already been addressed by state rules and are also addressed by actions being taken under EPA's National Enforcement Initiative for Mining and Mineral Processing. During the intervening 12 years since the time of the 2004 Report, EPA's Resource Conservation and Recovery Act (RCRA) program staff in Region 4 and EPA Headquarters have been extensively engaged in federal regulatory activities under EPA's RCRA National Enforcement Initiative for Mining and Mineral Processing. As a results of those activities, EPA and the Department have been negotiating RCRA settlements related to the operational, closure, and financial

assurance requirements that are also directly, "in connection with liability for the release of a hazardous substance," as referenced under Section 114(d) of CERCLA. Both Florida and EPA are parties to the settlements that have been reached to date in Florida. As a result of these settlements under federal RCRA regulations, there is already both state and federal regulatory oversight and financial assurance requirements covering the potential for related hazardous substance releases. Accordingly, efforts to include Florida phosphate mining in the upcoming CERCLA financial assurance rulemaking would be duplicative, is unnecessary to effect further environmental protection, and potentially frustrates and preempts the effectiveness of existing state and federal regulatory programs designed to address the potential hazardous substance releases and financial responsibilities for the referenced mineral processing facilities. Accordingly, efforts to include Florida phosphate mining in the upcoming CERCLA financial responsibility rulemaking would be duplicative, is unnecessary to effect further environmental protection, and potentially frustrates and preempts the effectiveness of existing state and federal regulatory programs designed to address the potential hazardous substance releases and financial responsibilities for the referenced mineral processing facilities. The Department believes that EPA should update the 2004 Report to correct inaccurate Florida specific information and to address relevant Florida developments that occurred since 2004, particularly if EPA chooses not to reconsider the risk factors as discussed in our comments. The Department is available for direct consultation and believes such is warranted prior to publication of any proposed rule that would include mining activities in Florida.

- We have serious concerns that EPA's plan to include Florida phosphate mining in the CERCLA section 108(b) rulemaking will undermine the Department's ability to enforce state regulatory programs in accordance with related settlement agreements. The most recent settlement under EPA's National Enforcement Initiative for Mining and Mineral Processing (Civil Action No. 8:15-cv-0286-JDW-TBM) was just entered by the United States District Judge for the Middle District of Florida on August 5, 2016, and includes important provisions for Florida to act under related state law provisions. The Department notes that because of Section 114(d) of CERCLA, where an owner or operator would be required under CERCLA to establish evidence of financial responsibility in accordance with section 108(b), such an owner or operator could not be required under any state or local law "to establish or maintain any other evidence of financial responsibility in connection with liability for the release of a hazardous substance from such vessel or facility." The settlements under EPA's National Enforcement Initiative for Mining and Mineral Processing in Florida each contain carefully negotiated provisions that bind the United States and the Department, and which rely heavily on the Department's ability to implement state laws and regulations related to the potential release of hazardous substances from these mineral processing facilities. EPA's plans to include Florida phosphate mining in the CERCLA financial responsibility rulemaking may very well preempt Florida's ability to effectively implement state laws

that are incorporated into these settlements for the facilities covered thereunder, and preempt implementation of state regulations at similar facilities that are not covered under the settlements.

Relationship to Other State Regulations that also Relate to Hazardous Substance Risks at Mining Sites

- Florida's Environmental Resource Permitting (ERP) requirements are applicable to any new phosphate mining and phosphate reclamation areas in the state. The statutory and regulatory requirements under the state's ERP program (see Part IV, Chapter 373, F.S., and Chapter 62-330, F.A.C.) are extensive and require critical water quality protections for both surface water and ground waters in the state. As such, both phosphate mining activities and mandatory reclamation activities are required to be planned and implemented in a manner that does not violate the state's water quality standards, including those for hazardous substances, for both surface water and ground water. Accordingly, the combination of state mandatory mine reclamation and state water resource protections are already in place for any newly permitted mining activities, and work to ensure that hazardous substances are not a significant or meaningful risk for phosphate mining in Florida.
- In accordance with Part II, Chapter 378, F.S., and Chapter 62C-16, F.A.C., new lands mined for phosphate after July 1, 1975, and after July 1, 1984 for lands used for clay settling areas, are subject to mandatory reclamation requirements. As such, they are also subject to corresponding financial responsibility requirements designed to ensure that reclamations activities are completed in a timely manner. Since the application of these state reclamation and financial responsibility requirements also addresses the potential for hazardous substance related risks through state permitting requirements, additional financial responsibility to address hazardous substance related liabilities is unnecessary in Florida for such new mining or reclamation areas. In addition, the Department is very concerned that imposition of CERCLA financial responsibility requirements for phosphate mining in Florida would potentially interfere with or preempt the state's phosphate reclamation financial responsibility requirements.
- The ORCR's inclusion of Florida phosphate mining in the rule to be proposed for the hardrock mining industry would also appear to be duplicative of state laws intended to address liabilities and damages for the release of hazardous substances, including financial responsibility provisions for facilities under Sections 376.308 and 376.309, F.S., and additional liability provisions under Section 403.727, F.S.
- Although EPA's rulemaking is intended to be forward looking, the imposition of CERCLA financial responsibility rules is also unnecessary to address reclamation activities that would be done in the future, on lands that were mined for phosphate prior to the state's mandatory reclamation requirements that first became effective in 1975.

Florida's legislatively established program continues to provide state funding from a portion of Florida's phosphate severance taxes for the purpose of funding reclamation of those historically mined lands so that they may be returned to beneficial uses (see Part I, Chapter 378, F.S., and Chapter 62C-17, F.A.C.). The applicable regulatory requirements include provisions specifically for addressing applicable water quality standards, and any health or safety hazards on the land. In addition, reclamation done under this existing state funding program is also required to be conducted in accordance with the ERP regulatory criteria that require compliance with state surface water and ground water quality criteria. Therefore, these regulations also require that any risks from hazardous substances also be addressed as part of state funded reclamation on pre-1975 phosphate mined lands. Accordingly, Florida's regulatory programs address both historical and current mining related operations.

Attachment B
Responses to Selected EPA Federalism Consultation Questions
Florida Department of Environmental Protection
Federalism Consultation Comments - CERCLA Section 108(b) Docket ID No. EPA-HQ-SFUND-2009-0265 and EPA-HQ-SFUND-2009-0834
Page 1

The responses below are provided by the Florida Department of Environmental Protection (Department) in an attempt to provide constructive input specifically related to the actual environmental circumstances and existing regulatory programs that are being implemented in Florida for phosphate mining. We encourage EPA to consult further with the Department prior to any proposal of rules for the hardrock mining industry, if EPA intends to include Florida phosphate mining, beneficiation, or processing in the proposed rules.

1. Since states have raised concerns about potential preemption or duplication of state hardrock mining financial assurance requirements, we would like to give you the opportunity to discuss those concerns with us, or any other concerns with or questions about the CERCLA 108(b) hardrock mining financial assurance rulemaking. We are forwarding letters we received regarding the CERCLA Section 114(d) preemption provision, from the states of Alaska, Arizona, Colorado, and New Mexico in 2011, and would like to give the state participants an opportunity to elaborate on or discuss current state thinking on this issue.

   Florida has provided information related to these concerns in our general comments in response to the requested Federalism Consultation. Based on our review of the relevant information, we strongly recommend that additional and direct consultation is needed with the Department to provide a full understanding of the level of risk associated with Florida phosphate mining, beneficiation, and processing operations, particularly given the interplay of exiting state and federal regulatory actions in this state.

2. How do your programs apply on mines located on land with shared federal-state ownership?

   Florida has extensive regulatory programs that apply to extraction activities, beneficiation, associated mineral processing facilities, and to corrective actions in response to releases of hazardous substances. These programs apply regardless of ownership type. Our general comments show the interdependence of our regulatory programs that have a connection with the release of hazardous substances in Florida.

3. How does your state approach spills or releases of hazardous substances from a mining site? Does your state require financial responsibility specifically for such releases?

   The Department's laws under Chapter 376, F.S., and Chapters 62-780 and 62-777, F.A.C., are applicable to any releases of hazardous substances, including those from a mining site in Florida. In addition, the regulations cited in our general comments, in conjunction with additional regulatory authorities implemented under our state's authorized Resource Conservation and Recovery Act (RCRA) and Clean Water Act National Pollutant Discharge Elimination System (NPDES) permitting programs are also

utilized to regulate potential sources of pollutants, including hazardous substances, at mining extraction, beneficiation, and processing facilities in Florida.

4. What reporting requirements do you have for mining facilities, either related to mine operations or maintenance of their financial instruments? Do you have any difficulties with compliance with these requirements?

   Reporting requirements apply to each of the required state regulatory programs that are referenced in the Department's general comments and in these question responses. The Department relies on these reporting requirements in conjunction with our various regulatory inspections programs and do not have any unaddressed or overriding difficulties with compliance with these requirements.

5. How frequently has your state needed to take enforcement actions against a mining entity for violations relating to financial assurance? How would you characterize the types of violations that trigger enforcement?

   The Department closely oversees and ensures compliance with applicable requirements for financial assurance. With respect to financial responsibility related to hazardous substances at phosphate mineral processing facilities, the Department has issued three orders since the state financial assurance requirements were strengthened in 2005, not including the referenced mineral processing settlements that were discussed for the Florida phosphate industry in our general comments.

6. Does your state require third party certification for assessing mine site features or to verify the calculation of cost estimates related to your state programs? If so, we would be interested in hearing about your experience with these approaches.

   The Department requires that cost estimates be certified by a third party engineer in relation to financial responsibility for phosphate related mineral processing facilities in Florida. The Department would be happy to further discuss any questions with EPA.

7. What is your experience with Environmental Management Systems, ISO certification, third party inspection programs, or similar types of programs in reducing risk from mining operations?

   The Department does not currently rely on Environmental Management Systems, or ISO certifications in its regulatory programs. Our regulations often require inspections by a qualified and licensed professional engineer where appropriate for compliance and safety related evaluations.

THE STATE of ALASKA
GOVERNOR BILL WALKER

Department of Natural Resources
COMMISSIONER'S OFFICE
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August 17, 2016

Ms. Anna Krueger
Economist
U.S. Environmental Protection Agency Headquarters
Mail Code 5303P
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Submitted Via Email to: Krueger.Anna@epa.gov, Mccarthy.Gina@epa.gov, Sasseville.Sonya@epa.gov, Barr.Linda@epa.gov, Barbery.Andrea@epa.gov, Hanson.Andrew@epa.gov

Re: Comments on CERCLA Section 108(b) Financial Responsibility

Dear Ms. Sasseville and Ms. Krueger,

I am writing to endorse the comments submitted by the Interstate Mining Compact Commission (IMCC), the Western Governor's Association (WGA), and the Environmental Council of the States regarding the Environmental Protection Agency's (EPA) anticipated rulemaking to require financial assurance for hardrock mining under Section 108(b) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA).

I endorse these comments on behalf of the Department of Natural Resources (DNR), as well as in consultation with and on behalf of the Department of Environmental Conservation (DEC). Both of these agencies currently exercise bonding authority over large mines proposing to operate in Alaska. Both DNR and DEC are concerned about preemption issues that may arise out of any bonding requirements that EPA may promulgate under CERCLA Sec. 108(b) [42 U.S.C. § 9608(b)]. Both state agencies also maintain the preemption concerns raised on their behalf in a letter sent to the EPA by Alaska Senior Assistant Attorney General Cameron Leonard on February 11, 2011 (letter attached).

Thank you for your consideration of these comments. If you have any questions, or would like to discuss our concerns, please contact me at 907-269-8431 or via email at Ed.Fogels@alaska.gov.

Sincerely,

Ed Fogels

Deputy Commissioner

GARY R. HERBERT
Governor
SPENCER J. COX
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director
Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

August 17, 2016

Anna Krueger
U. S. Environmental Protection Agency Headquarters
1200 Pennsylvania Avenue, NW
Washington, D. C. 20460

Subject: Comments Concerning Federalism and Proposed Rulemaking Under CERCLA 108(b)

Dear Ms. Krueger:

The State of Utah submits the following comments concerning the Environmental Protection Agency's (EPA's) proposed rule making under Section 108(b) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). Specifically, these comments are being submitted in response to the EPA's consultation concerning federalism.

The Interstate Mining Compact Commission (IMCC) has submitted separate comments which include a discussion of the Utah Minerals Regulatory Program's requirements under the Utah Mined Land Reclamation Act and associated rules. The State of Utah endorses IMCC's comments, some of which are reiterated below.

It is impossible to know precisely how any rule from the EPA might affect the Utah Minerals Regulatory Program because no draft has been issued, but various presentations from the EPA have raised concerns that the rules will overlap Utah's rules and will degrade the ability of the State to enforce its regulatory program. Regulation of mining activities can be best accomplished at the state level where inspectors can know and understand each individual mining operation.

The rules promulgated under the Utah Mined Land Reclamation Act have been effective in requiring mine operators to control deleterious materials (see definition below) and to reduce or eliminate adverse environmental effects from these materials. Additional regulation by the EPA is not necessary and would be a duplication of Utah's efforts.

Mining operations are defined under the Mined Land Reclamation Act as those activities conducted on the surface of the land for the exploration for, development of, or extraction of a mineral deposit, including, but not limited to, surface mining and the surface effects of underground and in situ mining; on-site transportation, concentrating, milling, evaporation, and other primary processing. Mining operations do not include secondary or off-site processing.

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UTAH DNR OIL, GAS & MINING

Deleterious materials are defined as:

> . . . earth, waste or introduced materials exposed by mining operations to air, water, weather or microbiological processes, which would likely produce chemical or physical conditions in the soils or water that are detrimental to the biota or hydrologic systems (R647-1-106, Definitions).

Although the terms used in Utah's rules may differ from those used by the EPA, this definition is very broad and includes both materials that are uncovered by mining operations and any introduced materials used in mining or on-site primary processing. These materials must be handled in accordance with operational and reclamation standards.

The operational standards are:

> Deleterious Materials - All deleterious or potentially deleterious material, shall be safely removed from the site or kept in an isolated condition such that adverse environmental effects are eliminated or controlled (R647-2-107.4, R647-3-107.4, R647-4-107.4).

The reclamation standards are:

> Deleterious Materials - All deleterious or potentially deleterious material shall be safely removed from the site or left in an isolated or neutralized condition such that adverse environmental effects are eliminated or controlled (R647-2-109.4, R647-3-109.4, R647-4-110.4).

In addition, large mines, those larger than 10 acres in unincorporated areas or larger than five acres in incorporated areas, must identify deleterious materials:

> The operator shall provide a narrative description referencing maps or drawings as necessary, of the proposed operations including: . . . the identification of any deleterious or acid forming materials present or to be left on the site as a result of mining or mineral processing (R647-4-106.2).

Thus, operators of large mines are required to identify deleterious materials, and all operators are required to handle and dispose of the materials to eliminate or control adverse environmental effects.

The State of Utah requires a reclamation surety to ensure that reclamation is completed. This financial assurance takes in all aspects of reclamation. It embraces traditional reclamation, such as demolition, regrading and revegetation, but it also includes cleanup, disposal, and treatment of deleterious materials, as discussed in the rules cited above, both after *and during* mining operations. For example, remediation of a spill of a deleterious material that occurred during mining operations would necessarily become part of reclamation if not properly cleaned up (as required) during operations.

The Utah Mined Land Reclamation Act and associated rules are administered by the Division of Oil, Gas and Mining; however, Oil, Gas and Mining routinely coordinates inspections, compliance actions and other regulatory activities with other federal and State agencies, including the Bureau of Land Management, the U. S. Forest Service, and the Divisions of Water Quality and Environmental Response and Remediation within the Utah Department of Environmental Quality. All of these entities are charged with protecting environmental resources, and the coordination allows sharing of expertise, knowledge and experience that can best be done on a level where personnel fully understand the specific mining operations.

Thank you for the opportunity to comment. Please feel free to contact me at 801-538-5334 or by email at johnbaza@utah.gov with questions about the Utah Minerals Regulatory Program.

Sincerely,

John R. Baza, P.E.
Director

PBB:eb
Enclosure:
Attachment:
cc: Sonya Sasseville, Linda Barr, Andrea Barbery, Andrew Hanson, EPA (sasseville.sonya@epa.gov, barr.linda@epa.gov, barbery.andrea@epa.gov, hanson.andrew@epa.gov)
Beth Botsis, IMCC (bbotsis@imcc.isa.us)
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ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

Douglas A. Ducey
Governor

Misael Cabrera
Director

August 17, 2016

Anna Krueger
U.S. Environmental Protection Agency
Office of Resource Conservation and Recovery (ORCR)
1200 Pennsylvania Ave, N.W.
Mail Code 5303-P
Washington, DC 20460

Re: Request for Additional Consultation and Testing of Financial Responsibility Rules

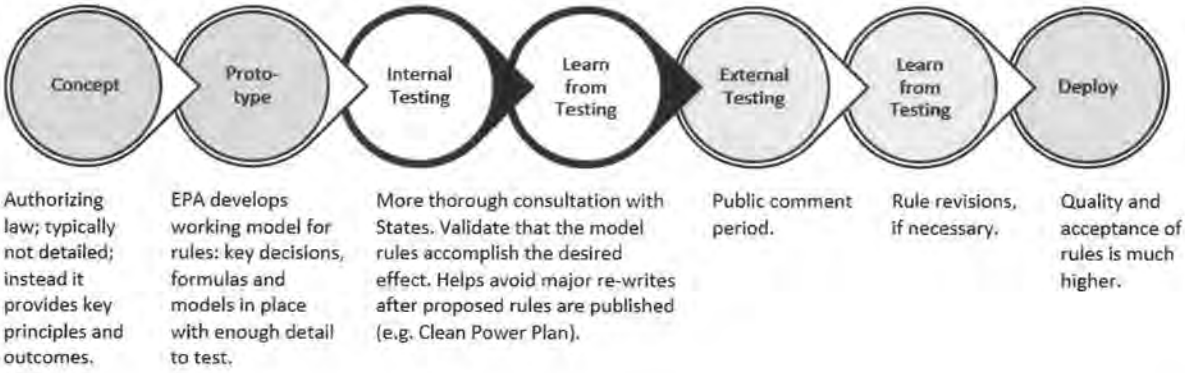
Dear Ms. Krueger:

We appreciate the opportunity to provide consultation on the upcoming proposed rules for financial responsibility (FR) in the hard rock mining sector. We would be pleased to discuss these comments further at your convenience. This letter is expressly intended to supersede the Arizona Department of Environmental Quality's (ADEQ) February 24, 2011 letter regarding FR.

ADEQ agrees that FR is needed for adequate release response for many industries. Hard rock mining, however, poses a particular challenge for EPA due to the number of existing state FR programs across the country that address various impacts associated with the hard rock mining industry, especially impacts to state groundwater resources under state regulatory jurisdiction. While CERCLA 114(d) preemption of state FR may be debatable between EPA and the states, legal action against EPA and state-led FR programs when EPA finalizes the CERCLA 108(b) rules is a near certainty.

In order to avoid the waste associated with those court challenges to EPA and state programs, ADEQ would like to partner with EPA and other western states of EPA's choosing to conduct several "case studies" using a representative sampling of actual mine sites and risks. The concept is simply to test the rules and FR formula in their current state of design and evaluate their impact and probability of acceptance and effectiveness. Internal testing is a typical step in Lean design as shown in Figure 1.

FIGURE 1 – Typical Lean Design Process as Applied to Rules



This proposed process is based on Lean principles and is applicable to everything from software design to remediation and yes, new rules. EPA and cooperating states could collaboratively test and evaluate the rules to validate them as is, or refine their design to avoid costly litigation against EPA and the states. In order to do this properly, we respectfully request that EPA file for an extension from the court. We know that this is not a trivial request, and we believe that it is warranted for the following reasons:

- The question of federal preemption will lead to wasteful litigation against the states that have existing FR requirements. Every state with an existing FR program will have to choose between abandoning its state FR program and defending it in court.
- Without appropriate clarification from EPA on the scope and coverage of the formula for calculating FR, EPA could be assuming unnecessary regulatory authority over state groundwater resources, an area historically beyond federal regulatory authority or jurisdiction, and could lead to wasteful litigation against EPA.
- ADEQ has run a screening financial analysis based on the example provided by EPA on May 18, 2016. Our screening test suggests that the financial impact to Arizona mines may be extreme – totaling an estimated $1.8 billion in FR liability for just two of Arizona's mines.
- ADEQ does not believe that the spirit of Executive Order 13132 is being honored – FR is fundamentally about assigning a monetary value to environmental risk and EPA's formula for doing so has not been shared and we fear may exclude applicable state environmental response action standards and procedures, as well as critical site-specific factors.
- Based on the limited information provided to date, it is not clear how the current approach to FR accurately reflects risk. Given the potential financial impacts noted above, the risk assessment methodology must be both sound and representative.

LEGAL ACTION AGAINST EPA AND STATE FR IS A NEAR CERTAINTY

Arizona's FR requirements for hard rock mining facilities are found in its Aquifer Protection Permit Program, the Arizona Mined Land Reclamation Act, and the regulations governing lessees conducting hard rock mining on State land. The Aquifer Protection Permit program, A.R.S. §§ 49-241- 252, is a regulatory program, designed to prevent groundwater pollution and remediate unpermitted discharges through closure procedures. It protects Arizona's aquifers by ensuring that facilities are designed, constructed, operated, maintained and closed in an environmentally protective fashion.

The financial assurance required as a part of this permit program is available to the State to help it protect and properly address (through closure procedures) discharges in the event that a facility does not meet the requirements of its permit. In fact, the FR for "closure" and "post closure monitoring and maintenance" under the Arizona APP program is defined broadly to include "all actions specified in an aquifer protection permit ..., as well as elimination, to the greatest degree practicable, of any reasonable probability of further discharge from the facility," and those activities that are necessary to "keep the facility in compliance with ... the [state] aquifer water quality standards" and to "perform any remedial, mitigative or corrective actions or controls as specified in the aquifer protection permit."[1]

Arizona's Mined Land Reclamation Act, A.R.S. §§ 27-902 -1026, requires FR as part of its reclamation program, which requires that hard rock mining facilities repair surface disturbances and revegetate upon completion of their mining activities. Finally, the State Land Department requires FR of its lessees, including those who conduct hard rock mining, to protect the value of the land its holds. A.A.C. R12-5-1805(i). In addition to these Arizona-specific risk mitigation mechanisms, hard rock mines have other duties and requirements that help mitigate the risk of releases as shown in Figure 2.

Every state with an existing FR program will have to choose between the waste of abandoning its FR programs or the waste of litigation to defend it.

CERCLA 114(d) states that "no owner or operator of a vessel or facility who establishes and maintains evidence of financial responsibility in accordance with this title 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 vessel or facility." Many Arizona requirements discussed above plainly involve "liability for the release of a hazardous substance" and therefore will fall within the scope of the Section. It is not difficult, in fact it is quite easy to argue that Arizona's APP program already provides *at least some* of the protections sought by the CERCLA Section 108(b) FR requirements, especially with

[1] ARS §§ 49-201.5 and 49-201.30.

respect to groundwater quality protection, mitigation and remediation. Certainly we should all expect the hard rock mines affected by these rules to pursue all avenues, administrative and judicial, to avoid duplicative regulation by the state.

FIGURE 2 – Risk Mitigation Mechanisms

Operating mines have a variety of risk mitigation mechanisms in place. State-led mechanisms may be the first to be challenged in court if the preemption questions are not addressed in advance.

WQARF Tax	Corporate income taxes are used to fund the Water Quality Revolving Fund which includes monies for orphan site clean-up
Aquifer Protection Permit FA	Covers closure, post-closure and remediation of unpermitted releases
State Trust Reclamation Bond	Covers damage to lands, water and other tangible improvements
Mined Land Reclamation FA	Covers reclamation of land
Federal Agency FR requirements for mines on Federal Lands	Protects Federal Lands
Asset retirement obligations	Requires disclosure of environmental liability – influences balance sheet
Bankruptcy Court Prioritization of Reclamation	Courts have prioritized reclamation in bankruptcy proceedings. (e.g. ASARCO Multi-State Trust)

The unmitigated risks of abandoned hard rock mines should not be attributed to highly regulated, modern-day mines.

Given that groundwater regulation has traditionally been within the jurisdiction of the states and that the CERCLA 108(b) rule may inadvertently change that as a matter of law, we believe that EPA's rulemaking should address the potential preemption explicitly and consider options including:

- Exemptions for states like Arizona that have existing programs; accepting that some augmentation of existing programs may be required.
- Clarification that EPA's formula will apply existing state environmental protection and remediation standards and procedures to calculate the appropriate FR to avoid unnecessary federal intervention or regulation of state groundwater resources.
- Delegation of CERCLA 108(b) FR to states to be incorporated into existing programs.
- Specific prohibition of state FR for any requirements that may be considered duplicative.

EPA's position on preemption, and to be fair, ADEQ's previous position as expressed in our February 24, 2011 letter, rests on a single court case, *Chemclene Corp. v. Pennsylvania Dep't of Envtl. Res.*, 497 A.2d 268 (Pa. Commw. Ct. 1985), which did not necessarily involve environmental remediation or response actions to releases of hazardous substances. This case is not dispositive and mine operators and their attorneys have already explained that the sheer magnitude of the FR from both state and federal programs would necessitate additional litigation. Clearly, multiple court challenges to state FR programs throughout the country would be time consuming, wasteful, and counter-productive to the goals of the rule.

POTENTIALLY EXTREME FINANCIAL IMPACT

As EPA's partner in protecting the environment, we would be remiss if we did not acknowledge that hyperbolic claims of economic impact face nearly every new regulation. In this case, we hope our sincere concern is not considered mere exaggeration. In fact, we hope our screening analysis is simply flawed.

We conducted a screening analysis using two actual mine sites in Arizona. Our analysis was quite simple given that EPA has not shared its formula: we leveraged EPA's May 18, 2016 example and scaled up based on the acreage of the actual mine's open pit. This limited analysis yielded disturbing results. The FR requirement sums to $1.8 billion for just two mines. Table 1 compares the estimated FR amount for the two mines to related values.

TABLE 1 – Magnitude of Estimated FR for Just Two AZ Mines

1.8 BILLION DOLLARS	VALUE	ITEM
	23%	of EPA's total budget for 2015
	30%	of the Mining Gross Domestic Product in AZ for 2013 (last year reported[2])
	156%	of EPA's Superfund Budget for 2015

Again, we accept that our limited analysis may be incorrect and hope that EPA's actual formula yields much lower values. We strongly believe that additional collaboration with ADEQ and other western states would result in better acceptance and less wasteful litigation and perhaps a stronger model. Alternatively, we ask that EPA use the information presented in Table 2 to calculate the actual FR values and determine whether or not the current formula exaggerates risk or is economically punitive.

Table 2 presents estimated FR required for the two mines – 1.8 billion dollars.

[2] http://www.azcommerce.com/resources/economy/gdp

TABLE 2 – Screening for Economic Impact at Just Two AZ Mines

MINE	SITE FEATURES (EST.)	ESTIMATED[3] NET FR
EPA Example May 18, 2016	Open Pit = 1,000 acres Stockpiles = 2,000 acres Tailing = 700 acres	$525 M
Actual Arizona Mine 1	Open Pit = 1,600 acres (active) Stockpiles Outside Open Pit Capture Zone = 1,900 acres Tailings = 4,200 acres	$840 M
Actual Arizona Mine 2	Open Pit = 1,800 acres (active) Stockpiles Outside Open Pit Capture Zone = 2,500 acres Tailings = 4,300 acres	$945 M
Total for two Arizona Mines (sum excludes example)		$1.8 Billion

ADEQUACY OF RISK ASSESSMENT

ADEQ believes it is important that any FR requirements not be based on the risk associated with cleaning up historical hard rock mining facilities that were often abandoned before the modern era of environmental controls. In justifying its decision to begin promulgation of FR rules, EPA cited exclusively to cost estimates drawn from experience with historical, heavily contaminated facilities. In all of the examples cited by EPA, mining began in the late 19th century; even the more recent mining activities that took place at the cited mines occurred before many environmental controls were required. Given this apparent reliance on cleanup costs at historic sites, ADEQ wants to emphasize the importance of including information that accounts for modern environmental controls, including available technologies, environmental management systems, and other mitigation measures, as well as existing state groundwater remediation response action standards in setting FR amounts.

We are also concerned about reliance on footprint as an indicator of environmental risk. For example, there are several NPL mine sites associated with smaller footprints, including Blackbird (ID), Formosa (OR), Stibnite (ID), Yerington (NV), Summitville (CO), Gilt Edge (SD), and Zortman – Landusky/Pegasus (MT).

Given the complexities and potential impacts of FR, ADEQ suggests the use of decision science techniques coupled with rigorous statistics to establish site-specific probabilistic risk models or formulas that align with state response action standards. This approach, calibrated to include modern-day controls at hard rock mine sites subject to existing state groundwater

[3] Estimated based on ratio of open pit acreage from EPA's May 18, 2016 example to actual mine open pit acreage. Additional analysis would require disclosure of EPA's formula for financial responsibility.

remediation response action standards, should lead to representative risk assessments. Having said that, these models must be evaluated not just based on the model construction and calibration, but on the relevancy of the model outcomes in context with actual state standards and site conditions.

ADEQ would consider it a privilege to work with EPA and other states on validating or refining the formula or model construction and calibration. The creation of a sound model for such a financially impactful rule requires time, talent and testing. In order to do this properly, we respectfully request that EPA file for an extension from the court and provide more details to the states for deeper collaboration. As previously noted, we know that this is not a trivial request, and we appreciate your consideration.

Sincerely,

Misael Cabrera, PE
Director

cc: Andrew Hanson
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August 11, 2016

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Submitted via Email to: Krueger.Anna@epa.gov, Sasseville.Sonya@epa.gov, Barr.Linda@epa.gov, Barbery.Andrea@epa.gov, Hanson.Andrew@epa.gov

Dear Ms. Sasseville and Ms. Krueger:

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. On January 29, 2016, the United States Court of Appeals for the District of Columbia Circuit in *In Re: Idaho Conservation League, Et Al., Petitioners, On Petition for Writ of Mandamus to the United States Environmental Protection Agency,* No. 14-1149, issued an order establishing a schedule for EPA to follow in establishing rules for the hard rock mining industry. The order requires EPA to sign a notice of proposed rulemaking by December 1, 2016 and to take final action by December 1, 2017.

EPA has invited states to submit "pre-publication" comments on the federalism implications of EPA's proposed rule on financial assurance requirements under section 108(b) of CERCLA for the hard rock mining sector by August 17, 2016. In response, the South Dakota Department of Environment and Natural Resources offers the enclosed overview of our state's financial assurance requirements and our "pre-publication" comments on the proposed rules.

We are concerned the proposed rules will have the potential to cause significant impacts to our postclosure and cyanide spill bonds, with concomitant impacts to the efficacy of our regulatory program. We are also asking for clarification of the types of mines in our state which will be required to comply with the new rules and whether EPA plans to actively coordinate with states as bonds are calculated and established. In addition, we outline measures instituted in South Dakota to reduce the risk of hazardous substance releases and request the rules provide for an exemption for states that have instituted defined risk reduction measures. Finally, we are asking EPA to participate in more substantive consultation with the states prior to publishing a proposed rule.

Thank you again for the opportunity to provide comments on the proposed rules. We appreciate your serious consideration of our comments and recommendations. We are also coordinating with the Interstate Mining Compact Commission and other state organizations on pre-publication rule comments and anticipate endorsing those comments. If you have any questions, please contact Eric Holm at (605) 773-4201.

Sincerely,

Steven M. Pirner
Secretary

Enclosure

cc: Linda Barr, EPA
Andrea Barbery, EPA
Andrew Hanson, EPA
Greg Conrad, IMCC
Chris Scolari, WGA
Shaun McGrath, EPA
Matt Konenkamp, Governor Daugaard's Office
Steve Blair, Assistant Attorney General

South Dakota Department of Environment and Natural Resources
CERCLA 108(b) Pre-Publication Financial Assurance Rule Comments

South Dakota's Financial Assurance Requirements for Hardrock Mining

The South Dakota Department of Environment and Natural Resources (Department) and the Board of Minerals and Environment (Board), under South Dakota Codified Law (SDCL) 45-6B, regulate mining operations in the state and require financial assurance. A Large Scale Mine Permit (SDCL 45-6B) is required for mines that affect more than 10 acres and mine more than 25,000 tons annually or use chemical or biological leaching agents. These mines are complex and difficult to reclaim, and may have long term-water treatment or other costs associated with them.

There are potentially three different types of bonds required for large scale mining operations in South Dakota. They include a reclamation bond, additional financial assurance for mining operations that employ chemical or biological leaching ("spill bond"), and post-closure financial assurance. By statute, the reclamation bond is required to cover the actual cost of reclamation, which would accrue to the state if a third party contractor had to be hired to reclaim the site. There is no set limit on the bond amount, and it must be submitted prior to the issuance of the mine permit.

The Department has copyrighted a spreadsheet program, called "BondCalc," that was developed in the 1980's to calculate mine permit bonds. The program has been refined and improved over the years. We also use Nevada's SRCE bond estimation program. These programs are used to do an engineering cost estimate based on having a third party contractor do the reclamation work. The cost estimate includes conservative equipment section based on local rates and equipment availability, actual operating costs and information from other states, and mine site acreages and volumes. Several references are used to identify costs, including the "Caterpillar Performance Handbook" and "Means Cost Data Book" among others. Certain assumptions are made in the calculation, such as a five-year reclamation timeframe. Overhead and indirect costs are also considered, and credit is given for reclamation work already completed.

Large scale mine permit cost calculations include:

- Earthmoving costs, such as reducing waste rock facility slopes, backfilling pits, grading, and topsoil replacement;
- Revegetation, including seeding, mulching, and fertilizing
- Erosion control;
- Disposal of pond solutions and neutralizing heap leach pads;
- In-situ ground water restoration;
- Site maintenance during the closure period;

- Monitoring and sampling;
- Water treatment;
- Waste depository caps;
- Well plugging;
- Building demolition; and
- Indirect costs, such as mobilization, performance bond, contractor overhead, contractor profit, state excise tax, inspection and administration, engineering and consulting, scope and bid, and contingencies.

In addition to the reclamation bond, financial assurance, referred to as a "Spill Bond", is required for mining operations that employ chemical or biological leaching. The Spill Bond covers the cost of responding to and remediating accidental releases of chemical or biological leaching agents. The maximum amount that may be required for a Spill Bond is $1 million. Spill Bond calculations are based on a site-specific engineering cost estimate which assumes a hypothetical spill or leak event, and a third party contractor doing the remediation work.

Mine operators are also required to submit postclosure financial assurance as part of a postclosure plan. Generally, a 30-year postclosure period applies, but the length of the postclosure period can be lengthened or shortened by the state, depending on site conditions. Postclosure bonds are required at the time of reclamation bond release and prior to the start of the post-closure period. These bonds are also calculated based on an engineering cost estimate for a third party contractor to do the work. The calculation includes costs for monitoring and sampling, inspection and maintenance activities, long term water treatment, such as for acid rock drainage (ARD), cap maintenance, and overhead and indirect costs. Considering a postclosure bond may be necessary for 30 or more years, a present worth analysis is used to calculate the long term bond. A lump sum amount is determined that, if deposited today, will cover costs over the post-closure period.

South Dakota mining statutes and permit conditions allow the state to periodically adjust bond amounts as site conditions change, permits are amended, technical revisions are made, or for other reasons requiring an adjustment. Bond amounts are also adjusted for inflation based on the construction cost index. Bonds are reviewed and adjusted on an annual basis.

The Department calculates the proposed bond amount after operators submit cost estimates for mine reclamation and post closure care in a mine permit application. The Department also recommends the amount and type of bonding mechanism to the Board which sets the final amount and type of bond. The bond must be submitted before a permit is issued. Bonds may be in the form of cash (certificates of deposit), irrevocable letter of credit, corporate surety, or government securities. Company net worth guarantees are not accepted by the Board.

South Dakota's Comments on Proposed CERCLA 108(b) Rules

1. **Exempt Classes of Hard Rock Mining**: During the September 2015 and May 2016 webinar presentations, EPA identified certain classes of hard rock mining facilities that are not included in the rulemaking by referring to a June 29, 2009 memorandum entitled

"Mining Classes not Included in Identified Hard Rock Mining Classes of Facilities". EPA also indicated placer mines that do not use hazardous substances, exploration mines, and small mines less than five acres that present a lower level of risk would not be included in the rulemaking. The Department requests EPA clearly identify in the rules those classes of mines that are exempt from the CERCLA 108(b) financial responsibility requirements, including those mentioned above.

2. **Postclosure Bonds**: Given contaminants requiring long term water treatment are considered hazardous substances under CERCLA, the Department is concerned its postclosure bonds as described above would be duplicated and pre-empted by the new financial responsibility rules.

   During the September 2015 and May 2016 webinars, EPA did not specifically mention the impact the new rules will have on states that require postclosure plans and bonds, such as South Dakota. During the July 19 conference call between EPA and the states, as part of the agency's federalism outreach, we told EPA our state currently has two large-scale gold mines where the reclamation bonds have been released and are now covered by postclosure bonds. One postclosure bond in the amount of $19.6 million covers a 100-year period of long term water treatment for acid drainage, while another in the amount of $42 million covers treatment of elevated sulfates and selenium for 100 years.

   Our state also holds two postclosure bonds for another gold mine that is still operating. One bond in the amount of $37.3 million covers treatment of elevated nitrates and selenium for a period of 50 years in the operating portion of the mine. The other bond in the amount of $1.7 million covers a portion of the mine area where the reclamation bond has been released. The postclosure bond covers elevated sulfates in groundwater at an isolated location and a capped acid rock depository.

   EPA's response to our postclosure questions during the July 19 conference call did not alleviate our concerns that our postclosure bonding program could be preempted. We do not agree with EPA's faulty preemption argument concluding state programs do not address hazardous releases, since our postclosure bonds clearly address releases of hazardous substances. Therefore, the Department requests EPA clarify that such bonds are not subject to preemption or clarify how the rules will affect states that have established postclosure bonding requirements. In addition, we request the rules exempt mining operations which are no longer producing, but are in a reclamation or postclosure phase, from the CERCLA 108(b) financial assurance requirements. In the alternative, the state requests the preamble to the rule clarify that any existing state bonds would not be impacted under the new rules.

3. **Cyanide Spill Bonds**: Given cyanide is considered a hazardous substance under CERCLA, the Department told EPA during the July 19 conference call it is concerned that our cyanide spill bond program described above would be duplicated and pre-empted by the new financial responsibility rules.

EPA's response to our cyanide spill bond questions during the July 19 conference call did not alleviate our concerns that our cyanide spill bonding program could be preempted. We do not agree with EPA's faulty preemption argument concluding state programs are not addressing hazardous releases, since our cyanide spill bonds clearly address releases of hazardous substances. Therefore, the Department requests EPA clarify that such bonds are not subject to preemption or clarify how the rules will affect mining operations which are required to submit cyanide spill bonds. In the alternative, the state requests the preamble to the rule clarify that any existing state bonds would not be impacted by the new rules.

4. **EPA Notification to States**: The Department requests EPA to commit to coordinating and communicating with states in the following circumstances:

    1. When a mine operator is required to post a bond with EPA;

    2. When a bond amount is determined; and

    3. When the bond has been submitted and accepted by EPA.

    We also request the rules require draft copies of financial assurance calculations be submitted to states for their review and final copies be submitted for their records.

5. **Risk Reduction Practices:** The Department and Board have taken steps in the past 25 years to reduce risks at hard rock mines and mineral processing facilities. We require operators to submit extensive geochemical data so we can determine whether acid drainage or other contaminants will be generated during the mining or processing of ore and waste material. If there are impacts that cannot be mitigated by methods such as capping or water treatment, we can recommend denial of a mine permit application in accordance with state law.

    The Department and Board have also improved bonding procedures. Previously, we only bonded for basic reclamation, such as earthmoving and revegetation. However, as mentioned earlier, we now include costs related to such things as required water treatment, waste depository capping, and holding costs during a five-year reclamation period in our reclamation bonds. Some of these costs would arguably cover responses to hazardous substances covered under CERCLA.

    As mentioned above, the Department requires postclosure bonds to cover long term water treatment costs, which reduce the risk of a CERCLA action at a mine site. We also require cyanide spill bonds to cover costs to respond to and remediate accidental releases of cyanide into the environment. This also reduces the risk of a CERCLA action at a mine site.

    The Department requests EPA include an exemption in the rules for those states that have instituted defined measures to reduce risks of the release of hazardous substances.

6. **EPA Consultation**: During the one-hour May 17, 2016 webinar, after EPA completed its presentation on the rules process, there were only about 20 minutes available for questions. During the July 7 and 19, 2016 one-hour conference calls with states and state organizations, there was not enough time for the states to adequately describe their bonding programs and how well they are working. This clearly shows that more time is needed for meaningful consultation. The Department requests EPA participate in more substantive consultation with the states prior to publishing a proposed rule. We also request EPA commit to a one day in-person meeting to discuss state bonding programs and the intended scope of the rules.

ONE HUNDRED ONE NORTH CARSON STREET
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LAS VEGAS, NEVADA 89101
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FAX NO.: (702) 486-2505

Office of the Governor

August 17, 2016

The Honorable Gina McCarthy
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Mail Code 1101A
Washington, DC 20460

Transmitted Electronically

Dear Administrator McCarthy:

I am writing to express serious concerns with a proposal by the Environmental Protection Agency (EPA) to establish financial assurance requirements for the hard rock mining industry under authority of CERCLA Section 108(b). Nevada is home to significant mineral resources and mining has always been a highly regulated and important industry in this State as it employs thousands of highly paid and skilled people.

We take great pride in our State mining regulatory program implemented by the Nevada Division of Environmental Protection (NDEP). This program has been refined over several decades and is both comprehensive and fully protective of the environment. We are often visited by other states and countries looking to emulate our program. A keystone of this program is the financial assurance requirement for mine reclamation costs. **Currently, more than $2.6 billion in sureties are held for mine sites in Nevada.**

As you are well aware, the EPA is in the process of developing a new and separate bonding requirement for hard rock mines by December 1, 2016. Based on the concepts I have seen from the EPA related to this rulemaking, I am deeply concerned that the proposed regulations will duplicate successful and protective State regulations and that our regulations may even be pre-empted. There would be no environmental benefit gained by such a duplication or pre-emption and yet the consequences would be dire for the industry and Nevada.

Because of the complexity of this undertaking, it is essential that the EPA learns all it can about hard rock mining and the extensive bonding requirements already in place by the federal government and the State of Nevada, in particular. I would also encourage the EPA to travel to Nevada and tour mine sites and learn firsthand how this industry protects the environment and implements mine reclamation.

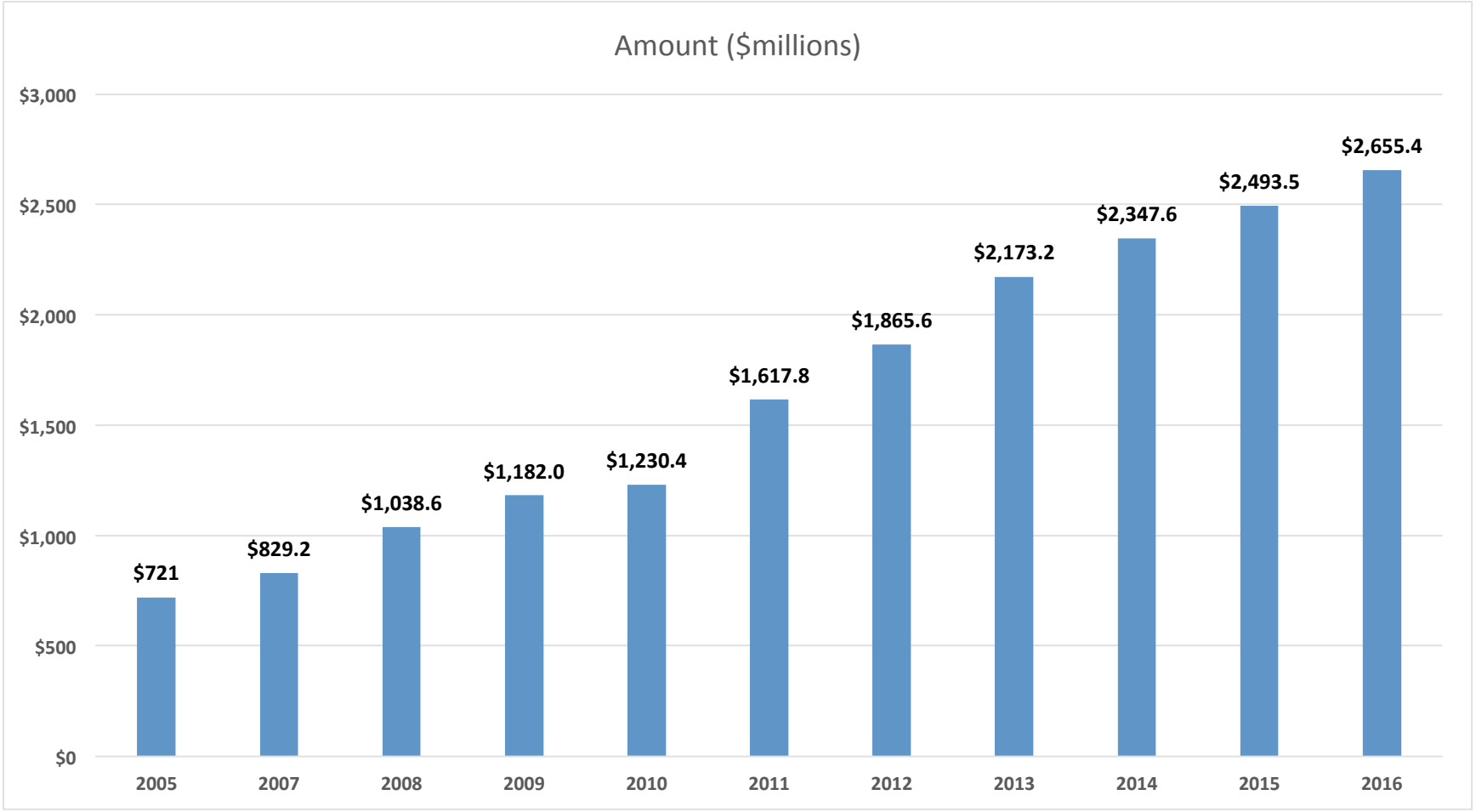
I urge you to carefully consider the comments provided by NDEP and the Interstate Mining Compact Commission, which are attached for your convenience.

Thank you for your consideration of this matter.

Sincere regards,

BRIAN SANDOVAL
Governor

Growth of NV Financial Assurance Amounts for Hardrock Mining Operations 2005 - 2016



Cumulative Financial Assurance Held by State of NV, BLM & USFS, data provided by NDEP, 9/12/16

As of Jan. 1	Total FA
2016	$692,142,145
2015	$692,261,957
2014	$693,615,072
2013	$684,343,033
2012	$572,280,477
2011	$571,488,680
2010	$596,210,669
2009	$594,771,103
2008	$602,484,604
2007	$651,074,229
2006	$662,372,814
2005	$634,366,040

NEVADA DIVISION OF
ENVIRONMENTAL
PROTECTION

STATE OF NEVADA
Department of Conservation & Natural Resources
Brian Sandoval, Governor
Leo M. Drozdoff, P.E., Director
David Emme, Administrator

August 17, 2016

Ms. Sonya Sasseville, Director
Program Implementation and Information Division
Office of Resource Conservation and Recovery
Office of Land and Emergency Management
US EPA Headquarters/William Jefferson Clinton Building
1200 Pennsylvania Avenue, N.W.
Mail Code: 5303P
Washington, DC 20460

Subject: CERCLA 108(b) Financial Assurance for the Hardrock Mining Industry

Dear Ms. Sasseville:

The Nevada Division of Environmental Protection (NDEP) provides this letter as part of the pre-rulemaking federalism consultation for the anticipated EPA rulemaking regarding CERCLA 108(b) financial assurance for the hardrock mining industry. Although EPA has not provided critical detail on the anticipated rulemaking, NDEP has several concerns with the overall basis, process and framework of the pending regulations as described in the brief webinar presentations provided by EPA in 2016. In response to our letter, we request that EPA commit to engaging with state regulators for more substantive and detailed consultation prior to publication of the proposed rule.

The mining industry in Nevada produces many commodities essential to American industry and our national security, including gold, copper, silver, barite, gypsum, lithium, lime, diatomaceous earth, aggregates and molybdenum. The industry directly and indirectly employs over 28,000 Nevadans and is the primary employer in seven of Nevada's 17 counties. As both the driest state in the U.S. and the largest hardrock mining producer, Nevada has a strong interest in a mining regulatory program that protects our precious water resources. The State laws and regulations that Nevada has enacted to regulate mines and mine reclamation are comprehensive and protective.

Since State mining reclamation regulations were adopted in 1990, Nevada has engaged with Federal Land Managers (FLM) to develop mine bonding programs to plan for and assure a productive post-mining land use at mines in Nevada. States and FLMs have decades of experience evaluating mining operations and determining bond amounts. Mine reclamation activities in Nevada are bonded for over $2.6 billion as of January 2016. NDEP brings this background and experience in managing an effective and efficient bonding program to the discussion about financial assurance requirements for mines.

As stated in its webinar presentations, EPA's overall approach to this rulemaking is premised on a supposed distinction between CERCLA 107 response costs and costs that are required to be included as part of existing State and federal financial assurance requirements for permitted mines. Although details regarding the formula used by EPA to calculate costs have not been provided, we find that EPA's basic premise and approach to this rulemaking is fundamentally flawed and duplicative of existing State programs. Based on NDEP's initial review, there is no substantive difference between CERCLA 107 response costs that may occur at permitted mine facilities and our existing State requirements.

As we have explained during recent work group calls with EPA, NDEP has specifically designed our mining program and regulations to minimize the potential for hazardous substance releases. In the event these releases

occur at permitted mine facilities, both mitigation and financial assurance are then required to ensure these releases are addressed. Nevada financial assurance regulations for mining facilities specifically include approved costs for third parties to perform work on behalf of NDEP in the event the mine owner fails to perform. Beyond financial assurance for standard reclamation of typical mine features (e.g. heap leach pads, waste rock dumps, tailings impoundments), these include costs for process fluid stabilization, waste disposal, and unplanned short and long-term mine impacted water treatment and monitoring (see Nevada Administrative Code 519A.270, 519A.345, and 519A.360.)

Because there does not appear to be a substantive difference between CERCLA 107 response costs and existing Nevada financial assurance requirements, NDEP is very concerned that the forthcoming EPA financial assurance requirements will duplicate or conflict with existing state requirements. Any duplication would cause an undue burden on the State and mine owners, with no additional benefit to the State's environment. This situation may also open up a pre-emption challenge to existing state regulations under CERCLA 114(d) which could be disastrous to effective and protective existing State programs.

In order to address these concerns, NDEP recommends that EPA develop an exemption in the rulemaking for mines that operate within States that have authority to require financial assurance for hazardous substance release response costs. This approach would avoid unnecessary cost and duplication of regulatory programs.

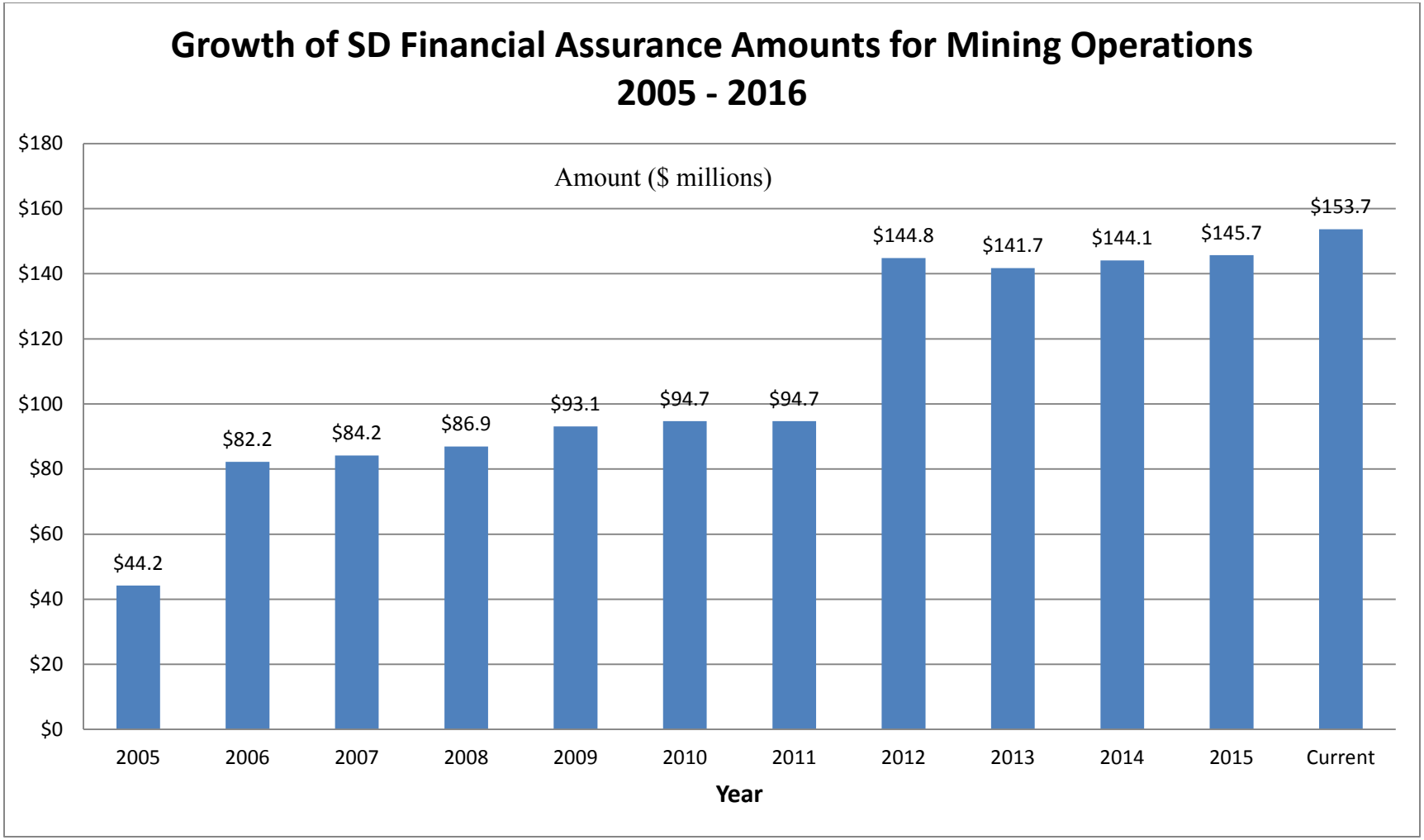
In summary, NDEP has significant policy concerns with the anticipated rulemaking process for CERCLA 108(b) and we concur with the April 20, 2016 Resolution of the Interstate Mining Compact Commission (http://www.imcc.isa.us/CERCLA%20108b%20Res.pdf.) More detailed consultation with the States is needed to satisfy federalism concerns and to establish the basis for the scope and necessity of the rulemaking.

We are available to answer any questions or provide further information on this matter. Please contact me at 775-687-9301 or Joe Sawyer, Chief, Bureau of Mining Regulation and Reclamation at 775-687-9397 or jsawyer@ndep.gov.

Sincerely,

David Emme, Administrator
Nevada Division of Environmental Protection

cc: Linda Barr, US EPA (barr.linda@epa.gov)
Rich Perry, Administrator, Nevada Division of Minerals
Leo Drozdoff, Director, DCNR
Jim Lawrence, Deputy Director, DCNR
Micheline Fairbank, Deputy Attorney General
Joe Sawyer, NDEP
Paul Comba, NDEP



US Forest Service Bonds	$750,235
BLM Bonds	$195,000

THE SURETY & FIDELITY ASSOCIATION OF AMERICA

SERVING THE INDUSTRY SINCE 1908

July 14, 2016

Mr. Mathy Stanislaus
Assistant Administrator
Environmental Protection Agency
Office of Land and Emergency Management
Mail Code 5101T
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Re: CERCLA 108(b)
Financial Assurance Requirement

Dear Mr. Stanislaus:

The Surety & Fidelity Association of America ("SFAA") is a non-profit corporation whose member companies collectively write the majority of surety and fidelity bonds in the United States. SFAA is a licensed rating or advisory organization in all states and is designated by state insurance departments as a statistical agent for the reporting of fidelity and surety experience. The vast majority of bonds that secure regulatory obligations are provided by SFAA members. We appreciated the opportunity over the last several months to participate in outreach events offered by the Environmental Protection Agency ("EPA") to discuss its proposed implementation of the CERCLA 108(b) financial assurance requirements for the hardrock mining industry. As we approach the December 2016 release of the Notice of Proposed Rulemaking, we submit comments regarding concerns we have identified based on those discussions, including most recently the webinar hosted by EPA on May 17, 2016.

A surety bond is a three party agreement by which the obligation owed by one party (the "bond principal") to another party (the "obligee") is secured by a third party (the "surety"). The breadth of availability of a surety bond is determined by the risk and exposure associated with the bond obligation. The bond's risk and exposure are affected by the scope and nature of the obligation, the size of the obligation and the duration of the obligation. A surety addresses levels of risk through it underwriting requirements. Therefore, as risk levels increase, underwriting requirements may be tightened. Tighter underwriting parameters mean that fewer bond principals may be able to qualify for the bond. Smaller businesses with limited financial resources may have particular difficulty in qualifying for the bond. Based on presentations and discussions regarding the proposed parameters of the bond thus far, we have identified certain aspects of the bond requirement that could restrict availability.

EPA has advised that the financial assurance instrument that the mining facility furnishes under section 108(b) could be used to pay into a trust fund pursuant to an administrative order or a court finding of CERCLA liability to fund the response to a release or threatened release. Other parties, including the public, could make claims against the owner or operator under section 107

of CERCLA, which would be payable from the financial assurance instrument. A direct action could be made against the instrument under section 108(c). EPA contemplates that the instrument would cover all section 107 liabilities (response costs, natural resource damages and covered health assessment costs).

Scope and nature of obligation

A significant concern is EPA's proposal to make the financial assurance available to multiple potential claimants through the direct action provisions of section 108(c). First, the potential that multiple parties, other than EPA, can make a claim under the surety bond significantly enlarges the surety's exposure to claims, and possibly dilutes the protection available to EPA to fund the response to a release or a threatened release. In addition, we presume the purpose of the financial assurance is to provide assurance of funding for addressing a release. If funds are paid to a third party, what assurance does EPA have that such funds will be used to remediate the effects of the release? Finally, pursuant to section 108(c), third party action arises from a filing of bankruptcy. In many cases, an operator that has filed for bankruptcy still has the ability to comply with its obligations under CERCLA. A bond is a conditional obligation under which the surety's obligations are triggered only when the bond principal has defaulted. Merely filing for bankruptcy should not be the triggering event for rights under the bond. SFAA recommends that EPA should be the only claimant under the bond. Further, the triggering event should be the failure to fund the costs associated with a release. (We submit that a "threatened release" could be too subjective to define the bright line that marks when the surety's obligations are triggered.)

EPA has maintained that the financial assurance required under section 108(c) is independent of existing state and federal bond requirements that operators must meet to secure reclamation obligations. However, the two requirements do, in fact, overlap. For example, it is conceivable that a release would involve groundwater contamination, and many state and federal reclamation bonds secure the restoration or maintenance of water and air quality. The Surface Management Surety Bond required by the Department of Interior Bureau of Land Management ("BLM") (Form 3809-1) secures compliance with the operator's plan of operations and with the regulations set forth in 43 CFR 3802. Environmental requirements are set forth in 43 CFR 3802.3-2, which states in part:

> (a)§ 3802.3-2(a) Air quality. The operator shall comply with applicable Federal and State air quality standards, including the requirements of the Clean Air Act (42 U.S.C. 1857 et seq.).
>
> (b)§ 3802.3-2(b) Water quality. The operator shall comply with applicable Federal and State water quality standards, including regulations issued pursuant to the Federal Water Pollution Control Act (33 U.S.C. 1151 et seq.).
>
> (c)§ 3802.3-2(c) Solid wastes. The operator shall comply with applicable Federal and State standards for the disposal and

> treatment of solid wastes. All garbage, refuse, or waste shall either be removed from the affected lands or disposed or treated to minimize, so far as is practicable, its impact on the environment and the surface resources. All tailings, waste rock, trash, deleterious materials of substances and other waste produced by operations shall be deployed, arranged, disposed or treated to minimize adverse impact upon the environment, surface and subsurface resources.

The response to a release of hazardous substances conceivably would be secured by the 108(b) financial assurance and by the BLM bond. A surety that provides the BLM bond and 108(b) bond for the same facility likely would be facing claims under both bonds. Clear guidance is needed to address how EPA, other federal agencies (such as BLM) and state regulatory agencies will coordinate activities in making the claims involving the same event so that the surety can avoid duplicative liability.

Another risk factor is the duration of the bond. Conceivably, the financial assurance must remain in place during the period of operation, which could be many years. A surety bond with a long duration increases the risk to the surety. When a surety writes a bond for an operator, it is making a judgment about the operator's financial and operational viability over the life of the bonded obligation. As the duration of the bonded obligation becomes longer, and the surety must assess the operator's operation and financial strength for periods of time well into the future, the certainty of the judgment may be lessened. To compensate for the increased risk due to the diminished certainty of underwriting, sureties typically raise their underwriting standards, and provide long-term bonds only to the largest and most financially sound operators. We recommend that the implementing regulations should contain measures by which the surety can control the duration, such as a cancellation clause in the bond.

Amount of assurance

EPA staff has advised that EPA is developing a formula for computing the amount of financial assurance based on the site conditions of the facility. We understand that the formula is based on the historic response costs of over 60 mining sites. Credits to a baseline computation are based on certain best practices that are employed by the facility. During the webinar hosted by EPA on May 17, 2016, EPA offered a few example calculations. The calculations yielded financial assurance amounts that ranged from $25 million to $525 million (the differences due to the characteristics of the facility and the best practices that were employed). Strictly in the context of the size of the surety bond alone, bonds in such amounts conceivably could be available in the market. However, considering that an operator may have multiple facilities, the aggregation of financial assurance requirements could present availability challenges, particularly considering the other risk issues discussed above. (Does EPA have an estimate of the aggregate required amount of financial assurance for the entire hardrock mining industry?)

We submit some suggestions for reducing the amount of required financial assurance. First, as discussed above, there is significant overlap of coverage between the 108(b) financial assurance and the surety bonds currently being furnished to meet state and federal requirements. We understand that EPA will reduce the amount of financial assurance based on the presence of engineering controls required under other state or federal programs. We submit that there should be a dollar for dollar credit for bonds already furnished to state or federal agencies. The Bureau of Ocean Energy Management ("BOEM") is taking a similar approach with respect to its expanded supplemental bonding policy under 30 CFR § 556.53. Under the expanded policy (which has not yet been implemented), it appears more entities with well drilling operations in the Gulf of Mexico will be required to furnish a bond to BOEM. However, many of these entities are parties to a purchase and sale agreement by which a major operator has conveyed a well lease to the entity. These entities already furnish a bond to the major operator (e.g. Chevron). As to these entities, BOEM is contemplating creating a rider adding BOEM as an obligee. This dual obligee private bond would satisfy the BOEM bonding requirement and would eliminate the need for the entity to provide duplicate bonding (to BOEM and the major operator).

Second, if the formula is based on costs from sites that are legacy sites with existing issues, the formula may be overstating the estimated costs, particularly considering that the financial assurance requirement will apply to currently operating sites that are not experiencing a release or a threatened release.

Our concerns that we set forth are not intended to convey that surety bonds will not be available. We simply wish to communicate with EPA potential concerns regarding availability that we have identified at this early stage based on information provided at EPA's various outreach events. We thank you for your consideration and offer SFAA and the surety industry as a resource to assist EPA is developing a workable surety bond requirement.

Sincerely,

Robert J. Duke
General Counsel

cc: Barnes Johnson, Director, Office of Resource Conservation (via electronic mail)

NOVAGOLD | SOLID. SECURE. GOLDEN.

September 16, 2016

Ms. Lanelle Bembenek Wiggins
RFA/SBREFA Team Leader
US EPA - Office of Policy (1803A)
1200 Penn Ave NW
Washington DC – 20460

Re: NOVAGOLD Post-panel Meeting Comments on EPA CERCLA 108(b) Rulemaking

Dear Ms. Wiggins:

NOVAGOLD Resources, Inc. (NOVAGOLD) (NYSE-MKT, TSX: NG, www.novagold.com) appreciates this opportunity to provide comments after the August 31, 2016 Small Business Advocacy Review (SBAR) panel meeting. Our comments incorporate by reference those previously provided to EPA by letter as part of the SBAR process on July 7, 2016, by letter on EPA's October 2012 Alaska State program summary on July 27, 2016, and by two emails sent to you on alternatives on August 29, 2016.

Background

Donlin Gold LLC is a 50/50 partnership between NOVAGOLD and Barrick Gold US Corporation. The partnership was formed to advance the development of our flagship asset, the Donlin Gold Project in southwestern Alaska. The Donlin Gold Project is one of the largest and highest-grade undeveloped open-pit gold deposits in the world. In August 2012, Donlin Gold LLC submitted the initial permit applications for the Donlin Gold Project to the U.S. Army Corps of Engineers. This submittal triggered the start of the National Environmental Policy Act (NEPA) review process. The Draft Environmental Impact Statement (DEIS) was released in November 2015 and the public comment period closed on May 31, 2016. As proposed in the permit applications, the Donlin Gold Project is expected to produce, on average, approximately 1,100,000 ounces of gold per year over its projected 27-year life.

The Donlin Gold Project is also a partnership with the shareholders of the Calista Corporation (Calista) and The Kuskokwim Corporation (TKC). These Alaska Native corporations have a direct interest in the Donlin Gold Project because Calista owns the mineral estate and TKC owns much of the surface estate on which the Project will be developed. Calista selected the lands at Donlin Gold as part of the compensation granted to Alaska Natives for the relinquishment of their aboriginal rights under the Alaska Native Claims Settlement Act (ANCSA). The lands were selected specifically because of their known mineral potential. Calista is mandated to responsibly develop the natural resources on the lands for the economic benefit of its shareholders, and through ANCSA's 7(i) and 7(j) revenue sharing provisions, the economic benefit of all Alaska Natives. Congress enacted ANCSA to "provide for the real economic and social needs of Natives ... with maximum participation by Natives in decisions affecting their rights and property." The agreements between NOVAGOLD (through Donlin Gold LLC) and the Native corporations provide for significant economic benefits to Alaska Natives in the Yukon-Kuskokwim region, which is one of the poorest areas in the U.S. Therefore, any regulatory action undertaken by EPA that adversely effects the development of the Donlin Gold Project will have significant economic impacts on Alaska Natives. This is also the case with other mining projects in Alaska, most notably the operating Red Dog Mine, which is a partnership between Teck

Ms. Lanelle Bembenek Wiggins
September 16, 2016

Resources, Inc. and NANA Regional Corporation. We continue to urge EPA to take this into account as it evaluates the economic impacts and environmental justice implications of the rulemaking.

SBAR Process

We commend EPA for sharing significant additional supporting information with the SERs on the rulemaking subsequent to the pre-panel discussion – especially as this material yielded greater insight into EPA's model and methods for determining response costs and credit amounts. The 11 small mine site examples were very informative as was the open dialogue regarding specific approaches used for the formulas and model during the August 31, 2016 panel meeting. It is, however, disappointing that EPA was not willing to provide these data earlier in the process. Moreover, the SERs still do not have the specific formulas to assess the actual potential financial impacts on our businesses. Finally, in my email to you on August 26, 2016, I indicated that many small mining companies are involved in the development of very large projects. As noted above, our proposed Donlin Gold Project would be one of the largest gold mines in the world. In defining the applicability of the rule to small businesses, EPA needs to take into account our situation, including in its economic impact analysis.

To understand the specific potential impacts to our project, I requested a large mine example. Unfortunately, no such example was provided. This lack of willingness to share this information or the model has made it difficult to provide meaningful input into the SBAR process. As a result, we cannot reliably estimate our expected compliance costs for the rule. Despite this major limitation, we have used the available information to "roughly" project potential CERCLA 108 financial assurance requirements (before credit reductions) for the Donlin Gold Project. Considering the open pit (1400 acres), waste rock facility (2,250 acres), and tailings storage facility (2,350 acres), and need for active water management and treatment at the site, the resulting financial assurance (before credit reductions) could approach $2 billion. To begin with, it is important to note no modern mining operations have approached this level of Federal CERCLA liability and EPA has failed to identify any way this could actually occur at modern mining operations with current State and Federal regulations. Therefore, the entire basis for EPA's estimates is highly questionable – see comment below related to EPA's model. Moreover, EPA has provided no information that reasonably assures us that financial instruments will be available to meet this need, especially given the theoretical amounts that could be required across the industry. EPA's market study provides very, generalized information on potential options but does not provide any specifics related to expected availability and costs. The likely availability of instruments is further questionable because of uncertainties in the required duration of coverage as well aspects of the program such as access to third-party claims that have not previously been considered under existing financial assurance programs. Without more specific information, we have to assume that small mining companies such as ours could potentially have to self-fund the required financial assurance. At the expected levels (roughly $2 billion), there is a high likelihood our project would not meet necessary economic criteria to be built. As indicated above, in our case, this would deprive our Native corporation partners with the ability to develop the resources that they selected for mining under Federal statutory authorities.

Even if financial instruments were available, the costs of these instruments before considering credit reductions could be upwards of $50-100 million per year. At typical 10-20 percent profit margins, this would also significantly impact project viability. Like many elements of EPA's approach, the Agency does not appear to have taken the time to really determine the actual potential economic impacts of the rule on the

mining industry, including small businesses. This is particularly troubling because as indicated above, EPA has not provided any demonstration of the need for a comprehensive program at modern mining operations.

Credits for Existing and Future Practices

The above points emphasize the importance of EPA's approach to determining credits. We commend EPA for now considering credits based on future actions that are guaranteed by existing financial assurance mechanisms. Each of the response categories included in EPA's examples is addressed by current financial assurance requirements for hard rock mines in Alaska. As indicated in EPA's 2012 Alaska State summary, the Alaska Department of Environmental Conservation specifically has the authority to require financial assurance to ensure that mining facilities are managed and closed in a manner that the Department finds "will control or minimize the risk of the release of unauthorized levels of pollutants from the facility to waters."

We are also encouraged to see that EPA is now proposing a Yes (100%) or No (0%) determination of credit applicability. As we have repeatedly said, there is no single "best practice" for each category that applies to all sites. Mining companies such as ours work with the States and Federal land management agencies (FLMAs) through an exhaustive, generally multi-year process, to make the appropriate, site-specific determinations of risks and best practice, and provide for the proper level of financial assurance to ensure they are implemented. Table 1 includes a comparison of the key components of Donlin Gold's proposed financial assurance compared to EPA's response categories. Based on our experience and knowledge, we believe that the other hard rock mines in Alaska would similarly show that their financial assurance covers all of the applicable response categories.

NOVAGOLD continues to strongly encourage EPA to give States and FLMAs great deference in the Yes/No determinations, i.e., if a response category is covered by existing financial assurance it should be fully assumed to minimize risk and the required CERLCA 108 financial assurance should be zero for that category. Any separate credit standards created by EPA could actually undermine the State and FLMAs efforts to minimize risk and liability, i.e., by encouraging measures that are not best practice at a specific site.

Response Cost Determinations

EPA's approach to determining response costs appears to be flawed. Our SER helper, Jeff Parshley of SRK is a recognized expert in determining financial assurance. His expertise and SRK's SRCE model are consistently relied upon by mining companies (including ours), States, and FLMAs to determine financial assurance requirements throughout the U.S. In reference to EPA's response cost calculations, Jeff has provided the following comments:

> *Although no details were provided regarding the actual calculations of FR in the EPA model, the EPA indicated that costs for the identified activities at those sites were used to create a dataset that was subjected to "regression analysis". This analysis was then used to define costs for each activity based on a few filtering criteria (e.g. tailings facility acreage). This benchmarking approach is an extremely simplistic approach to for creating a cost estimate and cannot account for numerous site specific/project specific conditions that can have profound impacts on the costs. In other words, using the acreage of a tailings impoundment multiplied by some one-size-fits-all cost/acre to determine the*

Ms. Lanelle Bembenek Wiggins
September 16, 2016

cost of a "response activity" for any tailings impoundment will either underestimate the cost, or overestimate the cost.

Jeff goes on to note that, through experience, State and FLMA mining staff have come to understand the inadequacies of such simplistic generalized approaches and consistently recognize the need for site-specific financial assurance determinations.

It is also important to recognize that States such as Alaska public notice closure and reclamation plan approvals and associated financial assurance requirements. In our case, for the Donlin Gold Project, these estimates are being further reviewed by our Alaska Native corporation partners and their expert consultants as well as by EPA and its consultant, Kuipers and Associates, through the NEPA process. As a result, consistent with all hard rock mines in Alaska, our proposed financial assurance is undergoing multiple levels of independent expert review and the process is fully transparent to the public. Once implemented, it will be required to be updated at a minimum of every five years or more frequently when major changes occur at the site. Alaska's agencies have experienced mining teams that conduct compliance inspections throughout year. Moreover, as we provide the required five year updates to our reclamation plans and financial assurance estimates, our permits will require a comprehensive, independent audit of facility operations, compliance, and closure and financial assurance requirements by outside experts hired by the State.

Based on the above factors, we strongly believe that our Alaska- and project-specific response estimates are much more accurate than the general values that the EPA formula will produce.

Past CERLCA Response Costs for Mining Operations

In numerous presentations and documents, EPA has indicated that, through FY2011, the Agency had spent approximately $4.6 billion to clean up hard rock mines and mineral processors. Without explanation, the implication is that because mining historically caused such significant Federal CERCLA liability; future releases that will require very high response costs are inevitable. After a number of requests, EPA provided the CERCLA site data used calculate the $4.6 billion value. Almost entirely, the sites on the list have no relevance to modern mining operations subject to current environmental regulations. As EPA moves forward in the draft final and rules, we respectfully request that EPA provide context when citing the $4.6 billion value by noting how programs have evolved and the remaining gaps that it is trying to address. The $4.6 billion value is in stark contrast to the comparatively much smaller modern mine example response costs that EPA cited in its SBAR panel presentation (for the Formosa and Barite mines).

Human Health Assessment Costs

During the August 31 panel discussion, EPA indicated that the human health assessment (HHA) cost is a fixed value applied to all mine sites regardless of the level of risk and response costs and credits. This value appears to be an average for mine sites from the ATSDR website – EPA did not provide the details on the specific data sources. Under the current approach, even if all the other response categories are reduced to zero, EPA has indicated that it still intends to require HHA financial assurance. We contend that a site has no potential for HHA liabilities if the response risk is zero. Including this requirement in the draft rule could subject small businesses to significant and unnecessary cost and administrative burdens of compliance. We

recommend that EPA take the time to re-visit this issue and allow a zero HHA value where the response risk is zero.

Existing State Programs and Alternatives

As EPA has seen through the SBAR process and outreach to the FLMAs, States, and other mining industry groups, there is significant overlap with existing mine permitting and financial assurance programs. Over the past several decades these programs have continued to evolve to where the risks of uncontrolled releases that could incur Federal CERCLA liability are minimized and, in many cases, have been eliminated. As shown Table 1, the Donlin Gold Project proposed financial assurance addresses each of the applicable response categories that EPA has established. The existing programs that FLMAs and States have in place utilize current regulations, resources, and staff expertise while EPA has none of these. They also rely upon proven financial assurance institutions and instruments that are known to be available to our industry with reasonable cost certainty.

Under the SBAR process, we are tasked with identifying alternatives that could address the potential risks but also minimize the financial and administrative burdens on our businesses. As such, we would like to see EPA consider the following specific alternatives:

1. In the final rule, exempting mines regulated by FLMAs and States who have functionally equivalent mine permitting and financial assurance programs that minimize CERLA Section 108 risk. We believe that the FLMAs and a number of States have already demonstrated they have such programs. EPA could also use the draft rulemaking process to solicit specific comments on any perceived gaps in existing FLMA and State programs and what additional information would be needed for exemption in the final rulemaking.
2. In the final rule, providing criteria for FLMAs and States to demonstrate that their programs are functionally equivalent to EPA's program and avoid Federal CERCLA liability. Criteria could address each of EPA's proposed response categories. In addition to specific regulatory and technical criteria, EPA could establish procedures for States to submit their program descriptions for review and public participation/input could be included in the process.

Recordkeeping, Reporting, and Compliance Requirements

EPA requested input from the SERs on the reporting, recordkeeping, and other compliance requirements of the upcoming proposed rule. As discussed above, we cannot accurately determine the overall cost of complying with the proposed rule because EPA has not provided the necessary information to calculate how much and for how long financial assurance will be required for our project. Without such information, we cannot approach the financial industry to assess the likely availability and cost of instruments. What is clear is that the proposed approach (as currently envisioned) could have significant financial impacts on the viability of the Donlin Gold project. This is why it is essential that EPA continue to explore opportunities to only address gaps in existing programs and avoid unnecessary and costly duplication of such programs.

As for recordkeeping and reporting, the costs and burdens are less of a concern than the operational issues. However, projects like the Donlin Gold require more than 100 Federal and State permits and other approvals.

Ms. Lanelle Bembenek Wiggins
September 16, 2016

Many of these authorizations have extensive application, recordkeeping, and reporting requirements. The information that EPA has provided to date includes few details on program implementation. Such details are especially important because EPA does not generally regulate active U.S. mining projects on its own but rather provides oversight of other agency activities. As such, the agency has limited internal expertise/capacity to develop and administer implement this program. Therefore, here again, we strongly encourage EPA to rely upon existing FLMA and State programs to the maximum extent practicable and avoid duplicative reporting and recordkeeping requirements. This should include flexibility: for submittals to meet multiple program requirements, collaborative reviews, and interagency coordination across all aspects of program oversight.

Conclusion

Thank you again for the opportunity to participate in the SBAR process. We appreciate that EPA has provided significant additional information since the start of the process and incorporated a number of our suggested approaches. Removal of legacy sites from coverage, the commitment to an expert peer review of the model prior to draft rule issuance, credits for future actions guaranteed by existing financial assurance, and EPA's overall recognition that existing programs are working to minimize risk are very positive steps. We hope that the ongoing dialogue will continue through the final rulemaking.

Please feel free to contact me at (303) 884-1823 with any questions or comments.

Sincerely,

Ron Rimelman, NOVAGOLD Resources, Inc.
Vice President, Environment, Health, Safety & Sustainability

cc: Linda Barr, EPA

Ms. Lanelle Bembenek Wiggins
September 16, 2016

Table 1. Donlin Gold Project Proposed Financial Assurance (FA)		
EPA Response Category	**Included in Donlin Gold FA**	**Comments**
Open Pit	Yes	
Waste Rock	Yes	
Heap/Dump Leach	N/A	Carbon-in-leach circuit in mill
Tailings Facility	Yes	Fully lined, dry closure
Process Pond/Reservoir	Yes	All seepage fully contained
Underground Mine	N/A	
Slag Pile	N/A	
Drainage	Yes	Detailed drainage plans, including diversions, containment, water treatment, seepage collection, etc. All sized based on specific water balance calculations
Interim O&M	Yes	
Water Treatment	Yes	Full water treatment and permitted discharge during operations and closure
Short-term O&M/Monitoring	Yes	Extensive geochemical, stability, ground and surface water quality monitoring
Long-term O&M/Monitoring	Yes	Proposed trust fund for long-term care maintenance

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September 16, 2016

Lanelle Wiggins
RFA/SBREFA Team Leader
US EPA - Office of Policy (1803A)
1200 Penn Ave NW
Washington, DC 20460

Re: General Moly, Inc.'s Comments on CERCLA 108(b) Rulemaking

Dear Ms. Wiggins:

These comments are being provided on behalf of General Moly, Inc. (GMI) regarding EPA's upcoming rulemaking, Financial Responsibility Requirements under CERCLA Section 108(b) for Classes of Facilities in the Hard Rock Mining Industry. GMI serves as a Small Entity Representative (SER), and has participated on the Small Business Advocacy Review (SBAR) Panel convened pursuant to the Small Business Regulatory Enforcement Fairness Act (SBREFA). EPA is developing Financial Assurance (FA) regulations under CERCLA 108(b) for the hard rock mining industry. CERCLA 108(b), passed in 1980, directs EPA to develop FA requirements for industry sectors with substantial risk to create environmental conditions that will result in CERCLA cleanup actions. EPA's approach to determining FA requirements for individual mine operations is to develop a model with a formulaic approach, whereby simple input assumptions can be used to generate the FA amount. As a fundamental value, GMI, and the mining industry in general, support the concept of FA to protect the public from bearing cleanup costs for mining operations. However: there is minimal risk or CERCLA cleanup resulting from today's mining operations; the existing regulatory framework administered by Federal Land Management Agencies (FLMA) and States already includes FA provisions for mining; and, the over-simplified and overly conservative approach being developed by EPA is not valid.

The mining industry poses minimal risk for environmental impacts that would require CERCLA action

Modern mining has changed greatly since the early days when there were little environmental controls and environmental protection regulations. Although these

changes have occurred continually, the year 2000 is a reasonably valid point to use for the transition to the modern mining era. Standard practices in use since then, as well as the stringent and comprehensive regulations in place since then, essentially eliminate the potential for CERCLA cleanups to be triggered. These regulations include requirements specifically to prevent releases of hazardous materials that are the precursor to CERCLA actions. EPA has not made a demonstration that the mining industry warrants the FA requirements being contemplated. For this reason alone, the proposed rule should be abandoned.

EPA's proposed rulemaking will duplicate existing FA requirements for the mining industry

Most mining operations are located in the western states on Bureau of Land Management (BLM) or U.S. Forest Service (USFS) lands. These Federal Land Management Agencies (FLMA) have comprehensive FA requirements. Those sites not located on lands administered by the FLMAs, are subject to the FA required by individual states. During the June 16 SBAR conference call, presentations by the BLM and USFS demonstrated that both have effective and comprehensive FA requirements that include physical reclamation (i.e., earthworks and revegetation) and closure (short and long-term solution management), and can include long-term financial assurance for sites when warranted. Individual States have similar programs. Implementing a separate program to require FA would duplicate existing requirements, and EPA should identify actual gaps in the FA requirements should they go forward with requiring FA for the mining industry.

A formulaic approach to determine FA for mining operations is inherently flawed.

Acquiring FA would be a significant expense, and negatively impact mining companies, especially small mining companies without substantial capital reserves. Thus, GMI stresses the importance of an accurate FA estimate based only on the tasks to reclaim and close a site. FA should not include "unanticipated problems" and should be based on actual site conditions. EPA hasn't provided the formula being considered, but information suggests an over-simplified, and potentially over-conservative approach is being developed. This approach may provide a speedy FA calculation, but it is likely to provide a result that is more arbitrary than accurate.

It is especially troublesome that EPA is proposing Natural Resource Damages (NRD) and Health Assessment Costs (HAC) be included in the FA calculation. Inclusion of these costs pre-supposes that a CERCLA action will be required, whereas current regulations minimize, if not outright preclude this outcome. NRD costs are notoriously contentious; it's clearly not possible to estimate a valid cost without knowing the specific CERCLA action to be undertaken. Requiring a company to post FA for this cost component is unacceptable. EPA should not attempt to use a CERCLA 108(b) rulemaking to establish an insurance pool for potential CERCLA actions.

EPA should exempt mines that operate in jurisdictions with comprehensive FA programs.

As noted, FLMA and States have comprehensive FA programs and development of a federal program that does not recognize these existing programs will create duplication and unwarranted economic burden on the mining industry. FLMA and States have the expertise and staff to calculate the appropriate amount of FA based on the unique circumstances of each mining operation. These agencies also have the expertise and authority to adjust FA as required over the life of the mining operation. EPA should ensure that the FA requirements being considered for the hard rock mining industry are not applicable to mines that operate within the jurisdiction of BLM, U.S. Forest Service, and States with adequate FA regulatory requirements.

The proposed rulemaking would have substantial negative impacts to GMI, the mining industry in general, and especially small businesses

A primary intent of the SBREFA is to assess the impact of proposed regulations on small businesses. GMI would be significantly impacted by EPA's Financial Responsibility Requirements under CERCLA Section 108(b) for Classes of Facilities in the Hard Rock Mining Industry, as currently envisioned. This impact cannot be quantified because we have not been provided with the formula being considered by EPA to calculate FA, and therefore cannot estimate what the FA requirements would be for our company under the planned rulemaking. However, EPA's 11 examples generate a range of millions to tens of millions of dollars. Costs of FA depend on the amount of the FA as well as market factors, and the cost could vary widely over the life of a mine. Without knowing the specific amount and negotiating with FA providers, the actual cost of securing and maintaining that FA cannot be determined. Small businesses especially do not have the economic reserves to absorb these relatively high costs, and the rulemaking as considered would almost certainly make some small companies economically unviable.

Small businesses are a critical component of the mining industry as they typically conduct the initial discovery and development work to maintain a pipeline of economic projects. Because it takes large capital investment and many years to advance an initial discovery to a minable deposit, and an additional several years to permit a project, preservation of small businesses in the mining industry is of paramount importance. This mining industry is essential to provide the raw materials to sustain the modern lifestyle and economic prosperity enjoyed in the enjoyed in the U.S. In addition, the mining industry provides a reliable domestic source of strategic minerals essential for national security. The rulemaking being considered would have serious and long-lasting negative impacts on small businesses in the mining industry.

Thanks you for your consideration of these comments.

Sincerely,

Patrick C. Rogers
Vice President, Environmental and Permitting

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September 16, 2016

Lanelle Wiggins
RFA/SBREFA Team Leader
US EPA Office of Policy and Recovery
1200 Pennsylvania Ave. N.W.
Washington, D.C. 20460

Linda Barr
Economist
US EPA Office of Resource Conservation
1200 Pennsylvania Ave. N.W.
Washington, D.C. 20460

Sent via email

Re: Renaissance Exploration Inc. Comments and Questions regarding CERCLA 108(b) in Response to the SBAR Panel Meeting of August 31st, 2016

Dear Ms. Wiggins and Ms. Barr:

Uranerz Energy Corporation (Uranerz) is a subsidiary of Energy Fuels, Inc. (Energy Fuels), which as a small business, represents the 2nd largest domestic producer of uranium in 2015. Energy Fuels has uranium production operations and development projects located in Arizona, Colorado, New Mexico, Texas, Utah, and Wyoming. Energy Fuels operates is In Situ Uranium Recovery (ISR) operation, Nichols Ranch, in Wyoming and its ISR project, Alta Mesa, in Texas.

Energy Fuels is pleased to participate as a Small Entity Representative (SER) as part of the SBREFA process. The EPA presentation and willingness to respond to questions from the SER's at the August 31, 2016. Our comments on the EPA's consideration of a CERCLA 108(b) rulemaking will be presented in the context of the company's ISR operations. In both cases, these operations are regulated under the Uranium Mill Tailings Reclamation and Control Act (UMTRCA) and the Safe Drinking Water Act, in the case of Wyoming, by the Nuclear Regulatory Commission and Wyoming Department of Environmental Quality, and in the case of Texas, by the Texas Commission on Environmental Quality.

As a SER for this process, as EPA has continued to provide additional information, more questions as to the need for a new rulemaking become of greater importance. The FLMA and States have demonstrated several times in clear and definitive means that the financial assurance requirements under their existing regulations already consider and have requirements to cover the CERCLA 108(b).

From the August 31, 2016 meeting, Energy Fuels would like to provide the following comments:

- In its presentation, EPA described its universe of facilities that would be regulated under CERCLA 108(b). In that description, EPA identified 8 facilities that are conducting in-situ leaching, and there was no indication if the facilities that fell within that classification were solely uranium producers and/or included copper or phosphate recovery operations. A clarification would be helpful as one of the small businesses that currently operate and recover uranium using in-situ recovery techniques.
- In the presentation titled "Eleven Financial Responsibility Calculations Based on EPA's Current Approach", there are no in-situ recovery operations described in those scenarios. That is important to Energy Fuels because it provides a measure of what EPA is considering within our small segment of hardrock mining. Based on EPA's presentation and responses to questions, one can easily surmise that there would be no case of the 13 Response Categories where EPA could respond "No" under column D for in-situ uranium recovery facilities. The basis for that statement is that under UMTRCA, a licensee regulated by the NRC or one of its Agreement States is required to provide financial assurance for all 13 of the Response Categories, and those are updated annually by rule to incorporate any additional environmental impacts from licensed activities.

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- From the presentation, one can presume that EPA is asserting that FLMA/state rules do not require operators to cover the cost of CERCLA liabilities. As a regulated operator within the FLMA, NRC, and state regulatory programs, Energy Fuels would strongly disagree with that assertion. From the perspective of our in-situ recovery facilities in Wyoming and Texas, these programs require financial assurance to ensure the actions planned to eliminate this risk are implemented even in the event of a default. These facilities should never become CERCLA liabilities because the state and federal programs prevent that from happening. These programs are designed to address each of the potential or actual remedial actions addressed in the mining slides lines 1-13.
- Within the context of the August 31 meeting, the EPA seems to be assuming that modern mines are operated in a manner similar to those that have become CERCLA sites. This ignores scope of the state and federal programs under which mines are required to operate that have come into effect since the majority of the CERCLA sites were identified. Rules, policies, and guidance documents drive regulatory programs that are specifically designed to ensure that the mines are designed, constructed, operated and closed in a manner that would avoid the types of problems that were caused by practices implemented by unregulated or under-regulated mines of the past. EPA is relying on sites that predominantly have assigned NRD costs from past activities including sites that were part of the "Manhattan Project" that were government run without any of the environmental and human health protections that are applied to modern mines.
- Existing regulatory programs are constantly being improved as the regulatory agencies and industry gain experience. This continuous improvement approach is a key element in these programs and is responsible for the significant increases in the financial assurance amounts required by state and federal agencies over the last 25 years.[1] NRC, USFS, BLM and state programs require updates to plans and financial assurance calculations whenever there is any change in the program or as specified in a particular program. For example, in Wyoming, each financial assurance cost estimate must be updated at least annually for both NRC and state regulatory programs. Although specific timeframes for permit or financial assurance updates are not include in all of the programs, it is common practice that mine plans will change on a regular basis and each of these changes triggers a review and update of all permit conditions, including the financial assurance calculations.
- EPA claims that "*The proposed Section 108(b) regulations under development are intended to produce a financial responsibility amount that is consistent with risks at the facility…*"[2]. Their approach appears to initially ignore the fact that requirements of the programs under which the mines are permitted eliminate or greatly minimize the risk to generate a financial responsibility cost, and then gives credit to operations that implement actions that eliminate or minimize risk. The result of this approach is to require operators to calculate financial responsibility, then reduce it based on practices implemented at the mine to minimize the risks, including those required by other regulatory programs. If the intent is to credit actions that eliminate or substantially minimize risk, any mine operating under modern mining regulations should have their financial responsibility reduced to zero. This was demonstrated in a number of the 11 mine examples provided by the EPA (although they admitted they had not finalized the financial responsibility reduction formulae). However, even if all the other financial responsibility categories are reduced to zero, the EPA still intends to require financial assurance for Human Health Risk Assessments and NRD claims.
- If the current hardrock mining regulations are sufficient to reduce the financial responsibility to zero, they there should be little or no risk of the site becoming a CERCLA site. Therefore, there is little or no risk of further human health risk assessments being required or a NRD claim being made. EPA has yet to demonstrate that modern mines have these costs over and above what is currently considered in existing financial assurance determinations. We look forward to examining the specific sites that EPA believes carry

[1] Parshley and Struhsacker. 2009. *The Evolution of Federal and Nevada State Reclamation Bonding Requirements for Hardrock Exploration and Mining Projects: A Case History Documenting How Federal and State Regulators Used Existing Regulatory Authorities to Respond to Shortcomings in the Reclamation Bonding Program*, NWMA Whitepaper.
[2] EPA. Aug 23, 2016. CERCLA108(b) FINANCIAL RESPONSIBILITY-SBREFA-PanelOutreach2016-08-23Annot20160826tmd.pptx. Slide 22 of 53.

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these costs. The one-size-fits-all for these items in their formulae ignore site specific conditions, creating one-size-fits-none. EPA did not account for the mines with zero costs.

- The EPA "*identified activities at hardrock mining facilities undertaken by Superfund in the past, based on historical Superfund data, then estimated the current costs of those actions based primarily on data from current situations*"[3]. In reviewing the Excel spreadsheet that supports that data, EPA has shown that they have a broad database to work from, but one should question the applicability of the sites. In the review of the table, Energy Fuels focused on sites with radiation, tailings, and uranium recovery activities. In every case, either the sites identified were built prior and closed prior to the implementation of UMTRCA or they were part and parcel of the U.S. Government's "Manhattan Project" which was built no consideration to human health or environmental risks. As a result, the data set, in our opinion, is skewed because it includes impacts that are specifically prohibited under UMTRCA and EPA's own rules under 40 CFR § 192.
- The financial responsibility costs for these activities were obtained from "*63 current facilities with publicly available engineering cost estimates that contained costs specific to these activities, supplemented with three historical sites for water treatment costs due to a small sample size*"[4]. During the August 31st meeting, EPA indicated that these costs were obtained from financial assurance calculations submitted by those mines under federal and/or state regulatory programs. If these programs have financial assurance requirements suitable for use as a basis for the EPA models for CERCLA 108(b) financial assurance, don't those programs satisfy the CERCLA 108(b) financial assurance requirements already? Why are these sites not costed at zero? If not, why did the EPA use them as a basis for their model?

The bullet points above represent general comments on the presentations and Q&A at the meeting. As phone-in participant, it was difficult to ask questions due to the number of participants at the physical meeting. The short notice for the August 31 meeting made it very difficult to change arrangements and plans in a company that is "doing more with less" and forcing its entire organization to wear "multiple hats". As a representative of a small entity that is operating in a commodity market environment that is a 12 year lows, the additional costs of any additional financial assurance resulting from this rulemaking would be felt financially as punitive.

One other consideration with respect to activities regulated under UMTRCA, NRC is charged with implementation of standards and enforcement of rules, and specifically, financial assurance. Throughout the SBREFA process, NRC has not been at the table, even though EPA has included facilities that are regulated by NRC, such as in-situ uranium recovery facilities.

Energy Fuels appreciates this opportunity to be part of the SBREFA process, and we look forward to EPA's responses and next steps.

Respectfully submitted,

William Paul Goranson
Executive Vice President ISR Operations
Energy Fuels Resources (USA), Inc.

[3] Ibid. Slide 25 of 53.
[4] Ibid. Slide 29 of 53

NEVADA Mining Association

The Champion of the
21st Century Mining Industry

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September 19, 2016

Ms. Lanelle Wiggins
RFA/SBREFA Team Leader
U.S. EPA Office of Policy
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

Sent via email to Wiggins.Lanelle@epa.gov

Re: Nevada Mining Association Comments for CERCLA 108(b) Financial Responsibility Rulemaking SBAR Panel

Dear Ms. Wiggins:

With this letter, the Nevada Mining Association (NvMA) respectfully provides comments as a small entity representative (SER) and member of the Small Business Advisory Review (SBAR) panel concerning the U.S. Environmental Protection Agency's (EPA) CERCLA 108(b) Financial Responsibility Rulemaking. In preparing these comments, we have considered the material provided by EPA in connection with the August 31, 2016, SBAR panel outreach meeting, information provided to EPA on this issue by the U.S. Bureau of Land Management (BLM), the U.S. Forest Service (USFS), and the Nevada Division of Environmental Protection (NDEP) as well as correspondence with and among EPA, other small entity representatives, and Governors and mining regulatory agencies from other western states. NvMA appreciates the opportunity to participate in the panel as both a small employer and a representative of small entities and also appreciates the substantial time and effort of EPA and the Small Business Administration Office of Advocacy (SBA) to facilitate the SBAR review and assure that information was generated, collected and distributed to the panel. We hope that these comments will be considered by the EPA, SBA, and the Office of Management and Budget in preparing the panel report and by EPA in drafting the proposed rule to avoid duplication and conflict with existing regulatory programs and to avoid unnecessary impacts to small entities.

First, a description of the Nevada Mining Association may be helpful. Organized in 1913, the Nevada Mining Association currently represents over 400 businesses that rely, in whole or in part, on Nevada's mining industry. These companies are involved in all aspects of this statewide industry, from exploration and discovery through development and operation to closure and reclamation. Many – perhaps most – of our members meet the federal definition of a small business. Although these businesses are located throughout Nevada, it is the state's rural counties that rely most heavily on the mining industry. In some counties, the mining industry is the only non-government employer of any size and the primary taxpayer.

Nevada mining produces, in a safe and environmentally-responsible manner, 20 of the nation's essential metals and minerals. In the process, the industry provides good jobs with exceptional pay and benefits to nearly 28,000 Nevadans.

This letter responds to EPA's request for input on three specific issues:

- The impact of compliance requirements of the proposed rule;
- The identification of other Federal or state rules that may duplicate, overlap, or conflict with the proposed rule; and
- A description of significant alternatives to the proposed rule, which accomplish the state objectives of applicable statutes and which minimize any significant economic impact of the proposed rule on small entities.

We will address each of these topics in turn, and then provide comments on additional issues.

Impacts of Compliance

It is not possible to fully assess the potential impacts of compliance on small entities because of two fundamental and unanswered questions associated with the proposed rule. First, EPA is still considering how potential additional CERCLA 108(b) financial assurance may be reduced by controls currently in place at a facility or for additional controls enforceable against the owner or operator and supported by financial responsibility. (SBAR Panel Meeting Slide #33) NvMA believes that owners or operators should be given a complete reduction for both categories. EPA should not require duplicative controls or duplicative financial assurance. Any duplicative financial assurance will be a significant burden on small entities because such entities will likely be forced to post cash bonds or letters of credit for financial assurance.

Second, EPA has failed to identify the most critical element of the financial responsibility instruments: the timeframe for financial assurance or the criteria for release or termination of financial assurance. (SBAR Panel Meeting Slide #40) Without knowing when or how financial assurance may be released, it is impossible to predict the cost or availability of financial responsibility instruments to small entities or any other sector of the mining industry. Based on current practices, we know that insurance or surety is unavailable for long-term obligations. Such obligations are typically funded by trust funds with upfront cash deposits. Again, if EPA were to duplicate those requirements with an additional long-term financial assurance obligation, it would impose a significant burden on small entities and would mean that less exploration would occur, fewer mines would open, and currently operating mines would close earlier.

The proposed rule, as described by EPA, will also impose substantial administrative and paperwork burdens on small entities. (SBAR Panel Meeting Slide #11) Mine operators in Nevada, both small and large, operating on federally-managed land, which represents 87% of the state's land mass, already hold a federally approved plan of operations, which includes a reclamation plan and an interim closure plan, as well as a reclamation permit and a water pollution control permit from NDEP. Mines located on privately-held land are also required to produce these same plans and obtain these same permits before they can begin operation. A reclamation cost estimate is provided for activities required under both the plan and NDEP

permits. Permits and plans are supported by baseline environmental studies and data, engineering studies, plans and analysis, and substantial supporting documentation. The proposed rule would require operators to provide additional supporting information in a different form or format for EPA's financial responsibility formula, and to obtain, and report on, additional financial assurance. If EPA goes forward with the proposed rulemaking, it should revise the approach in the rule so that operators could submit copies of existing permitting documents rather than be forced to comply with new and different requirements.

Duplication

For Nevada mine operators, the proposed rule duplicates, overlaps with, and conflicts with hard rock mining regulations and financial assurance requirements managed by the BLM (43 C.F.R. Subpart 3809), hard rock mining regulations and financial assurance requirements managed by the USFS (36 C.F.R. Subpart 228), and hard rock mining laws and regulations and financial assurance requirements by NDEP (*Nevada Revised Statutes* [NRS] 445A.300 – NRS 445A.730, NRS 519A.010 – NRS 519A.290, *Nevada Administrative Code* [NAC] 445A.350 – NAC 445A.447, and NAC 519A.010 – 519A.415). Details on these programs were presented to EPA by these agencies at a meeting on June 16, 2016, and have been supplemented by comments from SERs and letters from Governors, state regulatory agencies, and mining trade organizations.

NvMA acknowledges EPA's view that the proposed rule "addresses Section 107 liabilities – response costs, natural resource damages (NRD), and health assessments – and is distinct from closure and reclamation requirements of federal and state mine permit programs." (SBAR Panel Meeting Slide #9) However, closer examination of the activities required for "response costs" and "closure and reclamation requirements" reveals that this is a distinction without a substantive difference, a semantic distinction with no meaning.

This is most conclusively demonstrated by EPA's own formula for calculating financial responsibility. EPA has identified certain activities that will be included as "response costs" in 13 categories. (SBAR Panel Meeting Slide #28 and Slide #32, and Eleven Financial Responsibility Calculations Based on EPA's Current Approach [August 29, 2016]) The 13 categories are (1) solid/hazardous substance disposal; (2) open pit; (3) waste rock; (4) heap/dump leach; (5) tailings facility; (6) process pond/reservoir; (7) underground mine; (8) slag pile; (9) drainage; (10) interim O & M; (11) water treatment; (12) short-term O & M/monitoring; and (13) long-term O & M/ monitoring. The tasks included in these response action categories are exactly the same kinds of tasks that are required by BLM, USFS, and NDEP mine regulatory programs and guaranteed by financial assurance, including backfill, portal closure, earthwork, revegetation, stormwater controls, monitoring, fluid management, and so on. (SBAR Panel Meeting Slide #28) In practice, the same measures that apply to mine operators under BLM, USFS, and NDEP regulatory programs would be implemented in the case of an event that might trigger CERCLA 107 response costs. Those regulatory programs require operators to design, construct, operate, reclaim, and close mine facilities to avoid environmental problems, including the release of hazardous substances. Financial assurance under those programs assures that, if the mine operator does not comply with those requirements, adequate funding is available for

regulators to implement corrective action and prevent or control environmental problems, including releases of hazardous substances.

Financial assurance under these programs is far preferable to the formula developed by EPA because the BLM, USFS, and NDEP calculations account for site-specific tasks (i.e., "response categories") and site-specific conditions through the application of the Nevada Standardized Cost Reclamation Estimator (SRCE). Operation, reclamation, and closure plans, as well as the financial assurance calculations that guarantee performance of those plans in Nevada, also include hands-on review by professional engineers in the regulatory agencies with experience reviewing hundreds of similar plans and calculations. In contrast, EPA's model, which relies on averages or summaries of costs at a relatively small number of dissimilar sites in a variety of environments, will inevitably be incorrect. History has demonstrated that using averages, or per acre calculations for remedial or reclamation costs at large sites, does not accurately portray actual costs. Accordingly, where response categories are covered by existing regulatory programs and financial assurance calculations, EPA's formula should give complete credit for those measures and not require any additional financial assurance.

NvMA has consulted with other SERs who have been preparing a comparison of the response task categories in EPA's financial assurance formula with specific BLM, USFS, and NDEP regulations. NvMA urges EPA to look closely at those comparisons and at the purposes and objectives of the BLM, USFS, and NDEP programs. Those programs exist to assure compliance with environmental standards and, through financial assurance, protect the taxpayers from the costs of environmental management at mine sites, including mine closure and reclamation, and costs associated with response to releases of hazardous substance that might otherwise be recovered under CERCLA. We endorse and join in those comments that compare the EPA financial responsibility formula categories with BLM, USFS, and NDEP programs.

Regulatory Alternatives

EPA has emphasized that a key purpose of CERCLA 108(b) is to assure that owners and operators make financial arrangements to address risks from the hazardous substances at their sites and that the provision requires facilities to establish and maintain evidence of financial responsibility "consistent with the degree and duration or risk" of a release of hazardous substances at those sites. (SBAR Panel Meeting Slide #6) The information presented to the SBAR panel, including the description of the BLM, USFS, and NDEP programs summarized in these comments, suggest an obvious regulatory alternative to EPA's current approach: EPA should exclude, by rule, any facility that is permitted and operated under the BLM, USFS, and NDEP programs, as well as any other state regulatory program that addresses the response task categories in EPA's formula. Such a change would be consistent with the recommendations of BLM and the USFS at the June 16, 2016, meeting; NDEP's comment letter to EPA dated August 17, 2016; and the comments of numerous Governors, state regulators, and trade organizations.

It cannot be disputed that these existing programs require that owners and operators manage environmental issues, including hazardous substances, at their sites and provide financial assurance to guarantee that regulatory agencies have the authority, and if necessary, the funding

to address environmental problems. The degree of risk at a mine permitted and operated under these programs is very small. The duration or risk is also very short—only the time it takes an operator to respond to a compliance or corrective action order, or, if the operator is unable to comply, the time is takes for the agency to act under the financial assurance provisions. There is no aspect of the proposed CERCLA 108(b) rulemaking that diminishes either the degree or the duration of risk below that of the current BLM, USFS, and NDEP programs. Based on experience with the Superfund program, both the degree and duration of risk are less under current mine regulatory programs than any EPA response program under CERCLA.

The proposed rulemaking is needlessly duplicative and ineffective in accomplishing the statutory objective. Accordingly, we request that EPA modify the rule to exempt operations that are covered by adequate regulatory and financial assurance programs.

Thank you for the opportunity submit these comments. Please contact me if you have any questions.

Sincerely,

Dana R. Bennett, PhD
President