United States Senate
WASHINGTON, DC 20510

August 4, 2017

The Honorable Scott Pruitt
Administrator
Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Dear Administrator Pruitt,

We write today to make you aware of concerns related to the proposed rule regarding financial responsibility for hard rock mining under section 108(b) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).[1] The proposed rule fails to recognize the robust federal and state environmental regulations governing hard rock mining that currently exist today. As such, we urge you to conclude this regulatory process by finding that existing state and federal programs appropriately manage financial responsibility for hard rock mining. This outcome will ensure the rule does not undermine financial responsibility programs already taking place in Arizona.

There is a long history of hard rock mining in Arizona and the industry plays a key role in the state's economy. Consequently, Arizona has strong environmental protections in place to ensure responsible mining in the state. For example, the Arizona Department of Environmental Quality (ADEQ) administers the Aquifer Protection Program (APP). This program first started in September of 1989 and protects the state's groundwater resources, the vadose zone, and soils from activities that have a potential to discharge pollutants. One component of the APP is a requirement on mine owners and operators that they demonstrate to ADEQ a "financial capability to construct, operate, close and ensure proper post-closure care of the facility."[2] Specifically, the APP regulates, and imposes liability, for the potential release of hazardous substances, and ADEQ requires owners and operators to demonstrate financial assurances sufficient to cover the costs of closing a facility and any necessary post closure monitoring.

In addition to the APP, Arizona has an Arizona State Mine Inspector (ASMI) who is constitutionally mandated to enforce state mining laws and is responsible for administering the Mined Land Reclamation Act (MLR). ASMI has broad enforcement authority, including the ability to issue compliance orders, suspend reclamation plans, and issue civil penalties. In addition, the APP and MLR programs have been working in concert since 1994 to ensure reclamation of mining lands through imposing financial assurance requirements. Taken together, the APP and ASMI guarantee hard rock mining in Arizona is carried out in an environmentally responsible manner, while ensuring the taxpayer is not financially responsible for post-closure activities.

Enacted in 1980, section 108(b) of CERCLA requires the President to promulgate requirements that certain classes of facilities "establish and maintain evidence of financial responsibility consistent with the degree and duration of risk associated with the production,

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[1] Docket ID EPA-HQ-SFUND-2015-0781
[2] A.A.C. R18-9-A203(B)

transportation, treatment, storage, or disposal of hazardous substances."[3] The intent of this law was to protect the federal taxpayer from the financial burden of environmental investigation and remediation actions. As responsible stewards of taxpayer dollars and advocates for responsible natural resource development, we agree there is a need to enforce financial responsibility on resource extraction industries. However, in the 37 years since CERCLA was enacted, robust financial responsibly requirements have been developed at the state and federal levels. Furthermore, CERCLA 108(b) is drafted in a manner that is compatible with other regulations by not requiring a new EPA program, rather the law simply requires evidence of financial responsibly that is consistent with the degree and duration of risk. Put another way, the EPA is not lawfully authorized to regulate under section 108(b) unless it determines that the requirements they would levy are appropriate to the degree and duration of risk, which involves fully assessing the current state and federal regulatory environment.

The proposed rule[4] published in the Federal Register on January 11, 2017, was issued pursuant to a court order in the case *In re: Idaho Conservation League, et al.*[5] The court order directed the EPA to sign for publication in the Federal Register "a notice of proposed rulemaking," by December 1, 2016, and "a notice of its final action on such regulations" by December 1, 2017.[6] However, the court recognized after analyzing existing regulations that the EPA may not need to promulgate new regulations or a new rule. Specifically, the court wrote in the opinion that the "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."[7] If the EPA found that existing regulations manage the degree and duration of risk and opted not to promulgate a rule, that action would be compliant with the court order in I*n re: Idaho Conservation League, et al.*

After reviewing the voluminous administrative record, including the additional material submitted during the public comment period following the publication of the proposed rule, we believe there is adequate information to demonstrate that sufficient state and federal regulations currently exist. Some will point to CERCLA responses associated with mines that operated under a regulatory environment that predated modern mining laws, but we believe the record does not demonstrate a degree and duration of risk sufficient to justify the nationwide one-size-fits-all approach the EPA has proposed. This is seen in the misapplication of the Memorandum to Docket on Discharges that was used to justify the rule.[8] Rather than reaching back into the late 1970s for data that represent mines in operation before modern regulations, a look at modern mine data in the Memorandum will demonstrate risk reductions associated with state mining regulations. The National Toxic Release Inventory Report data used to justify the rule was similarly misapplied by incorporating the high-volume, low-concentration on-site "releases" which are intentionally placed on on-mine permitted facilities as part of a mine plan. Finally, the EPA ignored existing state regulations for purposes of assessing the degree and duration of risk, but went on to effectively admit the duplicative nature of the proposed rule when accounting for response cost reductions for complying with state regulatory programs. Those western states with significant hard rock mining interests, including Arizona's two state regulatory agencies that regulate hard rock mining whose letters are enclosed, have commented directly to the EPA with a

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[3] 42 U.S.C. 9608(b)(1)
[4] 82 F.R. 3388
[5] No 14-1149, D.C. Cir Ct
[6] Order, Filed on January 29, 2016, No 14-1149, D.C. Cir Ct
[7] *In re: Id. Conservation League, et al. Petitioners* Case No. 14-1149 at 17 (D.C. Cir Ct. January 29, 1016)
[8] Memorandum from Office of Resource Conservation and Recovery Staff to Docket on Releases from Hardrock Mining Facilities (November 22, 2016) (EPA-HQ-SFUND-2015-0781-0497)

full detailing of the state programs, as have many other commenters. Furthermore, on July 20, 2017, the Deputy Director of the ADEQ testified before Congress that no rule was necessary as the Arizona regulatory programs managed the degree and duration of risk that the proposed rule attempts to address.[9]

Due to the key role that hard rock mining plays in Arizona, we are keenly aware of the importance of protecting the taxpayer while allowing for environmentally responsible resource development. However, the administrative record of this rule documents the robust regulatory environment that has developed in the years since CERCLA. In addition, neither CERCLA, nor the court order requires the EPA to promulgate a rule with new financial responsibility regulations. The evidence is clear that additional regulations are not needed and we ask that you conclude the current regulatory process by making a determination that existing federal and state regulations appropriately manage financial responsibility for hard rock mining as set forth in CERCLA Section 108(b). We thank you in advance for your continued time and attention to these issues. As always, we ask that this matter be handled in strict accordance with all applicable agency rules, regulations, and ethical guidelines.

Sincerely,

JEFF FLAKE
United States Senator

JOHN MCCAIN
United States Senator

Enclosures:

1. Arizona Department of Environmental Quality, July 11, 2017, Letter re: Docket ID No. EPA-HQ-SFUND-2015-0781
2. Arizona State Mine Inspector, July 10, 2017, Letter re: Docket ID No. EPA-HQ-SFUND-2015-0781

[9] Oversight Hearing "Seeking Innovative Solutions for the Future of Hardrock Mining," House Committee on Natural Resources, Energy and Mineral Resources Subcommittee, July 20, 2017

ARIZONA DEPARTMENT
OF
ENVIRONMENTAL QUALITY

Douglas A. Ducey
Governor

Misael Cabrera
Director

July 11, 2017

Kenneth E. Wagner
Senior Advisor to the Administrator for Regional & State Affairs
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Mail Code: 1101A, Room 3309A WJCN
Washington, DC 20460

Barnes Johnson
Deputy Director, Office of Superfund Remediation and Technology Innovation, OSWER
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Mail Code: 5301P
Washington, DC 20460

Sonya Sasseville
Office of Land and Emergency Management
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Mail Code: 5303P
Washington, DC 20460

Also submitted to: https://www.regulations.gov/comment?D=EPA-HQ-SFUND-2015-0781-0001; johnson.barnes@epa.gov; sasseville.sonya@epa.gov; davis.patrick@epa.gov; wagner.kenneth@epa.gov

Re: Docket ID No. EPA-HQ-SFUND-2015-0781 (CERCLA 108b Financial Responsibility)

Dear Mr. Wagner, Mr. Johnson and Ms. Sasseville:

The Arizona Department of Environmental Quality (ADEQ) provides the enclosed comments[1] on the U.S. Environmental Protection Agency's (EPA) CERCLA 108b Financial Responsibility for hard rock mining proposed rule (hereafter "proposed CERCLA 108b FR rule" or "proposed rule").[2] ADEQ would first like to express its gratitude and support for EPA's collaborative meeting on May 16, 2017. The multistate meeting in Denver, Colorado hosted by the Western Governors' Association and facilitated by the Interstate Mining Compact Commission, demonstrated that EPA is now truly engaged with states in a dialog to understand the impact of the proposed rule. Based on administrative law, CERCLA 108b and the court order on consent, ADEQ requests EPA rescind or withdraw the proposed CERCLA 108b FR rule, and determine that no EPA action is necessary or appropriate under CERCLA 108b to impose financial responsibility requirements on the mining industry because hardrock mining is already regulated by mature, sophisticated state and federal programs.[3]

EPA's approach to this rulemaking has created significant regulatory uncertainty, undermining critical state programs that serve as the first line of defense in reducing the very same risks EPA seeks to address in the proposed CERCLA 108b FR rule. In formulating the attached detailed comments, three key concepts emerged, which I articulate below to facilitate your review:

Existing robust and sustainable state and federal programs are sufficient: The CERCLA 108b FR rulemaking requirements were enacted in 1980 at a time when hardrock mining operations were either partly or entirely unregulated.[4] EPA's proposed CERCLA 108b FR rules largely ignores mature, sophisticated state and federal land management regulatory permitting programs that have developed in the three-plus decades since the rule authority was first enacted. As the attached detailed comments will demonstrate, these state and federal programs make the proposed rule unnecessary as a matter of fact and law.

This concept is well documented in Arizona. Although EPA's administrative record for the proposed CERCLA 108b FR rule acknowledges the existence of Arizona's Aquifer Protection and Mining Lands Reclamation Act programs, EPA overlooked the broad applicability and effectiveness of these programs in preventing and mitigating risks associate with the hardrock mining industry. In fact, since the development, implementation and integration of these existing

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[1] ADEQ also has attached, and incorporates herein as part of its proposed CERCLA 108b FR rule proposal comments, this letter and its August 17, 2016 letter from Misael Cabrera, ADEQ to Anna Krueger, US EPA and November 16, 2016 letter from Hunter Moore, Office of the Governor to Howard Shelanski, Office of Management and Budget.

[2] 82 Fed. Reg. 3388, *Financial Responsibility Requirements Under CERCLA § 108(b) for Classes of Facilities in the Hardrock Mining Industry* Notice of Proposed Rulemaking, US EPA (January 11, 2017) (amending 40 C.F.R. pt. 320) (https://www.federalregister.gov/documents/2017/01/11/2016-30047/financial-responsibility-requirements-under-cercla-108b-for-classes-of-facilities-in-the-hardrock).

[3] *See In re: Id. Conservation League, et al., Petitioners* Case No. 14-1149 at 17 (D.C. Cir Ct. January 29, 2016) ("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.") (internal quotations omitted) (https://www.cadc.uscourts.gov/internet/opinions.nsf/1F012EA1238D7A3C85257F490054E52E/$file/14-1149-1596081.pdf).

[4] 42 U.S.C. § 9608.

mature, sophisticated state and federal programs, no currently operating mine facility release has triggered a call by ADEQ on a FR mechanism in Arizona. EPA has indicated that the proposed CERCLA 108b rule is not intended to cover closure or reclamation, but would create a risk-based program. This ignores how inextricably intertwined today's state regulatory permitting programs are with CERCLA risk. Proactive state regulatory permitting programs, like Arizona's, have the advantage of identifying the appropriate engineering controls for design, engineering, operation, closure and post-closure. It is also important to note that these regulatory programs continue to evolve to address potential new risks that may arise as hardrock mining industry practices continue to evolve.

Because of the decades of delay in implementing CERCLA 108b FR, other state and federal regulatory structures developed to fill the need, and as a result, the requirement to promulgate a CERCLA 108b FR rule has become antiquated.

Economic and administrative burden outweighs perceived but undemonstrated environmental benefit: EPA's record fails to demonstrate the compelling risk that the proposed CERCLA 108b FR rule is designed to address, or why the rule is necessary, well-conceived, reasonable and justified. The record also fails to balance environmental and taxpayer protections with promotion of an efficient, functioning economy and mining industry. The hardrock mining industry is the economic engine for many Arizona counties, supporting schools, hospitals, jails and other general government functions. In 2014, the Arizona copper industry employed approximately 12,000 people directly and 43,800 in total, and had an estimated direct and indirect impact on the Arizona economy of nearly $4.29 billion.[5]

As already communicated to EPA, ADEQ conducted a financial screening analysis based on the example provided by EPA on May 18, 2016 that suggests the financial impacts to Arizona mines could be extreme-totaling $1.8 billion in additional FR under the proposed CERCLA FR rule for just the two mines modeled.[6] This extraordinarily high financial burden is not warranted given the existing, robust, preventative and largely duplicative state and federal regulatory structure.

EPA's rule making process and technical substance is flawed: EPA's proposed rule is informed by Superfund history, ignoring significant changes that have occurred in the 35 years since CERCLA was enacted. EPA acknowledges that states, including Arizona, already have FR requirements applicable to some of the hardrock mining facilities that would be subject to this proposed rule. EPA fails to acknowledge the federalism implications of the rule, and is placing the burden on states to do the site-specific analyses to determine how any final CERCLA 108b FR requirements overlap with their long-standing state FR requirements. Though more than a third of mines impacted are small businesses, EPA also failed to meaningfully engage small entity representatives to evaluate the impact of the proposed rule on small businesses and assess options for regulatory flexibility. Finally, EPA notes that

[5] L. William Seidman Research Institute, *The Economic Impact of the Mining Industry on the State of Arizona 2014* (Sept. 2015); *see also* Hunter Moore's CERCLA 108b comments to Office of Management and Budget (Nov. 16, 2016) (incorporated and attached as comments).
[6] *See id*. at 7.

it lacked site specific data to estimate financial market capacity, and the reductions that would be available for facilities subject to the rule.

In summary, the existing regulatory programs and associated FR substantially reduce the degree and duration of risk; and EPA's proposed formulaic CERCLA 108b FR rule is an unworkable and flawed approach, which would likely result in years of legal challenges.[7] I close by reiterating my request that EPA exercise its discretion by rescinding or withdrawing the proposed rule, and determining that no action is necessary or appropriate under CERCLA 108b to impose financial responsibility requirements on the mining industry because hardrock mining is already regulated by mature, sophisticated state and federal programs. Thank you for the opportunity to comment.

Sincerely,

Misael Cabrera, P.E.
Director

[7] 82 Fed. Reg. 3403, fn. 46 ("EPA is providing its general views on the preemption issue for transparency and to obtain public comment. It is the courts that would make any final determinations about the preemptive effect of CERCLA 108(b) regulations at any particular facility. These determinations would necessarily be based on case-by-case evaluations.")

Attachment A

ADEQ Comments to EPA's Proposed Rulemaking for CERCLA 108b Financial Responsibility for Classes of Facilities in Hardrock Mining Industry (**Docket ID:** EPA-HQ-SFUND-2015-0781)

I. Financial Impacts of the Proposed CERCLA 108b FR Rules

The proposed CERCLA FR rules will disproportionately affect hard rock mining states. Arizona, as one of a limited number of states where the proposed hard rock mining FR rules will apply, believe the proposed CERCLA FR rules will result in a substantial impact on the overall economy. The most recent analysis indicates that mining activity in 2014 provided a total of 43,800 Arizona jobs and generated $4.29 billion in total income for workers, business and property owners, and governments in Arizona.[1]

Hard rock mining has a great economic impact with a small number of facilities, which exaggerate and concentrate impact on hard rock mining states and their rural communities. Arizona has 14 active hard rock mining projects with 6 additional projects in permitting. In 2014, Arizona mines produced approximately 65% of the nation's newly-mined copper, along with significant amounts of associated valuable co-products (*e.g.,* gold, silver, selenium, tellurium and molybdenum).

Overall, income per worker in the mining industry is $102,860 which is double the average income per worker across all industries in Arizona. Most of the mines in Arizona are located in rural counties and in many are the highest contributor to the local tax base. If the continued operation of the mines in Arizona are severely impacted because of an ill-conceived CERCLA 108(b) rule, it will gravely affect the economic livelihood of those rural Arizona counties.

II. Litigation Driven Rulemaking Violates Spirit of Notice and Comment Process

On March 11, 2008 NGOs filed a suit that resulted in EPA publishing a 2009 priority notice for development of CERCLA 108b FR concluding hardrock mining facilities should be first. Dissatisfied with progress on the CERCLA 108b FR rulemaking EPA was sued by NGOs, including the Idaho Conservation League, in 2014 that led to the expedited schedule EPA agreed to for proposed rules publication by December 1, 2016, and final rule by December 1, 2017.[2] EPA intends that the proposed rules will prevent owners or operators from shifting the burden of cleanup to other parties, including the taxpayer.[3] Importantly, hardrock mining is just the first industry for which EPA is proposing rules, having already published a notice of intent to proceed with rulemakings for three addition industries. EPA is setting a precedent with this rulemaking, and setting a path for future CERCLA 108b FR.[4]

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[1] *The Economic Impact of the Mining Industry on the State of Arizona 2014*, L. William Seidman Research Institute, Arizona State University (Sept 2015) http://www.azmining.com/uploads/AMA%20report%202014%20v2%20.pdf.

[2] 82 Fed. Reg. 3388 at 3397 (January 11, 2017).

[3] *Id*. at 3388.

[4] *See* 82 Fed. Reg. 3512 (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.).

Under APA notice and comment requirements, "[a]mong the information that must be revealed for public evaluation are the 'technical studies and data' upon which the agency relies."[5] Further, "[i]n order to allow for useful criticism, it is especially important for the agency to identify and make available technical studies and data that it has employed in reaching the decisions to propose particular rules."[6] In the rule proposal notice process the immense docket continues to grow daily during the comment period. Initially, on January 11, EPA provided 504 documents spanning 46,000 pages to review. As of February 8, the docket included 2,296 documents, exceeding 230,000 pages and is currently 2,335 documents.

EPA had years to address meaningful involvement of states and to move away from a duplicative one-size-fits-all approach. United States Senator Lisa Murkowski, Chairman of the Senate Committee on Energy and Natural Resources sent a letter as early as 2011 expressing these very concerns and citing to a National Research Council report from 1999 that found that "simple 'one-size-fits-all' solutions are impractical because mining confronts too great an assortment of site-specific, technical, environmental, and social conditions."[7] Modern mining operations are designed and engineered employing proactive management practices, and conduct operations and maintenance that prevents the release of hazardous substances and reducing the relative risk the proposed CERCLA 108b FR encompasses. ADEQ agrees with the SBA, Office of Advocacy comments that current programs' "[a]daptive management requirements require pre-emptive actions to avoid releases into the environment." [8] "As a result of the currently required monitoring, reporting and periodic inspections, regulators are able to respond to potential and actual releases."[9] "The report of the National Research Council (NRC) in 1999 concluded that the modern regulatory controls adopted by Federal and state agencies would effectively address the environmental releases."[10]

The docket also contains evidence EPA knows and has notice these parallel programs are working. SER comments include reports to Congress from the respective FLMA's stating "[t]hese 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."[11] "In other words, the BLM, USFS and states' requirements are the 'functional equivalent' of a CERCLA 108(b) financial responsibility rule."[12] "The fact that no hardrock mining or beneficiation plan of

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[5] *Chamber of Commerce v. SEC*, 443 F.3d 890, 899 (D.C. Cir. 2006) (citation omitted).
[6] *Conn. Light & Power Co. v. NRC*, 673 F.2d 525, 530 (D.C. Cir. 1982).
[7] *CERCLA 108(b) Hardrock Mining Panel Report*, Appendix B at 120 (Letter from US Senator Lisa Murkowski, (R-AK), Chairman of Committee on Energy and Natural Resources at 2. (March 8, 2011)).
[8] *See* SBA, Office of Advocacy January 19, 2017 letter to EPA Administrator, Gina McCarthy at 6. (hereafter "SBA, Office of Advocacy letter").
[9] *Id*.
[10] *Id*.; *see also Hardrock Mining on Federal Lands*, National Research Council, National Academy of Sciences (1999) (https://www.nap.edu/catalog/9682/hardrock-mining-on-federal-lands).
[11] *CERCLA 108(b) Hardrock Mining Panel Report*, Appendix B at 69 (Laura Skaer, AM&EA SER Comment letter at 2).
[12] *Id*.

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."[13]

EPA asserted in its 2009 Notice, the "identification of hardrock mining [was] not itself a rule", so EPA did not have to solicit any public comments, including comments analyzing state programs that already eliminate or mitigate potential environmental or human health risks at mines.[14] Therefore, ADEQ believes EPA should consider the inclusion of hardrock mining facilities in the proposed CERCLA 108b FR rules as both open and ripe for comment.

EPA has not sufficiently identified or quantified the duplicative and preventative nature of existing regulatory and permit programs' required operational controls and closure plans that mitigate or eliminate the risk of CERCLA liability. Examples from Alaska to New Mexico, and BLM to USFS demonstrate CERCLA Financial Responsibility (FR) is duplicative of existing FR bonds. In Arizona, for example, facilities have to demonstrate compliance with operational, closure and post-closure requirements.[15] The total cost of the proposed CERCLA 108b FR rules is not justified, nor the risk and uncertainty around the scope of state regulatory program financial responsibility preemption.

EPA continues to express that the CERCLA 108b is independent of existing state and federal mine permitting and financial assurance programs. This conclusion is founded on the premise that existing programs address remediation of planned mining operations while CERCLA 108b FR will address the relative risk of unanticipated releases. Under modern mining regulation, the line between the relative risk the proposed rule purports to address, and response activities managed concurrently during mining operations is mitigated by a focus on preventing releases during operations and post-closure requirements.

In reducing the immensity of the docket, EPA's process in developing the proposed rules is based on the central premise that past mining history resulted in CERCLA liability that should be reflected in FR amounts required by CERCLA 108b of modern mining operations. In doing so, EPA failed to seek an approach that fit the data limitations and acknowledge the post-CERCLA regulatory framework that has evolved within the past 35 years. EPA should recognize the existing state regulatory framework that prevents and reduces the relative risk of releases that has grown in the 35-plus years since CERCLA was adopted.

III. Arizona's Financial Assurance and Regulatory Permit Programs Mitigate Risk

[13] SBA, Office of Advocacy letter at 4.
[14] 74 Fed. Reg. 37,213, 37,214 & n.5 (July 28, 2009)
[15] *See e.g.*, A.R.S. § 49-243(N)(3) ("Except for a state or federal agency or a county, city, town or other local governmental entity, the applicant or permittee shall demonstrate financial responsibility to cover the estimated costs to close the facility and, if necessary, to conduct postclosure monitoring and maintenance …")

Arizona and other states have accumulated decades of experience regulating and working with hardrock mining facilities to prevent potential releases to the environment. State programs have been amended and improved to adopt best available controls and fill gaps over the years, both at the statutory and regulatory level.

Arizona imposes financial responsibility that addresses many potential sources of "hazardous substances" (*e.g.*, tailing pond and heap leach facilities) over the entire lifetime of a typical hardrock mine under Arizona's Aquifer Protection Permit ("APP") and Mined Land Reclamation programs, but its oversight and rules do not end there, as explained below.

In contrast, CERCLA and EPA's implementing regulations have never been applied to create financial assurance and operating design and engineering requirements. Similarly, EPA has never been a permitting and oversight agency for production practices at modern hardrock mines. Thus, EPA lacks experience, personnel and budget to implement a program that ultimately is unnecessary given state programs and proximity to the actual activity.

Below, ADEQ details the most significant regulatory programs that it implements to address the same risks that EPA purports to address through the substantive terms of the proposed CERCLA 108b FR rule, including Arizona's financial assurance provisions that govern hardrock mining.

a. Arizona's Aquifer Protection Program FR and Mine Life-Cycle Regulation

ADEQ already protects the state's groundwater resources, the vadose zone, and soils from activities that have a potential to discharge pollutants through its APP program. Arizona's APP program is a mature program that became fully effective on September 27, 1989.[16] The three central requirements for an individual APP permit are (1) the protection of aquifer water quality standards (AWQS) at the applicable Point of Compliance, (2) the implementation of best available demonstrated control technology ("BADCT"), and (3) the provision of financial assurance to cover closure of all discharging facilities and, if necessary, to conduct postclosure monitoring and maintenance.

The APP regulations further provide that owners or operators of discharging facilities must demonstrate "financial capability to construct, operate, close and ensure proper post-closure care of the facility."[17] Financial assurance mechanisms are required to be issued in the name of ADEQ.[18] Specifically, the owner or operator of any discharging facility required to obtain an individual APP must provide a financial assurance mechanism to ADEQ sufficient to cover the

[16] A.R.S. §§ 49-241 to 252; 18 A.A.C. 9, Arts. 1-3 & 18, A.A.C. 11, Art. 4. (The APP program requires a "facility" that "discharges" to obtain an APP permit. (A "facility" is defined to include "any land, building, installation, structure, equipment, device, conveyance, area, source, activity or practice from which there is, or with reasonable probability may be, a discharge." A "discharge" is defined as "the addition of a pollutant from a facility either directly to an aquifer or to the land surface or the vadose zone in such a manner that there is a reasonable probability that the pollutant will reach an aquifer.").

[17] A.A.C. R18-9-A203(B).

[18] A.A.C. R18-9-A203(C)(2)(d), (3)(c), (4)(a), (5)(c), (6)(g), (7), (8)(a)(vii).

costs to close the discharging facility and to conduct necessary postclosure monitoring and maintenance prior to receiving approval to operate.[19]

Permittees also are required to regularly demonstrate maintenance of financial assurance to ADEQ.[20] Additionally, if ADEQ believes that a permittee has the potential to lose its financial capability, ADEQ can require evidence of financial assurance or an alternative financial assurance mechanism.[21] Permittees only are allowed to substitute financial assurance mechanisms if the substitute mechanism has been approved through a permit amendment.[22] ADEQ has broad permit revocation and enforcement powers in the event of any potential financial assurance default.[23]

Arizona's APP program protects aquifers by ensuring that facilities are designed, constructed, operated, maintained and closed in a fashion that ensure that potential discharges of pollutants to an aquifer or the vadose zone are properly controlled or eliminated.[24] The APP program regulates, and imposes liability for, the potential release of hazardous substances. The APP program imposes financial assurance for facilities that are subject to individual APP requirements, and requires that it be posted before operations commence. Mining facilities are clearly within the scope of the APP program, and ADEQ has refined and enhanced the APP program over time to account for specific types of mine features.[25]

The term "pollutant" is defined broadly to include, among other things, any liquid, solid, gaseous, or hazardous substance.[26] Therefore, Arizona's programs address the universe of facilities and the substances within the scope of the proposed CERCLA 108b FR rules.

Certain facilities are categorically defined as "discharging facilities" that must be operated pursuant to an individual or general APP. Categorical discharging facilities automatically regulated by the APP program include features common to EPA's proposed CERCLA 108b FR rules.[27] Facilities not within the mandatory permit categories listed above *still* must obtain an

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[19] A.R.S. § 49-243(N)(3).
[20] A.R.S. § 49-243(N)(4).
[21] A.A.C. R18-9-A203(D).
[22] A.A.C. R18-9-A203(E), (F).
[23] A.R.S. §§ 49-261 to -263; A.A.C. R18-9-110(B) & R18-9-A213(A)(5).
[24] *Id.* § 49-223(A).(The APP program presumptively classifies all aquifers as drinking water sources. Because all aquifers in Arizona are presumed to be drinking water aquifers, the primary drinking water maximum contaminant levels ("MCLs") under the federal Safe Drinking Water Act, as of 1985, have been adopted as numeric AWQS. Moreover, if additional MCLs are developed by EPA after 1985, ADEQ is required to adopt them as AWQS within one year after their adoption, unless ADEQ affirmatively determines that there is no scientific evidence to support the new MCL.).
[25] *See, e.g.*, A.R.S. § 49-243.G (imposing specific conditions for mine pits).
[26] A.R.S. § 49-201(29).
[27] Features such as (1) surface impoundments including holding, storage, settling, treatment or disposal pits, ponds and lagoons; (2) solid waste disposal facilities (except for mining overburden and wall rock that has not been and will not be subject to leaching); (3) injection wells; (4) land treatment facilities; (5) facilities which add a pollutant to a salt dome formation, salt bed formation, dry well, or underground cave or mine; (6) mine tailings piles and ponds; (7) mine leaching operations; (8) underground water storage facilities;; (9) sewage treatment facilities,

APP if there is a reasonable probability that a "discharge" of a "pollutant" from the facility will reach an aquifer.[28]

In addition to protecting AWQSs at the applicable POC, an individual APP applicant must show that its facility is designed, constructed, and operated to ensure the greatest degree of discharge reduction achievable through the application of BADCT, including, where practicable, a technology prohibiting the discharge of all pollutants.[29] A facility must provide substantial, detailed, site- and facility-specific information as part of the APP application and amendment processes. For instance, applications generally require the submission of facility-specific information such as as-built drawings, information detailing how the facility will be operated, existing and proposed pollutant control measures, potential pollutants and closure strategy.[30] Furthermore, site-specific information must include a hydrogeologic study of the discharge impact area, as well as information about the groundwater quality in the area and the use of water from aquifers in the area.[31] Also required is information such as detailed maps that show property lines, topography, and all types of wells and points of compliance; facility design documents; detailed information about known past discharges; and, detailed information about the BADCT to be used at the facility.[32] ADEQ's Revenue Audit Supervisor in the Business and Finance Office examines the sufficiency of the proposed financial assurance mechanism.

ADEQ has developed a BADCT Guidance Document specifically for mining facilities. That Guidance Document, which runs hundreds of pages in length, establishes prescriptive and individual BADCT requirements for the main types of discharging facilities found at mining operations (*e.g.*, non-stormwater ponds, process solution ponds, heap leach pads, tailing impoundments, dump leaching facilities, in-situ leaching). [33]

Moreover, the BADCT guidance provides approaches for sampling and addressing potentially-impacted soil at ponds that could impact groundwater. It states that, where required, permittees must conduct soil remediation to prevent groundwater impacts, underscoring the multi-media scope of the analysis. If soil remediation is required, residual soil conditions must be reviewed and approved by ADEQ after it is completed (followed by, *e.g.*, filling and grading to minimize future infiltration).

"Postclosure monitoring and maintenance" are activities conducted after closure notification that are necessary to (1) keep the facility in compliance with AWQS at the applicable POC, (2) verify that actions or controls specified as closure requirements in an approved closure plan are routinely inspected and maintained, (3) perform any remedial, mitigative, or corrective actions

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including on-site wastewater treatment facilities; and (10) wetlands designed and constructed to treat municipal and domestic wastewater for underground storage.

[28] *Id.* § 49-241(A).

[29] *Id.* § 49-243(B)(1).

[30] *See id*. § 49-243(A).

[31] *See id*.

[32] A.A.C. R18-9-A202.

[33] *See* "Arizona Mining Guidance Manual – BADCT (2006), *available at* www.azdeq.gov/environ/water/wastewater/download/badctmanual.pdf.

or controls as specified in the APP or as necessary to comply with the APP statute, and (4) meet property use restrictions.[34]

Typically, in order for a discharging facility to no longer require permit coverage and associated financial responsibility, it must have undergone "clean closure."[35] "Clean closure" means "implementation of all actions specified in an aquifer protection permit, if any as closure requirements, as well as elimination, to the greatest degree practicable, of any reasonable probability of further discharge from the facility and of either exceeding aquifer water quality standards to the applicable point of compliance or, if an aquifer water quality standard is exceed at the time the permit is issued, causing further degradation of the aquifer at the application point of compliance . . ."[36] "Clean closure" also means "post-closure monitoring and maintenance are unnecessary to meet the requirements in an [APP]."[37] As noted above, ADEQ's BADCT Guidance Document has provisions for soil remediation as part of the closure process for non-stormwater and process pond mine facilities, to the extent that soils could have a potential to discharge pollutants to groundwater.

Clean closure may be approved by ADEQ for a former discharging facility if the following conditions are met: (1) The closure complies with all the terms of an existing individual APP; (2) The closure eliminates all discharges from the facility to the greatest degree practical; (3) There is no reasonable probability that the facility will exceed AWQS)at the applicable POC due to a discharge; and (4) As closed, the facility does not require post-closure monitoring or maintenance.[38]

As part of the application process for clean closure approval, ADEQ generally requires that permittees submit a description of any anticipated remediation activity(s) to be implemented, including if applicable soil remediation levels or groundwater protection levels are exceeded for contaminants detected during the investigation.

The APP financial assurance requirement, like the proposed CERCLA 108b FR rule requirement, is intended to help protect the taxpayers from bearing the costs of unpermitted discharges to the environment. In addition, ADEQ has broad enforcement options to respond to a noncompliant company or permittee, including issuance and enforcement of compliance orders, suspension, withdrawal, or revocation of permit coverage, injunctive relief, and imposition of civil penalties.[39]

EPA did not submit any information to the administrative record that questioned whether ADEQ has adequately implemented the APP program, or name any particular mining operation that is not already covered by that program. Therefore, ADEQ believes that the existing information in the administrative record clearly stands for the proposition that Arizona's APP program (among

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[34] A.R.S. § 49-201(30).
[35] *See* A.A.C. R18-9-A209(B)(4)(a), (C)(2)(c).
[36] A.R.S. § 49-201(5).
[37] *Id*.
[38] *See* A.R.S. § 49-201(5).
[39] *See* A.R.S. §§ 49-261 to -263; A.A.C. R18-9-110(B), R18-9-A213(A).

other State programs) already exists to address the same types of risks at hardrock mining operations that EPA is targeting in the proposed CERCLA 108b FR rules. In sum, Arizona's APP regulatory program is much more detailed than the proposed CERCLA 108b FR rules generally applicable design requirements and financial formula, and protects against the risk the proposed CERCLA 108b FR rules encompass.

b. Arizona's Mined Land Reclamation Act Further Protects Against CERCLA Risk

The MLR program was intended to complete a comprehensive scheme of Arizona and federal laws and regulations that govern the environmental performance and reclamation of hard rock mining and exploration operations in Arizona to protect public health and safety and the environment. Existing Arizona and federal laws and regulations extensively regulate the environmental performance of mines in the State to protect public health and safety and the environment. Arizona's Mined Land Reclamation ("MLR") program of 1994, was not intended to replace or duplicate statutory provisions relating to environmental protection such as the APP program.[40] Arizona's MLR program imposes reclamation and financial assurance requirements that cover the life of a hardrock mine above Arizona's APP further serving to protect the environment.[41]

The purpose of the MLR program is to provide for the reclamation of land that is being mined and to fill the gap in existing laws by requiring the reclamation of land that currently is being mined or that has been mined since January 1, 1986, to provide for future land use. Arizona's MLR program applies to mining operations that are larger than five acres and requires such operations to conduct reclamation of surface disturbances to achieve a safe and stable condition consistent with the post-mining land uses specified in a reclamation plan.[42]

The MLR reclamation plan for mining operations must include, among other things, (1) proposed reclamation measures to achieve the proposed post-mining land use including measures to (a) restrict public access to pits, adits, shafts, and other safety hazards, (b) achieve erosion control and stability, (c) address revegetation and conservation, and (d) promote wildlife or fish habitat for surface disturbances where the proposed post-mining land use objective is designated as grazing, fish or wildlife habitat, forestry, or recreation, and (2) estimated costs to perform each of the proposed reclamation measures for purposes of determining financial assurance.[43]

Arizona's MLR program that duplicates financial assurance required under other federal or state laws.[44] The owner or operator of any mining operation subject to Arizona's MLR program must

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[40] *See* A.R.S. § 27-902(B).

[41] *See* A.R.S. §§ 27-901 to 27-1026; 11 A.A.C. 2.

[42] *See id.* § 27-901(13) ("Reclamation" is defined to include any "measures that are taken on surface disturbances at exploration operations and mining units to achieve stability and safety consistent with post-mining land use objectives specified in the reclamation plan." "Surface disturbance" means "clearing, covering or moving land by means of mechanized earth-moving equipment for mineral exploration, development and production purposes." "Stability" requires erosion control and the ability to withstand seismic activity.)

[43] *Id.* § 27-971(B)(9), (11).

[44] *Id*. § 27-994.

transmit a financial assurance mechanism to the ASMI within 60 days after a reclamation plan receives agency approval. The financial assurance mechanism must equal the cost to perform the reclamation measures stated in the approved reclamation plan. The financial assurance for exploration operations and mining units is a presumptive amount of $2,000 per acre.[45]

When calculating reclamation costs, the ASMI will assume that third parties will perform the reclamation measures unless the owner or operator demonstrates certain financial ability to perform the reclamation measures.[46] This amount can be reduced to the costs of the owner or operator to perform the reclamation if sufficient financial ability is demonstrated. The amount of financial assurance required will be adjusted by the agency at least once every 5 years to provide for reclamation of new areas of planned surface disturbances, inflation, and changed costs associated with modifications to the approved reclamation plan.[47] Amount of FR for mining operations is based on estimated costs in current dollars for (1) performing the approved reclamation measures stated in the reclamation plan and (2) providing continued care and monitoring of the acres stated in the reclamation plan for revegetation for up to three growing seasons after reclamation has been completed.[48]

When calculating reclamation costs, all activities in the mine's reclamation plan must be addressed including: (1) earth moving, regarding, and stabilization of surface disturbances; (2) revegetation, preparation of seedbed, and planting; (3) demolition of buildings and other structures; (4) any ongoing or long-term activity which area required to maintain the effectiveness of reclamation or are necessary in place of reclamation, including periodic clean-out of sediment basins or maintenance of berms and fences which are used to prevent access to areas which pose a threat to public safety; (5) equipment mobilization and demobilization (7) contractor profit; and (8) administrative overhead.[49] Finally, owners or operators of mining operations must provide the source of all estimated costs as well as documentation for the calculation of such costs.[50]

Any, or a combination, of financial mechanisms common to other financial responsibility programs are acceptable under the MLR program.[51] The owner or operator of a mining operation may apply for release of all or part of financial assurance by describing which reclamation measures have been performed and which, if any, surface disturbances included in an approved reclamation plan have not been disturbed. This application must contain an estimate of the costs

[45] *See* A.R.S. § 27-993(A).
[46] A.R.S. § 27-992(B).
[47] A.R.S. §§ 27-992, 27-993, A.A.C. R11-2-802.
[48] A.R.S. § 27-992(C).
[49] A.A.C. R11-2-802(A).
[50] A.A.C. R11-2-802(B).
[51] A.R.S. § 27-991(B) ((1) surety bond; (2) certificate of deposit; (3) trust fund with pay-in period; (4) letter of credit; (5) insurance policy; (6) certificate of self-insurance; (7) cash deposit with the State Treasurer; (8) evidence of ability to provide self-insurance or corporate guarantee; (9) annuities; and (10) other mechanisms approved by the ASMI. The specific conditions necessary to qualify for these mechanisms are set forth in A.A.C. R11-2-804 through R11-2-812.).

of reclamation measures that have not been performed.[52] Within 60 days of receiving a complete application for release, the ASMI will inspect the operation or project and either approve or deny the request.[53] Funds covered by a financial mechanism also can be released to the owner or operator of a mining operation upon receipt by the ASMI of an alternate financial assurance mechanism that meets the requirements of Arizona's MLR program.[54]

Under the MLR program, financial assurance may be forfeited in specific occurrences.[55] ASMI has broad enforcement options under Arizona's MLR program that it can take against a noncompliant company, including issuance and enforcement of compliance orders, suspension, withdrawal, or revocation of reclamation plan approval, injunctive relief, and imposition of civil penalties.[56]

Significantly for the proposed CERCLA 108b FR rule, the MLR statute specifically provides that financial assurance is not required under the MLR program if the financial assurance would duplicate financial assurance required under other state or federal laws.[57] An owner or operator of a mining operation could submit a formal request to the ASMI for release of MLR financial assurance on the grounds that it duplicates financial assurance required under another governmental program.[58]

c. State Lands Reclamation Bonding Program

Separately and additionally, Arizona State Trust Land lessees who conduct hard rock mining are required to post a reclamation bond and generally provide other financial assurances.[59] Significantly, Arizona's separate law protecting its State Trust Land requires that a bond be provided in "a reasonable principal amount" for the purpose of protecting against "damage to lands, livestock, water, crops or other tangible improvements."[60] This is in addition to the APP and MLR program provisions outlined above. The Arizona State Land Department manages approximately 9 million acres in Arizona pursuant to a trust created by the Arizona Enabling Act and Constitution. Applicants and lessees who fail to post a bond are deemed to have forfeited their lease.[61]

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[52] *Id*. § 27-996(A).
[53] A.A.C. R11-2-817(B).
[54] *Id*. R11-2-817(E).
[55] *Id*. R11-2-818(A) ((1) reclamation is not timely initiated after completion or closure of the exploration operation or mining unit; (2) reclamation is stopped or suspended after completion or closure of the operation or unit; (3) the operator stops business operations in Arizona and does not transfer an approved reclamation plan to a new operator; (4) the operator stops business operations because of insolvency, bankruptcy, receivership, or misconduct; (5) the operator does not comply with the terms of the financial assurance mechanism; or (6) the owner or operator fails to reclaim surface disturbances as required by the reclamation plan or applicable regulations.).
[56] A.R.S. §§ 27-1021 to 27-1026.
[57] *Id*. § 27-994.
[58] *See id*. § 27-996.
[59] *See* A.A.C. R12-5-1805(I).
[60] *Id.*
[61] *See id.*

d. Additional Protections of the Clean Water Act

Arizona also has separate regulatory programs — or has successfully attained regulatory primacy over federal programs — that extend the State's multi-media regulation of potential "hazardous substances" releases (*e.g.*, via the Arizona Pollutant Discharge Elimination System ("AZPDES"), for protection of surface waters) to eliminate or mitigate an array of potential human health and/or environmental risks that were raised by historical mining practices.

In addition to the broad protections and responsibilities created by Arizona's APP and MLR programs, AZPDES program protects surface waters from potential pollutant discharges in accordance with the federal Clean Water Act ("CWA"). The CWA enabled EPA to authorize states to administer their own NPDES-equivalent permit programs; however, to gain regulatory primacy, a State must demonstrate that it has the necessary authority and a program sufficient to meet the Act's requirements.[62]

Under Section 402 of the CWA, ADEQ has attained federal authorization to regulate "point source" discharges of pollutants to surface waters by issuing AZPDES permits. ADEQ adopted the regulatory requirements for the national NPDES program by regulation.[63] Again, this underscores that ADEQ provides multi-media oversight and regulation of potential "hazardous substance" releases from hardrock mines in Arizona.[64]

Prospective discharging facilities in Arizona, including hardrock mines, must comply with the CWA by obtaining coverage under an individual AZPDES permit. When reviewing individual permit applications, ADEQ generally considers: (1) applicable technology-based effluent limitations that should apply, and (2) water quality based effluent limits. To the extent that stormwater runoff exists at areas on the periphery of a mine, they typically are managed under the AZPDES General Permit for Stormwater Discharges Associated with Industrial Activity from the Mineral Industry.

e. ADEQ's Solid and Hazardous Waste Programs Risk Mitigation

In addition to the above protections, ADEQ has attained regulatory primacy to protect environmental media through its solid and hazardous waste programs, which are equally protective or more stringent than the respective federal programs. States have a continuing obligation to maintain hazardous waste programs that are equivalent to, consistent with, and no less stringent than the federal hazardous waste program.[65] These programs are primarily intended to protect human health and environmental receptors from the improper disposal of solid waste and hazardous waste in or on the land, and impose stringent management requirements and procedures for the generation, transportation, treatment, storage, and

[62] *See 33 U.S.C.* § 1342(b)-(c).
[63] *See* A.R.S. 49, Ch. 2, Art. 3.1; 18 A.A.C. 9, Art. 9 (effective Feb. 2, 2004).
[64] EPA authorized the State of Arizona to administer NPDES requirements through the AZPDES program on December 5, 2002. 67 Fed. Reg. 79,629 (Dec. 30, 2002).
[65] *See* 42 U.S.C. § 6926 *et seq.*

ultimate disposal of solid and hazardous wastes.[66] ADEQ has attained authorization to implement the Resource Conservation & Recovery Act ("RCRA") "hazardous waste" program in Arizona, and oversee federal "hazardous waste" requirements within the State.[67]ADEQ has adopted, with minor exceptions, the bulk of EPA's federal regulations under RCRA.[68]

f. Natural Resources Damages Coverages

Arizona also has assumed responsibility for addressing potential Natural Resource Damages ("NRD") that may arise from mining activities, and has experience with successfully resolving NRD claims related to prior mining activities. Arizona's state natural resource trustee is the Director of ADEQ. As the state trustee, the Director has authority, to take all actions necessary to carry out the responsibilities of the natural resource trustee provided under CERCLA. [69] This includes actions for the recovery of damages and related costs for injury to, destruction of, or loss of the State's natural resources.

ADEQ has experience with developing and successfully resolving NRD claims related to mining activities. For instance, during the Chapter 11 reorganization of ASARCO LLC, the State successfully settled claims regarding two ASARCO-related active sites that had each been operating for over a century for approximately $30 million in 2009.[70] The NRD portion of the settlement, according to the terms filed with the United States Bankruptcy Court for the Southern District of Texas, included about $4 million in unsecured claims (ultimately paid in full) and the transfer of approximately 1,000 acres, valued between $3 million and $4 million, to the Arizona Game and Fish Commission for the preservation of wildlife.[71]

Similarly, in 2012, the State reached a $6.8 million settlement with Freeport-McMoRan Corporation related to potential injuries to natural resources that related to alleged hazardous substance releases at and from the company's Morenci Mine site in eastern Arizona.[72] Settlement funds ultimately have been applied to the restoration of aquatic and wildlife populations and their habitat. Therefore, Arizona has demonstrated the authority and experience to properly address NRD issues that may potentially arise in the future from mining activities within the State.

g. Clean Air Act Protections Against Significant Harm to Health and Safety of the Public

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[66] *See id.* § 6901(b).
[67] *See* 40 C.F.R. § 272.151.
[68] *See* A.R.S. §§ 49-701 *et seq.* and 49-901 *et seq.*; 18 A.A.C. 8 & 13 (ADEQ also has entered a Memorandum of Agreement with EPA Region IX (dated June 20, 1991) regarding implementation of the "hazardous waste" program within the State).
[69] *See* A.R.S. §§ 49-282 and 49-287.
[70] *See In re Asarco LLC*, No. 05-21207, "Settlement Agreement Regarding Natural Resource Damage Claims for Mineral Creek, the Gila River, and The San Pedro River, Arizona" (S.D. Tex. Barkr. filed March 2009) *available at* https://legacy.azdeq.gov/function/news/2009/download/0519az.pdf.
[71] *See id.*
[72] *See United States v. Freeport-McMoRan Corp.*, No. 12-CV-00307, "Consent Decree" (D. Ariz. filed April 23, 2012), *available at* https://www.justice.gov/iso/opa/resources/732012424164128438296.pdf.

Arizona has been delegated the authority to implement CAA programs, such as New Source Performance Standards ("NSPS") and National Emissions Standards for Hazardous Air Pollutants ("NESHAP") programs.[73] The CAA also requires permits for construction and modification of sources in nonattainment and attainment under the New Source Review program.[74]

Arizona Revised Statutes Title 49, Chapter 3, Articles 1, 2, and 3 establish ADEQ and local agency authority for preconstruction review and permitting. Title V of the CAA requires major sources of air pollutants, and certain other sources, to obtain and operate in compliance with an operating permit. Title V operating permits incorporate all applicable requirements, including applicable federal requirements (*i.e.*, NSPS, NESHAP, and the Accidental Release Program under 40 C.F.R. Part 68) as well as applicable state, county, and local rules. ADEQ and the county agencies received full approval of the Title V Operating Permit Program under 40 C.F.R. Part 70.[75]

Arizona has an approved Emergency Episode Plan, which EPA found to be substantively identical to CAA § 110(a)(2)(G).[76] These procedures are implemented by the Director in order to prevent the occurrence of ambient air pollutant concentrations which would cause significant harm to the health and safety of the public. ADEQ would notify the public in the case that "significant harm" levels were exceeded as provided in the rule.[77]

Finally, to the extent that ADEQ does not already have regulatory primacy under federal law, it has been diligently seeking such authorization, including for programs directly relevant to mining.[78] Thus, ADEQ asserts there are virtually no gaps to fill by proposing CERCLA 108b rules.

IV. Proposed CERCLA 108b FR Rulemaking Flaws

a. Failure to Comply with Executive Order 13132: Federalism

EPA expressly avoided the administrative burden of a tailored rule, though EPA acknowledges that state and FLMA permit programs have "the advantage of identifying the appropriate engineering controls for closure before they become necessary."[79] First, EPA failed to conduct a "case-by-case evaluation of each facility to determine the appropriate engineering controls that CERCLA might require, and then … compare that set of controls to any applicable regulatory requirements, such as state or Federal reclamation requirements."[80] Second, because of the difficulty EPA failed "to create a CERCLA § 108(b) financial responsibility instrument that would be written to cover only the particular 'gaps' the Agency sought to cover for each engineering

[73] *See* 40 C.F.R. Pts. 60 & 63.
[74] *See* 80 Fed. Reg. 67,319 (Nov. 2, 2015) (ADEQ has obtained partial approval/partial disapproval of their NSR/PSD permitting program and is in the process of submitting revised rules for approval by EPA).
[75] *See* 66 Fed. Reg. 63,175 (Dec. 5, 2001).
[76] *See* 77 Fed. Reg. 62,452 (Oct. 15, 2012).
[77] *See* A.A.C. R18-2-220.
[78] *See, e.g.*, A.R.S. § 49-203(A)(5) (authorizing ADEQ to pursue primacy for "the permit program for underground injection control described in the [federal] safe drinking water act").
[79] *See id*.
[80] *See id*.

requirement at a facility without having the instrument overlap with other requirements given that some closure programs conduct activities that reduce CERCLA risks."[81]

Congress has taken a keen interest in the impact of this rulemaking. EPA driven by a litigation deadline, despite the level of stakeholder interest, is pushing ahead with this rulemaking, requesting an immense amount of review and requesting specific comment in a 60-day comment timeline.[82]

Executive Order 13132, *Federalism* requires EPA to develop an accountable process to ensure "meaningful and timely input by state and local officials in the development of regulatory policies that have federalism implications."[83] "Policies that have federalism implications" is defined in the Executive Order to include regulations that have "substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government."[84]

"Under Executive Order 13132, EPA may not issue a regulation that has federalism implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the

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[81] *Id*.

[82] Ultimately, EPA has chosen to extend the deadline by 120-days, to July 11, 2017.

[83] *Regulatory Impact Analysis of Financial Responsibility Requirements under CERCLA § 108b for Classes of Facilities in the Hardrock Mining Industry Proposed Rule*, US EPA at 8-13 (Dec. 1, 2016) (hereafter "EPA RIA"); *also see* EO 13132 64 FR 43255 (August 10, 1999) (Sec. 3. *Federalism Policymaking Criteria.* In addition to adhering to the fundamental federalism principles set forth in section 2, agencies shall adhere, to the extent permitted by law, to the following criteria when formulating and implementing policies that have federalism implications:
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(b) …Where there are significant uncertainties as to whether national action is authorized or appropriate, agencies shall consult with appropriate State and local officials to determine whether Federal objectives can be attained by other means.
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Sec. 4. *Special Requirements for Preemption.* Agencies, in taking action that preempts State law, shall act in strict accordance with governing law.
(a) Agencies shall construe, in regulations and otherwise, a Federal statute to preempt State law only where the statute contains an express preemption provision or there is some other clear evidence that the Congress intended preemption of State law, or where the exercise of State authority conflicts with the exercise of Federal authority under the Federal statute.
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(c) Any regulatory preemption of State law shall be restricted to the minimum level necessary to achieve the objectives of the statute pursuant to which the regulations are promulgated.
(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.
(e) When an agency proposes to act through adjudication or rulemaking to preempt State law, the agency shall provide all affected State and local officials notice and an opportunity for appropriate participation in the proceedings.
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Sec. 7. *Increasing Flexibility for State and Local Waivers.*
(a) Agencies shall review the processes under which State and local governments apply for waivers of statutory and regulatory requirements and take appropriate steps to streamline those processes.) (emphasis added).

[84] *Id*. at 8-14.

Federal government provides the funds necessary to pay the direct compliance costs incurred by State and local governments, or EPA consults with State and local officials early in the process of developing the regulation."[85]

Initially accepting that federalism applied, subsequently EPA failed to address EO 13132 in a meaningful way, instead opting to conclude "[t]his rule is not expected to have federalism implications."[86] EPA concluded "EPA does not anticipate that the proposed rule will have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in the Order."[87] "The rule would establish financial responsibility requirements under CERCLA designed to assure that owners and operators of facilities provide funds to address CERCLA liabilities at their sites, without affecting the relationships between Federal and State governments."[88] "Thus, Executive Order 13132 does not apply to this rule."[89] "Nevertheless, EPA welcomes comment from State and local officials in response to this proposed rulemaking."[90]

b. Inadequate RFA/SBREFA Process

Consistent with the comments above, the Panel commented to EPA that the proposed rules are not necessary.[91] "Thirty-six percent of hardrock mining businesses are small businesses, and EPA estimates that these firms will face significant costs under this proposal."[92] "EPA determined that 44 to 56 small businesses may be subject to the proposed rule."[93] "An initial screening analysis to determine the impact of the rule on small businesses indicated that EPA could not certify that there is no Significant Impact on a Substantial Number of Small Entities (SISNOSE)."[94] "EPA worked with small entity representatives (SERs) to evaluate the impact of the proposed rule on small businesses and assess options for regulatory flexibility."[95] "EPA has received comments from the panel, and the agency is in the process of assessing the comments for applicability."[96]

"The Regulatory Flexibility Act (RFA) as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) requires EPA to convene a Small Business Advocacy Review (SBAR) Panel for a proposed rule when the agency cannot certify that the rule will not have a significant

[85] *Id*.
[86] *Id*. at 8-13.
[87] *Id*.
[88] *Id*.
[89] *Id*. at 8-14 (emphasis added).
[90] *Id*.
[91] *See* Letter from SBA to EPA re: Financial Responsibility Requirements for the Hardrock Mining Industry (Jan. 19, 2017) (concluding that all hardrock mines, even small ones, "are already highly regulated by robust state and Federal programs," and that "[n]ew Federal standards risk damaging these programs").
[92] SBA, Office of Advocacy letter at 2; *also see* EPA RIA at 2-8 and 8-2.
[93] *Id*. at 2.
[94] EPA RIA at ES-13.
[95] *Id*.
[96] *Id*.

economic impact on a substantial number of small entities."[97] "If a regulation is found to have a significant impact on a substantial number of small entities, further analysis must be performed to determine what can be done to lessen the impact."[98] "For the Proposed Rule, this analysis takes the form of an initial regulatory flexibility analysis (IRFA)."[99] The RFA and SBREFA gives small entities a voice in the rulemaking process to assess the impact of the proposed rule on small entities and to consider less burdensome alternatives.[100]

"The RFA requires agencies to consider small business regulatory alternatives that address small business impacts for the rules significantly affecting small firms."[101] "Those alternatives considered by the agency become part of the Initial Regulatory Flexibility Analysis (IRFA)."[102] "However, EPA failed to do so."[103] "This is very disappointing given that the panel proceedings identified several alternatives that would achieve the statutory purpose, including the option of no regulation, or regulating mines that fall within identified regulatory 'gaps'."[104] "These alternatives are fully discussed in the panel report, and were all but ignored by the agency."[105] "Thus, EPA did not comply with the RFA requirement to identify small business alternatives in the IRFA."[106]

Even in the proposal stage, SBA, Office of Advocacy still expresses disappointment at the lack of meaningful involvement.[107] "On August 24, 2016, EPA convened a panel, in accordance with

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[97] *See* https://www.epa.gov/reg-flex/frequent-questions-small-entities#2_2*; also see* 5 U.S.C. § 601 *et seq*.
[98] EPA RIA at 8-1.
[99] *Id*.
[100] SBA, Office of Advocacy Letter at 2.
[101] *Id*. at 14.
[102] *Id*.
[103] *Id*.
[104] *Id*. at 15; *also see e.g*., *CERCLA 108(b) Hardrock Mining Panel Report* Appendix B at (Laura Skaer, AM&EA July 7, 2016 SER Comment letter) ("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.")
[105] *Id*. ("EPA did not address these regulatory alternatives in the preamble, but did address the "deferral" option. In the rule preamble, EPA discussed several elements of an approach that would defer to robust state and Federal programs under certain conditions. Unfortunately, this discussion is absent in the RFA section of the proposal, and there is little evidence that EPA seriously considered this very important option.").
[106] *Id*. (Therefore the SBA, Office of Advocacy recommends: "The agency should cure this violation by either withdrawing the proposal, or including true regulatory alternatives in any future rulemaking activities.")
[107] SBA, Office of Advocacy at 3.

SBREFA requirements but the panel did not complete the panel report during the required 60-day time frame."[108] "The panel report was completed on December 1, 2016, the day EPA signed the proposed rule for publication, long after EPA had submitted a draft proposal for review to the Office of Management and Budget under Executive Order 12866."[109]

The SER process is to allow small entities a specific and meaningful role as required under the RFA/SBREFA, for any rule that "will have a significant economic impact on a substantial number of small entities."[110] "Pursuant to the terms of Executive Order 12866, the Agency has determined that this regulation is an economically significant regulatory action because it may have an annual effect on the economy of $100 million or more, as defined under part 3(f)(1) of the Order, and as documented in the results chapter of this RIA [Regulatory Impact Analysis]."[111] "EPA estimates that the regulation will have aggregate annual compliance costs of $171 million under Option 1 and $111 million under Option 2 (not including administrative reporting costs)."[112] EPA has calculated overall "[t]he proposed rule may require these facilities to secure approximately $7.1 billion in financial responsibility obligations."[113] These results may suggest that a significant number of small entities expected to incur annualized cost of more than the three percent of the revenue thresholds.[114]

Congress proposed CERCLA 108b FR in 1980, EPA has formally engaged in the process since 2009 Priority Notice, but EPA did not meaningful or timely input in the development of these regulations. This despite marginal benefits at great expense to the hardrock mining industry.[115] For instance, EPA notes "[b]ecause EPA cannot quantify estimated improvements in environmental performance at hardrock mining and processing facilities, EPA cannot develop quantitative estimates of the benefits to impaired waters and wild and scenic rivers from the proposed rule."[116]

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[108] *Id*. (internal parenthetical omitted).
[109] *Id*.
[110] *See* 5 U.S.C. § 601 *et seq*.; *see also* EPA RIA at 8-13 (The Unfunded Mandates Reform Act (UMRA), promulgated in 1995, requires all federal agencies to provide a statement to support the need to issue any regulation containing an unfunded federal mandate, and describe prior consultation with representatives of affected state, local, and tribal governments. Because the proposed rules is expected to result in the expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of $100 million or more in any one year. EPA has determined the final CERCLA 108(b) rule is subject to the requirements of sections 202 and 205 of UMRA.)
[111] EPA RIA at 8-12.
[112] *Id*. at 8-13.
[113] *Id*. at ES-7*; see also id*. at 5-9 ("Applying the estimated government burden rate for the modeled universe (approximately 7.5 percent) to the total FR amount of $7.1 billion yields a potential, expected value, government cost of $527 million.").
[114] 82 Fed. Reg. 3483.
[115] EPA RIA at 8-12 (EPA is required under EO to assess costs and benefits but "EPA could not monetize all the rule's benefits given limitations in the available data").
[116] *Id.* at 7-13.

In 2008, "EPA began working to identify appropriate facility classes that would be subject to financial responsibility requirements."[117] "In an initial study of NPL sites listed after 1990 (known as the "Phase 1" Report), EPA identified Superfund sites across eight general industry sectors for further examination."[118] "EPA collected data on activities conducted at 438 operable units at 88 NPL or Superfund alternative sites."[119] "Using this data, EPA could link specific site features to releases or threatened releases of hazardous substances, and to remedies that incurred response costs."[120]

Procedurally, EPA did not give ADEQ, other states, and mining entities the opportunity to comment on EPA's selection of hardrock mining facilities as the priority facilities for establishing a first-of-a-kind CERCLA 108b FR program in its 2009 CERCLA 108b FR "Priority Notice of Action".[121] The proposed CERCLA rule comment period is the first opportunity for states and mining entities to consider the priority decision in the context of a proposed regulatory framework. ADEQ is believes the proposed rules will undermine and negatively impact state regulatory programs, including the aquifer protection permit program.

The Western Governor's Association sent a letter as early as March 2016 asking for meaningful input and substantive consultation that EPA chose to ignore.[122] The SER comments also demonstrate that EPA had notice, but has failed to meaningfully address the duplicative nature of the proposed CERCLA 108b FR rules in light of comprehensive and effective financial assurance programs already in place on both the federal and state levels.[123]

ADEQ believes that EPA failed in its duty to engage in an appropriate regulatory flexibility analysis of the proposal based on its untimely engagement, lack of transparency, and failure to address SER comments and the SBAR Panel report questions about duplicative nature and alternatives to mitigate impacts on small businesses. The docket is replete with questions about the necessity and wisdom of EPA's formulaic approach. Most SERs complained that information critical to the

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[117] *Id*. at 1-2 (citing Superfund Sites and Financial Responsibility: Background Phase 1 Analysis in Support of Assessing the Financial Responsibility Requirements Under CERCLA 108(b): An Analysis of National Priorities List Superfund Sites to Identify Facility Classes for Further Phase 2 Analysis, U.S. EPA. (2008)).
[118] *Id*.
[119] *Id*.
[120] *Id*.
[121] 74 Fed. Reg. 37,213 at 37,214 and n. 5 (July 28, 2009).
[122] *CERCLA 108(b) Hardrock Mining Panel Report*, Appendix B at 80 (Laura Skaer, AM&EA SER Comment letter attachment 3).
[123] *CERCLA 108(b) Hardrock Mining Panel Report*, Appendix B at 3 (EPA's Outreach Meeting with potential Small Entity Representatives)("that there is no assurance of financial market capacity; that EPA failed to identify gaps in the current framework that has evolved in the 35-plus years since the CERCLA 108b FR provision was enacted; that EPA failed to share how the formula works; and that the formulaic approach significantly increases the FR at the expense of HMFs, especially the small entities."); *also see id*. (EPA has failed to identify any "significant gap in the current financial assurance programs administered by the states or the FLMA's".)

SBAR review process was not provided in a timely manner to allow SERs ability to meaningfully provide input.[124]

Proposed Rule Data Deficiencies' Financial Impacts on Mining Entities

Additionally, ADEQ agrees with SER comments that the proposed rules should not effectively penalize a company by crediting no reduction of FR "because the design features do not fit within the standard menu requirements built into EPA's rule to obtain reductions".[125] It is unwise policy to disincentivize any risk mitigation activities, such as reuse of a former mine site, by limiting FR analysis to strictly defined reductions. At least one commenter provided an example of "[r]euse of former operation to mitigate ongoing groundwater issues resulting from historical operations will improve historical groundwater conditions, and avoid impacts to a site on undisturbed land."[126]

"Applying the estimated government burden rate for the modeled universe (approximately 7.5 percent) to the total FR amount of $7.1 billion yields a potential, expected value, government cost of $527 million."[127] EPA acknowledges "[c]ertain characteristics of the hardrock mining sector pose important considerations for the financial assessment of the proposed rule's impacts."[128] "Data limitations constrain EPA's ability to fully incorporate each of these considerations into the analysis, but they serve as a useful guide to making appropriate simplifying assumptions when necessary."[129] "The body of evidence from the studies described in [the RIA] suggests that the disclosure of information related to environmental liabilities is likely to affect firms' market value as well as their cost of capital." [130] "EPA [also] did not have sufficient data to model and quantify the potential changes in mines' employment levels as a result of the proposed regulation."[131]

The SBA, "[Office of] Advocacy shares the concerns raised by the SERs."[132] "Advocacy believes SERs were not provided the selection criteria for choosing the input mines, the input data used

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[124] *See e.g., CERCLA 108(b) Hardrock Mining Panel Report*, Appendix B (EPA's Outreach Meeting with potential Small Entity Representatives for the CERCLA 108(b) Hardrock Mining Rulemaking (June 9, 2016) Written Comments from Potential Small Entity Representatives) (hereafter "CERCLA 108(b) Hardrock Mining Panel Report Appendix B") at 44 (Tim Harvey, Pebble Partnership SER Comment letter at 3) ("Information critical to the SBAR review process has not been provided in a timely manner, if at all. SERs will not be able to fulfill their obligations to the panel unless this information is made available. Without access to underlying data and assumptions, SERs have no way of understanding how or if site specific factors can be considered.").
[125] *CERCLA 108(b) Hardrock Mining Panel* Report, Appendix B at 56 (PolyMet SER Comment letter at 4).
[126] *Id*.
[127] EPA RIA at 5-9.
[128] *Id*. at 6-1.
[129] *Id*. at 6-1 fn 60.
[130] *Id*. at 7-7.
[131] *Id*. at 6-5.
[132] SBA, Office of Advocacy letter at 13 (citing Panel Report, p. 26.).

to develop the formula, nor the key elements of the formula."[133] "SERs could not estimate the costs of such an approach on their own facilities."[134] "As of July 7, 2016, EPA still had not provided a list of EPA approved practices for reductions based on existing requirements or the criteria used to identify these practices."[135] "The SERs cannot assess the financial impacts to their businesses or recommend regulatory alternatives without this information."[136] Based on the record, finalizing EPA's proposed CERCLA 108b rules without meaningful collaboration, creates considerable risk of adverse economic impacts for communities, mining entities and state regulatory programs.

The conclusion that proposed rule establishment financial responsibility requirements under CERCLA will not affect the relationships between Federal and State governments is plainly false. EPA is enlisting and employing state program requirements as a key component of EPA's proposed CERCLA 108b Hardrock Mining Financial Responsibility Calculator.[137]

EPA failed its non-discretionary duty to consult states and "have an accountable process to ensure meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications."[138] By side-stepping the Supremacy clause implications of the proposed rules application of response activities already covered by many states' mine permitting and FR programs, EPA completely ignores the direct duty it has under the EO 13132 to closely examine the constitutional authority and necessity of the rule and limits the states, and potentially preempts existing state programs. By concluding EO 13132 did not apply, EPA failed to meaningfully consult states whether the federal objective is of national significance and determine if the objectives of the proposed rules could be attained by other means. Finally, EPA failed to consult states to consider "any alternatives that would limit the scope", or to develop the standards in consultation with the states.[139]

EPA failed its express preemption duties of the EO that requires the rules "shall be restricted to the minimum level necessary to achieve the objectives".[140] EPA also fails to consider states have traditional role land-use and ground water, and to consult the states concerning the possibility of a conflict between State law and Federally protected interests within its area of regulatory responsibility. In Arizona, the state APP and MLR programs address public health, welfare an

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[133] *Id*.
[134] *Id*.
[135] *See CERCLA 108(b) Hardrock Mining Panel Report*, Appendix B at 90 (Laura Skaer, AM&EA July 7, 2016 SER Comment letter at 4).
[136] *Id*.
[137] Found at https://www.epa.gov/superfund/financial-responsibility-calculator-accompany-proposed-requirements-under-cercla-section.
[138] *Id*.
[139] *See* EO 13132.
[140] *Id*.

environmental protection both through enforceable best available control technology and financial responsibility obligations.[141]

V. CERCLA 108b FR Express Preemption of State FR and Threat to FLMA FR

a. CERCLA and State APP Preemption

CERCLA provides for express preemption of state FR related to CERCLA 108b.[142] In relationship to other law CERCLA provides "[n]othing in this chapter shall be construed or interpreted as preempting any State from imposing any additional liability or requirements with respect to the release of hazardous substances within such State", with the exception that CERCLA expressly preempts CERCLA duplicative state FR.[143]

EPA's position that the proposed CERCLA 108b rules are risk based and not addressed by state closure or reclamation is not supported. EPA claims it would be difficult to address CERCLA 108b FR scope on a site-by-site basis "given that some closure programs conduct activities that reduce CERCLA risks".[144] EPA's proposed rules, however, allow for CERCLA 108b FR reductions for response activities under current state and FLMA permitted mines, and termination of CERCLA 108b FR based on response activities on a site-specific basis that are the same as those states use in addressing operation, closure, reclamation and post-closure.[145]

EPA discusses preemption in the proposed rules in the following language in the preamble. EPA asserts "[f]irst, both CERCLA §§ 108(b) and 114 are expressly focused on hazardous substances,

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[141] *See* A.R.S. § 49-241 *et seq*. and associated regulations in 18 A.A.C. 9 and 11; *also see* A.R.S. § 27-901 *et seq*. and associated regulations in 11 A.A.C. 2.

[142] 42 U.S.C. § 9614. ("Except as provided in this subchapter, no owner or operator of a vessel or facility who establishes and maintains evidence of financial responsibility in accordance with this subchapter shall be required under any State or local law, rule, or regulation to establish or maintain any other evidence of financial responsibility in connection with liability for the release of a hazardous substance from such vessel or facility. Evidence of compliance with the financial responsibility requirements of this subchapter shall be accepted by a State in lieu of any other requirement of financial responsibility imposed by such State in connection with liability for the release of a hazardous substance from such vessel or facility.") (emphasis added).

[143] 42 U.S.C. § 9614(d) ("Financial responsibility of owner or operator of vessel or facility under State or local law, rule, or regulation[.] Except as provided in this subchapter, no owner or operator of a vessel or facility who establishes and maintains evidence of financial responsibility in accordance with this subchapter shall be required under any State or local law, rule, or regulation to establish or maintain any other evidence of financial responsibility in connection with liability for the release of a hazardous substance from such vessel or facility. Evidence of compliance with the financial responsibility requirements of this subchapter shall be accepted by a State in lieu of any other requirement of financial responsibility imposed by such State in connection with liability for the release of a hazardous substance from such vessel or facility.").

[144] 82 Fed. Reg. 3401.

[145] 82 Fed. Reg. 3505(c) ("Owners and operators may satisfy requirements of paragraph(b)(i) through (xiii) [response component FR calculations], in whole or part, by demonstrating that they are subject to, and in compliance with, requirements that will result in a minimum degree and duration of risk associated with the production, transportation, treatment, storage, or disposal, as applicable, of all hazardous substances present at that site feature. A demonstration under this paragraph will reduce the amount of financial responsibility that an owner and operator must demonstrate under this part.").

the risks they present and financial responsibility associated with liability stemming from their release or threatened release."[146] EPA argues that "[t]aken together, these references quite naturally preserve state mine bonding requirements as 'additional requirements' to the extent that they may also address the release of hazardous substances."[147] "Second, CERCLA § 114 taken as a whole makes clear that states are not prohibited from requiring reclamation bonding."[148] "Third, many state requirements serve significantly different purposes from any final CERCLA § 108(b) regulations, and for this reason alone those state requirements should not be considered to be 'in connection with liability for release of hazardous substances' within the meaning of CERCLA § 114(d)."[149]

"EPA does not intend its [proposed] CERCLA § 108(b) regulations to result in widespread displacement of those programs, nor does EPA believe that such preemption is intended by CERCLA, necessary, or appropriate."[150] EPA acknowledges, though, that "[m]any states already have financial responsibility requirements applicable to some of the hardrock mining facilities that would be subject to this proposed rule."[151] "EPA compiled summaries of all 50 states' mine bonding requirements to get a general understanding of the types of requirements applicable under other programs."[152] EPA argues, however, that "many state reclamation bonding regimes are not similarly limited to CERCLA hazardous substances or their release."[153] Acknowledged by EPA, however, is that both federal CERCLA and state environmental regulations address CERCLA liability. Where this is the case state FR will be expressly preempted.

Preemption occurs in federal law in one of three ways, express preemption, and implied field or conflict preemption.[154] Express preemption occurs when the Congress has included express preemption language in law. CERCLA expressly preempts state or local laws establishing or maintaining FR "in connection with liability for the release of a hazardous substance from such…facility".[155] However, EPA failed to meaningfully engage in federalism reviews and to acknowledge in the rulemaking the preemption reality, and expects existing programs to change to fit CERCLA 108b FR, rather than vice-versa. Specifically, EPA fails to reconcile preemption with

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[146] 82 FR 3403.
[147] *Id*.
[148] *Id*.
[149] *Id*.
[150] 82 FR at 3403.
[151] *Id*. at 3397.
[152] *Id*. at 3403.
[153] *Id*.
[154] *See Cal. Coastal Comm'n v. Granite Rock Co.*, 480 U.S. 572 (1987) (http://caselaw.findlaw.com/us-supreme-court/480/572.html last viewed 2/27/17) (The Supremacy Clause of the United States Constitution invalidates state laws that interfere with or are contrary to the laws of Congress in any of three ways: (1) where the federal statute expressly states that it is preempting state law; (2) where the federal regulatory scheme is so pervasive the Congress must have intended to "occupy the field" and disallow any state regulation on the same subject; and (3) where Congress has chosen not to occupy a field, but federal and state law conflict.)
[155] 42 U.S.C. § 9614(a)&(d) ("Nothing in this chapter shall be construed or interpreted as preempting any State from imposing any additional liability or requirements with respect to the release of hazardous substances within such State", except that "…no owner or operator… shall be required under any State, or local law, rule, or regulation to establish or maintain any other evidence of financial responsibility.") (emphasis added).

CERCLA's provision that "[e]vidence of compliance with the financial responsibility requirements of this title shall be accepted by a State in lieu of any other requirement of financial responsibility imposed by such State in connection with liability for the release of a hazardous substance from such vessel or facility."[156] The application of the language of CERCLA preemption under the proposed CERCLA 108b rulemaking language would logically expressly preempt all state FR for the covered response activities, natural resource damages and health assessments.

Comments in the SBAR Panel report states "[t]he June 17th [2016] presentations by the states of Nevada, Utah, New Mexico and South Dakota, as well as those by the Bureau of Land Management and U.S. Forest Service, made it very clear that robust, effective and comprehensive financial assurance programs are already in place at both the state and federal levels."[157] "Moreover, these presentations made it abundantly clear that these programs were not narrowly focused on reclamation (recontouring and revegetation) but also included provisions to deal with releases of contaminants meeting the CERCLA definition of hazardous substances from operating and closed mine sites."[158]

In a specific example from New Mexico, the Questa mine Record of Decision ("ROD"), demonstrates the overlap EPA is employing for CERCLA response activities already covered in the state programs. "The [federal CERCLA] Selected Remedy [for Questa mine] is consistent with the requirements and conditions for mining reclamation and ground water abatement set forth in the current New Mexico mining permit (TA001RE) and ground water discharge permits (DP-1055 and DP-933)."[159] "[T]he Selected Remedy takes into account the current and reasonably anticipated future land uses."[160] "It also takes into account the current and potential future uses of ground water resources at the Site, as well as New Mexico statutes and regulations for the abatement and protection of ground water as Applicable or Relevant and Appropriate Requirements (ARARs)."[161]

In addition, EPA's proposed FR calculator for the proposed rules permit FR reductions if: 1) evidence the owner or operator is subject to the requirements described in § 320.63(d); 2) evidence that requirements are in an enforceable document; 3) evidence that the owner has adequate FR to assure the implementation of the requirements; and 4) certification the facility is on compliance with applicable CERCLA 108b rule requirements.[162] This is direct evidence that EPA's proposed rules for CERCLA FR directly conflict with state response item based FR for mines.

Thus, EPA cannot claim that there is no preemption where there is overlap with existing state requirements. States could impose additional FR only for additional liability requirements, as

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[156] 42 U.S.C. § 9614(d) (emphasis added).
[157] CERCLA 108(b) Hardrock Mining SBAR Panel Report, Appendix B at 5. (https://www.regulations.gov/document?D=EPA-HQ-SFUND-2015-0781-1838 last viewed 2/27/17).
[158] *Id.*
[159] *Id.* at 1-3.
[160] US EPA Reg. 6 Record of Decision, Molycorp, Inc. Questa, NM at 1-2 (2010) (https://www.regulations.gov/document?D=EPA-HQ-SFUND-2015-0781-0975 last viewed 2/27/17).
[161] *Id.*
[162] EPA January 30, 2017 Webinar on CERCLA 108b Proposed Rulemaking at Slide 35.

contemplated by programs associated with the facility, but not for CERCLA 108(b) response activities, natural resource damages, and health assessments. Any state FR related to these response activities are in jeopardy of preemption. This is supported by the CERCLA language that "[e]vidence of compliance with the financial responsibility requirements of this subchapter shall be accepted by a State in lieu of any other requirement of financial responsibility imposed by such State in connection with liability from release of a hazardous substance from such…facility."[163]

b. State Law Preemption

Arizona state APP statute also provides "[f]inancial assurance for a facility is not required pursuant to this section if substantially similar financial assurance for that facility is required and has been provided pursuant to other federal, state or local laws."[164]

c. Proposed Rules Conflict with Existing FLMA FR

Finally, the proposed rules will create confusion around existing FLMA FR because CERCLA 107 provides "[r]ecovery by any person (including the United States or any State or Indian tribe) for response costs or damages resulting from a federally permitted release shall be pursuant to existing law in lieu of this section."[165] Thus, there is no CERCLA recovery for federally permitted releases covered by another provision of law, and no double recovery.

EPA admits, the proposal is "intended to address facilities' potential for release or threatened release that result in CERCLA liability" and not to comply with states' "otherwise-applicable regulatory requirements, that may or may not be connected with (or may be only partially connected with) hazardous substance release or threatened releases."[166] EPA has indicated that the proposed CERCLA 108b FR rules are not for closure or reclamation, but are a risk based program, and thus are not preemptive of states mining reclamation bonding. It is not an excuse that EPA finds it would be administratively difficult to address the scope of CERCLA 108b FR on a site-specific basis and to write rules that recognize state programs, "given that some closure programs conduct activities that reduce CERCLA risks." [167]

VI. Misaligned and Flawed Reductions Criteria

The proposed rules section 320.63, provides for calculation of total FR amounts.[168] Subsection (c), provides for CERCLA 108b FR reductions to the base formula total FR amount, for owners and operators "demonstrating that they are subject to, and in compliance with, requirements that will result in a minimum degree and duration of risk associated with the production,

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[163] *See* 42 U.S.C. § 9614.
[164] A.R.S. § 49-243(N)(6) (http://www.azleg.gov/viewdocument/?docName=http://www.azleg.gov/ars/49/00243.htm) (emphasis added).
[165] 42 U.S.C. § 9607.
[166] 82 Fed. Reg. 3403.
[167] *Id*. at 3401.
[168] *Id.* at 3506

transportation, treatment, storage, or disposal, as applicable, of all hazardous substances present at the site feature."[169]

Through the rulemaking process, "EPA found that 13 site features (e.g., tailings) served as the source of release that resulted in remedies within an initial list of 12 categories (e.g., water treatment)."[170] "EPA obtained a sample of 63 facilities' reclamation and closure plan engineering cost estimates with data."[171] "The identified owner/operator companies of the 49 facilities in the modeled universe were matched to S&P's financial database"[172] "To simulate impacts for the full universe of 221 facilities, this analysis follows the same general analytic approach as for the modeled universe."[173]

"EPA properly recognizes that it should provide financial assurance credit for the 13 response categories for mines that already incorporate adequate financial assurance and good engineering plans."[174] However, based on the formulaic approach, EPA fails to recognize some response activities may not be required based on site-specific conditions. These include response categories such as Long Term Operation & Maintenance (O&M) and water treatment. If the mine already meets water quality standards, for example, further water treatment may not be required. "EPA needs to provide for full credit for these elements where the [state and or federal] mining agency has determined that the financial assurance response category is either not needed at this time, or not needed at all, provided that the agency performs periodic reviews of these determinations."[175]

In association with the 13 response activities, "[t]he agency proposes to require compliance with 14 pages of engineering standards and compliance with a general performance standard as a condition for receiving financial assurance credit."[176] "EPA is now proposing specific numeric requirements such as planning for a 200-year storm event, and reducing net precipitation by 95 percent."[177] The basis for the 200-year storm event is speculative based on climate change.[178] "These conditions override the site-specific judgment and flexibility employed by the mines, and approved by state and Federal regulators."[179]

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[169] *Id*. at 3505.
[170] *Hardrock Mining Peer Review – Combined Documents*, MDB, Inc. at 94 (November 23, 2016); CERCLA 108(b) Financial Responsibility Formula for Hardrock Mining Conference Call Monday October 3rd, 2016 at slide 9.
[171] EPA RIA at 1-2.
[172] EPA RIA at 4-1, fn 32.
[173] *Id*. at 5-5.
[174] SBA, Office of Advocacy letter at 13.
[175] *Id*.
[176] *Id*.
[177] *Id*. at 14
[178] *See, e.g*., *Financial Responsibility Requirements under CERCLA § 108(b) for Classes of Facilities in the Hardrock Mining Industry Proposed Rule: Financial Responsibility Reductions Technical Support Document*, US EPA at 16 (Dec. 1, 2016) (rationale for stormwater control of 200-yr flood).
[179] *Id*.

a. State and Mining Administrative Burden of Proposed Reductions Criteria

The proposed rules provides "[i]nformation provided to make the demonstration in paragraph (c)(1) [reductions] of this section must provide sufficient and detailed information adequate to allow EPA to evaluate the adequacy of the financial responsibility and the underlying requirements."[180] EPA has not been transparent about its reductions or the FR calculator. [181] EPA includes in the proposed CERCLA 108b Financial Responsibility calculator reference to a "detailed breakout of the response component in the 'Detailed Response Component' tab."[182] EPA also expressly disclaims the calculator requirements are not part of compliance with rules.[183]

This disclaimer raises questions about the EPA's proposed FR calculator and its role in making a demonstration resulting in a reduction of federal CERCLA 108b FR. Without SERs and states having the benefit of investigating what the calculator entails, what information is sought to meet the rule demonstration requirement, and the fact that it is a tool and disclaimed from being a regulatory requirement means that there is still significant uncertainty what EPA will use as objective criteria for EPA accepted demonstration for reductions. EPA will also not provide reductions for existing approved closure plans and related FR that are not implemented, but which is duplicative of the relative risk EPA is trying to cover in the proposed rules.[184]

For a facility to obtain the proposed rule response item reduction credit within limits of Arizona state groundwater protection program, the state APP program must require the response item, and the state's ability to enforce it. Assuming an acceptable demonstration for EPA approved reduction, CERCLA FR response activities could be incorporated into a state APP permit condition by amendment.

EPA included in its January 30, 2017, webinar discussions of a FR calculator ("the FR calculator"). The FR calculator takes into account four certifications required as part of the demonstration for FR reductions: 1) evidence the owner or operator is subject to the requirements described in § 320.63(d); 2) evidence that that requirements are in an enforceable document; 3) evidence that the owner has adequate FR to assure the implementation of the requirements; and 4) certification the facility is on compliance with applicable CERCLA 108b rule requirements.[185] EPA proposes to define an "enforceable document" that makes a mine eligible for a reduction only as one "to which the owner or operator is currently subject, and the requirements of which can be enforced against the owner or operator by the issuing authority," but clarifies that it may only be

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[180] 82 Fed. Reg. at 3506.

[181] *CERCLA 108(b) Hardrock Mining Panel Report,* Appendix B at 46 (Pebble Partnership Tim Harvey SER Comment letter at 5) ("EPA has provided no guidance on how the credit process would be implemented.") (https://www.regulations.gov/document?D=EPA-HQ-SFUND-2015-0781-1838 last viewed 2/27/17).

[182] EPA CERCLA 108b Webinar, January 30, 2017 at slide 31.

[183] *Id*.

[184] *See* CERCLA 108(b) Hardrock Mining Panel Report Appendix B at 63 (Ron Rimelman, NOVAGOLD Resources Inc. SER Comment letter at 4.)

[185] *Financial Responsibility Requirements under CERCLA § 108(b) for Classes of Facilities in the Hardrock Mining Industry Proposed Rule: Financial Responsibility Reductions Technical Support Document* at slide 31 (December 1, 2016).

"a permit, a settlement, an order, or any other document" that meets EPA's specific criteria. State regulatory requirements that provide such requirements apparently cannot meet EPA's FR reductions criteria if they are not repeated in any and all permits or orders issued for hardrock mines. In effect, the proposed CERCLA 108b FR rule will likely encourage hardrock mining facilities to create much more complex permits that re-incorporate generally-applicable provisions of state law, which will impose a significant burden on state permit-writers.

The difficulty in this is the criteria appear objective, but there is no guidance on how to define and calculate the criteria.[186] Some of EPA's requirements (such as the 24 hour, 100 year, 24 return interval storm event design, or requiring a stability analysis) are accepted engineering practice, and would be common to virtually all mining APPs. Others, (such as a Safety Factor of 1.5 for critical structures), may or may not be in an individual permit, depending on site-specific factors, and depending on what is meant by the term "critical structures". ADEQ also concurs with SBA's concerns regarding the engineering design requirement in the proposed rule, that the APP program does not specify engineering and design criteria in statute or rule.[187] Instead site-specific requirements are designed into each permit for each mining facility to achieve BADCT.

EPA proposal also does not take into account site-specific features of climate and materials factors that are accounted for in the state APP program. There are categories of facilities in the proposed rule that are not typically regulated under the APP program. The EPA response to comment on the subject and rule demonstration provisions reflect EPA's intention to have existing state and FLMA harmonize their existing rules with the proposed rules, not vice-versa. EPA also provides itself no deadlines for the EPA Administrator required authorizations for various FR and real estate transactions tied to FR.

In short ADEQ is concerned that few, if any, APP permitted facilities would meet the proposed engineering performance requirements for that type of facility, and facilities will be caught in a bureaucratic authorization limbo that greatly impacts its ability to react to market conditions. Therefore it seems unlikely that APP permitted facilities would be able to obtain reductions from CERCLA financial assurance requirements as defined in the proposed rule. In part this is due to some of EPA's novel requirements (for example requiring 200 year lifetime design), and in part because site-specific designs do not always require compliance with the generalized standards EPA proposes. Additionally, some of EPA's requirements need clarification. In particular, ADEQ does not understand the requirement for concurrent or sequential reclamation of heap leach facilities or impoundments.

b. Disincentivizing Innovative Approaches and Independent Certifications

[186] *See e.g.*, 82 Fed. Reg. 3506 ("The plan must address and provide for capture and treatment at closure consisting of a capture and treatment system that meets a minimum 200-yr life design criteria, and that is designed to either prevent pit lake formation or groundwater contamination exceeding applicable water quality standards to achieve at least a 95 percent capture efficiency of the affected groundwater, and to meet applicable water quality standards.").
[187] *See* A.A.C. R18-9-A202.

EPA has sought comment on, and ADEQ believes there are innovative and site-specific approaches EPA should consider for the need of the proposed CERCLA 108b FR rule, including voluntary measures adopted through proactive practices like environmental management systems and other programs.

ADEQ's Voluntary Environmental Stewardship Program (VESP) and Voluntary Remediation Program (VRP) are innovative systems that are not based on enforceable commitments required for reductions. Additionally, Environmental Management Systems, ISO certification, third party inspection programs, or similar types of state and federal programs for reducing risk from mining operations should be considered when determining need for CERCLA 108b FR. For example, Freeport-McMoRan, with mines in Arizona, employs industry best practices of an ISO14000 environmental management system.[188] Additionally, ADEQ has achieved results at sites entering in to the Voluntary Remediation Program. Though not in a permit, such commitments to voluntary practices are an innovative and important aspect of operator responsibility the proposed CERCLA 108b FR rules threaten.

The rules may have the effect of causing best management practices not to be employed where they otherwise would be because the practice does not meet EPA's simplistic approach to meeting FR reduction requirements of the rule.[189] This not only applies to site-specific best management practices being contemplated as reported specifically in this rule docket, but also impedes development of new, innovative mining to address relative risk for future mines and mining activities.

The SBA also commented with an example of other innovative approaches, "in the case of the Pole Canyon ODA, there is an ongoing removal and remedial action to address elevated selenium and other contaminants."[190] "However, the mine owner, J.R. Simplot Company, is performing the work under the oversight of the USFS at its own expense - a cost of about $7 million."[191] "No USFS bond is being used."[192] "This is an illustration of the current system working, not the need for a supplemental EPA rule."[193] The progress of such voluntary actions and activities are in jeopardy because of the rulemakings failure to incorporate these programs. Additionally, because of the uncertainly caused by EPA's formulaic approach with ambiguous standards for reductions, the cost and requirements may prevent some, especially small facilities, to forego pursuing federal CERCLA 108b FR reductions for which they may be eligible.

EPA's proposed rule is introducing new unnecessary design and engineering requirements to qualify for any reductions of CERCLA 108b FR through state programs. CERLCA is not a permitting

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[188] *See* https://www.fcx.com/sd/env/index.htm
[189] *See* CERCLA 108(b) Hardrock Mining Panel Report Appendix B at 62 (Ron Rimelman, NOVAGOLD Resources Inc. SER Comment letter at 3.)
[190] SBA Office of Advocacy letter at 7 (citing SC&A memo to Advocacy, dated January 18, 2017 (available from SBA Office of Advocacy)).
[191] *Id*.
[192] *Id*.
[193] *Id*.

program, and introducing such inappropriate design and engineering requirements through the reductions criteria will adversely impact state programs and require mines to endure the time and expense of significant reengineering and state program permit amendments for existing mining operations.

VII. Formulaic Approach Deficiencies in Recognizing Site-Specific Permitting Approach

EPA states "the purpose of the formula is simply to establish an amount of financial responsibility that reflects the costs that might be expected to result, if a Superfund action should ultimately be required at the site, based on the information EPA has compiled on a national basis in the record for this proposal."[194] EPA acknowledges that the CERCLA 108b FR should be "designed to reflect the relative risk to human health and the environment, of facility practices for managing hazardous substances, including reductions in risk that may result from compliance with other regulatory requirements or other facility practices."[195]

In the formulaic approach, "EPA developed a multi-dimensional analysis to estimate the costs of the proposed rule."[196] "This analysis involves identification of the potentially regulated universe, estimation of regulated facilities' financial responsibility obligations, and assessment of the costs associated with obtaining financial assurance for those facilities."[197]

"The Agency contracted with MDB, Inc. to conduct a blind, external, letter peer review of the draft *CERCLA 108(b) Financial Responsibility Formula for Hardrock Mining Facilities Background Document* (or background document)."[198] "A peer review is a process for enhancing a scientific or technical work product so that the decision or position taken by the Agency based on that product has a sound, credible basis."[199]

EPA engaged peer reviewers ostensibly "for enhancing a scientific or technical work product so that the decision or position taken by the Agency based on that product has a sound, credible basis."[200] Access and transparency to the formula development and basis for calculations in the rulemaking process, however, were a concern for all peer reviewers.[201] "The EPA [formulaic] approach to financial assurance determination appears to be strongly tilted towards a one-size-fits-all philosophy." "This is in significant contradiction to the approach adopted by the states and FLMA's which recognize the site-specific nature of assessing appropriate financial assurance."[202]

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[194] 82 Fed. Reg. at 3401.
[195] *Id*.
[196] EPA RIA at ES-3.
[197] *Id*.
[198] *Response to Peer Review Comments: CERCLA 108(b) Financial Responsibility Formula for Hardrock Mining facilities Background Document*, US EPA *at 1-1.* (Dec. 2016) (hereafter "EPA Response to Peer Review Comments")
[199] *Id*.
[200] *Id*.
[201] *See id*. at 6-1 to 6-10.
[202] *Id*.

"This increases the likelihood of inappropriately high levels of financial assurance being required which will place an increased burden on small mining entities."[203]

a. Limited Data led to a Costly Oversimplified FR Formula

"In developing the formula EPA was constrained by the available data, and the need for a practical approach that could be applied across a heterogeneous set of mining facilities and locations throughout the United States."[204] EPA identified a list of mines and mineral processors that may be subject to the proposed rule. "From this list, EPA ultimately identified 221 facilities and 121 ultimate parent companies in the affected universe that this RIA evaluates."[205] "Practicality is a necessity, and time constraints had to be considered when gathering data and developing the Formula."[206]

EPA notes that it lacked site specific data to estimate financial market capacity, and the reductions that would be available for facilities not in the modeled universe.[207] EPA also lacked financial and operating data for companies that are not publicly traded.[208] EPA also assumed a static commodities market and no financial market impact from creating CERCLA 108b FR. "The estimated annualized cost figures in this analysis remain applicable for all future years under the assumption that industry conditions, including total industry size, remain fairly constant" though mining is a cyclical commodities market.[209]

"EPA acknowledges that many states have individual requirements for mines" in existing state-level controls that are missing and could affect the formula output and thus ultimately the FR required.[210] "However, EPA is neither designing this formula to predict state reclamation costs nor to be site-specific."[211] "Rather, EPA is developing a nationwide formula which estimates FR under the assumption of future CERCLA liabilities."[212] "Since these CERCLA liabilities may or may not be consistent with the requirements under state reclamation and closure laws, no further response is necessary."[213]

"[T]he proposed formula uses thirteen subformulas derived from regression analysis where sample sizes are often much smaller than 63."[214] "The majority of the regressions have samples with 50 percent or fewer of these 63 mines."[215] "For many regressions, a key variable is based

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[203] *Id*.
[204] *Hardrock Mining Peer Review – Combined Documents* at 2.
[205] EPA RIA at ES-3.
[206] *Id*.
[207] EPA RIA at 3-3; *also see* EPA RIA at 5-15.
[208] *Id*. at 5-15.
[209] *Id*.
[210] *Id*. at 5-4.
[211] *Id*.
[212] *Id*.
[213] *Id*. (emphasis added).
[214] *Hardrock Mining Peer Review – Combined Documents* at 9.
[215] *Id*.

upon less than 6 mines."[216] "Small sample sizes in general harm the robustness of regression analyses."[217] "Specifically, in this instance, small sample sizes create two large concerns: potential influence points (i.e. outliers) and the effect of data quality issues."[218]

EPA also made assumptions with limited data about the total acreage in formula. In the rule definition of disturbed acreage/acres "means the area of land or surface water that has been altered for purposes of accommodating mining and/or processing activities."[219] EPA estimated disturbed acres for its modeled universe and calculated its estimated total FR for regulatory impact analysis, which may not be accurate. "EPA also developed assumptions to scale the acreages of certain features, which in turn affected the facility-wide acreage, to model facility expansion over time and the effect increasing FR amounts would have on FR instrument maintenance."[220] "When EPA calculated the cost of FR instruments, it used facility-specific FR amounts for facilities owned or operated by a company with readily available financial data."[221] "To extrapolate the FR amounts from the modeled universe of 49 facilities to the regulated universe of 221 facilities, EPA calculated the median FR amount for each facility type."[222]

Based on limited data EPA also used proxies for facilities types not represented in the modeled universe. "Some facility types in the regulated universe did not exist in the modeled universe."[223] "EPA assigned the other facilities the median FR amount of a proxy facility type in the modeled universe."[224] "EPA used these proxies due to data limitations, and because they likely represent the most similar set of operational activities to the missing facility types."[225] "However, these proxies may result in overestimates or underestimates due to uncertainties in these approximations, as well as in actual facility characteristics."[226]

"Ideally, this analysis would rely on company-level financial information and facility-specific engineering cost estimates for each company affected by the proposed rule to estimate the impacts of obtaining financial assurance."[227] "This information, however, is not readily available for all facilities and companies."[228] "EPA therefore utilized a sample of mining facilities and

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[216] *Id*.
[217] *Id*.
[218] *Id*.
[219] 82 Fed. Reg. at 3503.
[220] EPA RIA at 3-9.
[221] *Id*.
[222] *Id*. at 3-10.
[223] *Id*.
[224] *Id*.
[225] *Id*.
[226] *Id*.
[227] CERCLA 108b RIA at ES-3; *also see EPA Response to Peer Review Comments* at 2-18 (Commenter 2 concluded "[s]ample sizes are small, so the data may not provide enough information to estimate additional relationships precisely. Instead, if additional resources are available, I would recommend they go into expanding the sample or allowing greater use of the CERCLA cost data, as argued above.")
[228] *Id*.

related owner companies to create a modeled universe, which is assumed to be representative of the full universe."[229] "This modeled universe includes 49 individual facilities."[230] "As indicated above, financial data are not readily available for many of the companies likely to be affected by the proposed rule."[231] Therefore, "[b]ased on the estimated industry and government costs associated with the modeled universe (see Steps 6 and 7), the analysis then extrapolates these results to the full universe of facilities."[232] The exhibit below shows the limited data in the model universe used to calculate and extrapolate FR for the entirety of the potentially regulated universe under the proposed rules.[233]

Exhibit 3-4.

Median FR Amounts per Facility: For Extrapolation from the Modeled Universe to the Potentially Regulated Universe

Facility Type	Modeled Universe (n=49)	Potentially Regulated Universe (n=221)	Facility FR - Median ($2015 Millions)
Brine Extraction/Processing	(none; assume equal to ISR)	2	$1.3
In-situ recovery (ISR)	3	8	$1.3
Processor/Refiner	1	33	$75.6
Surface Mine	25	62	$47.8
Surface Mine/Processing	13	27	$28.4
Surface Mine/ Processing/ Primary Smelter	(none; assume equal to surface mine/processing)	2	$28.4
Surface/Underground mine	(none; assume equal to surface mine)	1	$47.8
Underground Mine	5	53	$5.4
Underground	2	6	$28.6
Primary Smelters	(none; calculated a uniform FR amount for all primary smelters, see Appendix B.5)	23	$11.4

[229] *Id*.
[230] *Id*.
[231] *Id*.
[232] *Id*. at ES-6.
[233] *Id*. at 3-11.

"The SERs asserted that the operation of a modern hard rock mine varies dramatically between sites due in part to different climates, deposit types, and varying permit requirements."[234] "As a result, Advocacy believes that the current regression analysis in the proposed rule cannot capture these differences adequately, and cannot replace the site-specific expert-driven methodology almost universally adopted across the country."[235] "The end result of EPA's approach provides a formula that predicts the average cost, dependent on acres and few other variables, across all facilities."[236]

For instance, the size of a mine is not necessarily a surrogate for risk, even though EPA seems to assume as much in the proposed CERCLA 108b FR rule. The assumption is inaccurate. Also inaccurate is EPA's apparent assumption that an analysis of a mine's proximity to receptors (*i.e.*, for human health and environmental risks) can be overlooked in favor of mere proximity to media (which inherently exists at every mine site, regardless of risk).

"Advocacy is concerned about potential outliers or influence points within the data that may hurt the validity of the formula."[237] "Peer reviewers have also highlighted this issue."[238] "In its response, EPA identified potential influence points in almost every subformula."[239] "These influence points may be unduly altering the formula causing a much higher, or lower, financial assurance value."[240] "With so many influence points, it is difficult to have confidence in the internal validity of the formula."[241] ADEQ also concurs that "[t]his overarching approach will, by design, over-predict the costs of small responses and potentially under-predict costs of very large responses."[242] "Such an approach is particularly harsh on small mines that would be required to post large, unneeded financial assurance."[243]

Despite not having produced a meaningful state program analysis, "[t]o date, however, EPA has provided no evidence that the proposed action would address a clear, specific need that is not sufficiently covered by other programs."[244] "Likewise, information shared by Federal Land Management Agency (FLMA) and state agency representatives indicates that there are no significant unaddressed issues that would be captured by the proposed rule."[245] "The industry record for modern mining operations (post 1990) demonstrates the collective effectiveness of state and federal regulations in providing the necessary financial assurance to address potential

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[234] SBA, Office of Advocacy letter at 8.
[235] *Id*.
[236] *Id*.
[237] SBA, Office of Advocacy letter at 9 (citing *EPA Response to Peer Review Comments*, Chapter 4, Response Component Regression Analysis.)
[238] *Id*.
[239] *Id*.
[240] *Id*.
[241] *Id*.
[242] *Id*.
[243] *Id*.
[244] *Id*.
[245] *Id*.

hazardous material releases."[246] "On June 17, 2016, EPA and SBAR Panel members heard presentations from several States and Federal Land Managers concerning existing financial assurance programs and regulations."[247] "From the information provided, it is apparent that existing financial assurance programs are robust and address public health, ecological risks, and hazard release and response requirements under CERCLA."[248] "It is clear from the record that the current programs are effective."[249] "Small entity members are reporting that a duplicative CERCLA 108 (b) rule calculating financial assurance according to the examples in the SBREFA 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."[250]

One specific SER example of a site unable to achieve intended reductions under CERCLA 108b is the Pumpkin Hollow mine. "Pumpkin Hollow is entirely on private land regulated by the Nevada Division of Environmental Protection."[251] "Included in the permit process was a detailed calculation of financial assurance for closure; reclamation; demolition of facilities no longer needed for mining and not converted to another post-mining land use; removal and disposal of all chemicals and hazardous materials; and post-closure site management and monitoring."[252] The commenter provides: "Our mining operation is engineered and designed to eliminate or prevent release to the environment, as noted in the myriad of regulatory programs and standards listed above."[253]

Peer Reviewer 4 explained further how "[s]itting down with industry professionals and asking them about the results and special response cost situations is an important reasonableness check that has not apparently been done and that would have revealed the types of implementation flaws I have identified."[254] As the SBA relates in comments "[f]or example, in the case of the open pit cost category, the cost of the Historic Phoenix mine is a strong outlier."[255] "The Historic Phoenix mine open pit cost is $153,000/acre, which is far higher than the median cost in this category of only $1,600/acre."[256] "EPA's test to identify influence points confirmed this mine's dramatic effect on the Open Pit's final subformula."[257] "One reviewer cited this example stating that Phoenix had "huge" response costs - $223 million was due to the company's mine closure

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[246] *Id*.
[247] *CERCLA 108(b) Hardrock Mining Panel Report,* Appendix B at 41 (Paul Goranson, Energy Fuels Resources SER Comments letter at 3.)
[248] *Id*.
[249] *Id*.
[250] *CERCLA 108(b) Hardrock Mining Panel Report,* Appendix B at 57 (Frank Ongaro, MiningMinnesota SER Comment letter at 1).
[251] *Id.* at 8 (Tim Dyhr, Nevada Copper July 7, 2016 SER Comment Letter).
[252] *Id*.
[253] *Id*. (The comment letter includes 28 pages of regulatory permits in a table included to demonstrate the myriad of obligations that reduce the risk of a release or threatened operating modern mines.)
[254] *External Review of CERCLA 108(b) Financial Responsibility Formula for Hardrock Mining Facilities Background Document* at 9 (Sept 19, 2016) (hereafter "Peer Reviewer 4").
[255] *Id*. (citing *Formula Background Document*, Table G.1, Open Pit Data.).
[256] *Id*.
[257] *Id*.

plan that includes backfilling the pit."[258] "The reviewer suggested that EPA include an additional variable in the regression analysis for sites where expensive backfilling measures are not a requirement or part of the closure plan."[259] "EPA's failure to separately account for this factor in the regression greatly inflated this category, which accounts for one of the three largest response costs of the thirteen categories."[260]

"Similar anomalies are found in the two other costly categories – the waste rock and heap dump response categories."[261] "Second, due to the small sample size, issues with data quality would also be magnified."[262] "Errors in data interpretation or transcription could create a large deviation in the predicted costs."[263] "One peer reviewer evaluated a limited sample of data from four mines and could not replicate the proposal's cost/acre allocations from the reclamation and closure plans."[264] As the formula relates to calculating Natural Resource Damages, "EPA …agrees with commenter 3 that the effect of missing NRD is uncertain."[265] "Thus, EPA will solicit comment on additional NRD data in the proposed rule preamble."[266]

For example Peer Reviewer 4 believes "a Formula whose performance is -50% +100%, and that could result in a company posting financial assurance that is twice that required is satisfactory."[267] EPA in response concluded that "EPA does not believe that a response component of $131 million with a +100% to -50% bound of $66 million to $262 million is inconsistent."[268] "EPA also disagrees with commenter 4 that the +100% to -50% range is not satisfactory."[269] EPA provides based on prior documentation, "[Feasibility Study] cost estimates should provide an accuracy of + 50 percent to -30 percent using data available in the [Remedial Investigation]."[270]

"However, at the stage that facilities will be using this formula, there may not yet have been a release, and the facility almost certainly would not have undergone a remedial investigation."[271] "Thus, the premise that this same accuracy can or should be achieved in the absence of the presumed information is incorrect."[272] "While higher degrees of accuracy are purported by reclamation and closure plans, those plans have defined activities and criteria that are known

[258] *Id*. (citing Peer Reviewer 4, p. 5.).
[259] *Id*.
[260] *Id*.
[261] *Id*. at 9 (citing *EPA Response to Peer Review Comments*, Chapter 4, Response Component Regression Analysis).
[262] *Id*. (citing Peer Reviewer 4 at 4-5.).
[263] *Id*.
[264] *Id*.
[265] *EPA Response to Peer Review Comments* at 4-4.
[266] *Id*.
[267] *Id*.
[268] *Id*.
[269] *Id*.
[270] *Id*.
[271] *Id*.
[272] *Id*.

with more certainty than the plethora of potential response actions that could be taken by EPA or another party."[273]

"Given the time constraints and data constraints experienced by EPA I am of the opinion that the overall methodology is sound."[274] "With respect to the references to the SRCE model, EPA used the model to support the professional judgment of those deciding on the initial suite of variables to be used in the stepwise regression process."[275] "However, the SRCE model is a site-specific model that requires detailed engineering plans and judgment to be exercised prior to its use."[276] "In contrast, no remedial alternatives will have been considered prior to the use of the financial responsibility formula."[277]

EPA's apparent decision to overlook generally-applicable provisions of state law in favor of broadly-applicable CERCLA financial assurance will erode the willingness of hardrock mines to rely upon and fully satisfy those programs, as they will know they will get no federal credit for doing so. Site specific, complex programs take into account the unique geology, geography, terrain, climate, mining methods, engineering controls and management practices attributable to an individual mine.

"Modern mining methods and the unique nature of individual mine sites across the United States are incompatible with the generic, "one-size-fits-all" financial assurance model in the proposed rule."[278] ADEQ agrees, "The costs of the proposed CERCLA 108(b) rulemaking, including costs to small and large businesses and to State and local governments, appear to vastly outweigh any potential public health and environmental benefits."[279]

b. Unknown Market Capacity and Cost of Novel Financial Responsibility

EPA failed to acknowledge the uncertain financial market capacity for the novel CERCLA 108b FR. The novelty and complexity of the proposed rules has left many questions about the financial market capacity.[280] EPA admits the formula limitation that "the actual pricing of financial responsibility instruments is case-specific and dependent on the individual characteristics of the project or facility being underwritten, the financial profile of the owner or operator, and the

[273] *EPA RIA* at 3-21.
[274] *EPA Response to Peer Review Comments* at 6-17 (emphasis added).
[275] *Id*.
[276] *Id*. at 6-19
[277] *Id*.
[278] *CERCLA 108(b) Hardrock Mining Panel Report*, Appendix B at 46 (Tim Harvey, Pebble Partnership, SER Comment letter at 4.).
[279] *CERCLA 108(b) Hardrock Mining Panel Report*, Appendix B at 40 (Paul Goranson, Energy Fuels Resources, SER Comments letter at 2.)
[280] Hunter Moore, Office of the Arizona Governor, CERCLA 108b comments to OMB (Nov. 16, 2016) (incorporated and attached as comments).

estimated timing and amounts of costs likely to be due over the life of the project."[281] EPA also qualified "[i]t is important to note that this pricing approach assumes that no capacity constraints exist for the issuance of third-party instruments sufficient to cover the FR amounts contemplated under the rule."[282]

CERCLA requires "[t]o the maximum extent practicable, the [EPA] shall cooperate with and seek the advice of the commercial insurance industry in developing financial responsibility requirements."[283] The CERCLA 108b FR is novel in that it authorizes rules for direct action by third-parties asserted directly against any guarantor.[284] EPA calculates "[t]he proposed rule may require these facilities to secure approximately $7.1 billion in financial responsibility obligations."[285] The EPA financial market capacity and availability report concludes that "there may be softening in the underwriting of traditionally volatile lines of business, including environmental liability and mining" making it "exceedingly difficult to make inferences or predictions from the data as to future market trends and capacity." [286] One of EPA's sources, the Willis report identifies mining as a risk of concern, warranting careful evaluation.[287]In this case, uncertainty regarding third-party claims and "direct action" in relation to the long-tailed nature of the proposed FR under the rule only add to the uncertainty of available financial market capacity.

CERCLA is a risk contingency program, not a regulatory permitting program. CERCLA section 108b required EPA to promulgate rules for CERCLA FR within five years of the passage of CERCLA (1980), based on "experience of the [Super]Fund, commercial insurers, courts settlements and judgments, and voluntary claims satisfaction."[288] EPA has engaged in a flawed process in this rulemaking by relying too heavily on 35-years of Superfund history to the exclusion of state and federal land management agencies' permitting and FR programs that have been proactively eliminating or substantially mitigating CERCLA risk. This approach dramatically increases the likelihood that EPA underestimates the industry cost of the proposed CERCLA 108b rulemaking.

"Through State specific mining statutes and federally delegated programs, (e.g. Clean Water Act, Resource Conservation and Recovery Act, Clean Air Act, Safe Drinking Water Act, Uranium Mill Tailings and Recovery Act), the States and Federal regulatory agencies already have adequate

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[281] *Id*. at 4-4.
[282] *Id*. at 4-10.
[283] 42 U.S.C. § 9608(b)(2).
[284] 42 U.S.C. § 9608(c).
[285] EPA RIA at ES-7.
[286] *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* at 8.
[287] *Marketplace Realities 2016: Bringing the Pieces Together*, Willis at 21 (2016) http://www.willis.com/documents%5Cpublications%5CMarketplace_Realities%5CMarketplace_Realities_2016%20-%20v1.pdf (last visited 11/11/16).
[288] 42 U.S.C. § 9608(b)(2).

authority to comprehensively address the prevention and release of hazardous substances."[289] "The history of modern mining regulation bears out the effectiveness of these programs."[290] "CERCLA 108(b) bonding is an unnecessary and duplicative federal regulatory program."[291] "As a result, the proposed Rule appears to unnecessarily duplicate these programs."[292] "This duplication will create unnecessary and unwarranted economic stress on small entity mining companies that has the potential to drive some of them out of business."[293]

[289] *CERCLA 108(b) Hardrock Mining Panel Report*, Appendix B at 42 (Paul Goranson, Energy Fuels Resources SER Comments letter at 4.)
[290] *Id*.
[291] *Id*.
[292] *Id*.
[293] *Id*.

Attachment B

STATE OF ARIZONA
OFFICE OF THE GOVERNOR

DOUGLAS A. DUCEY
GOVERNOR

EXECUTIVE OFFICE

November 18, 2016

Howard Shelanski, OIRA Administrator
The Office of Management and Budget
Attn: Danielle Y. Jones, Policy Analyst
Office of Information and Regulatory Affairs
725 17th Street, NW
Washington, DC 20503

via email to: OIRA_Submission@OMB.EOP.gov
Danielle_Y_Jones@omb.eop.gov
aastanislaus@epa.gov
Johnson.Barnes@epa.gov

Re: EPA Proposed Financial Responsibility Requirements under CERCLA Section 108(b) for Classes of facilities in the Hard Rock Mining Industry

Dear Mr. Shelanski & Ms. Jones:

This letter is intended to reiterate and clarify Arizona's request to the Office of Management and Budget ("OMB"), Office of Information and Regulatory Affairs ("OIRA") related to the United States Environmental Protection Agency ("EPA") proposed CERCLA 108(b) financial responsibility rules for hard rock mines ("proposed CERCLA FR rules"). Arizona respectfully request that OIRA return the rule to EPA, and request EPA take additional consultative actions with States necessary to fully comply with Executive Orders 13563 and 12886 and federal statute. We are aware that this request will require EPA to petition the court for an extension to the existing draft rule publication deadline. Arizona further requests that OIRA compel EPA to solicit specific comment from States on their existing regulatory structures applicable to mining and mineral processing, how to clarify criteria necessary to achieve 100% credit for federal/state requirements for each response category, how to create a cost estimation model that addresses the gaps between a "one-size" and "site-specific" approach and an appropriate transition period that would be necessary for states to augment their regulatory structure if gaps exist.

In addition to the August 17, 2016 letter to EPA; comments provided during the October 28, 2016 OMB and EPA call with the Western Governors' Association ("WGA"), and comments

provided during the October 31, 2016 meeting with OMB and the Interstate Mining Compact Commission, we are providing the following information to supplement this request.

Through the court-sanctioned order on consent, EPA must identify the need for the proposed CERCLA FR rules, but has no obligation to promulgate rules.[1] The scope of the proposed CERCLA FR rules state the goal is to address risk, as opposed to ongoing operational controls covered by existing state and federal environmental and land use regulations. EPA fails to resolve, however, overlap in the scope of the proposed CERCLA FR rules assessment of risk of a release of a hazardous substance, and the multiplicity of modern state and federal operational engineering controls, industry best practices and existing financial responsibility regulations imposed on modern mining operations.

EPA has failed to properly analyze, collaborate on and ultimately justify the proposed CERCLA FR rules relative to addressing risk and benefits. Specifically, EPA fails to demonstrate the compelling need for the proposed CERCLA FR rules, or why the rules are necessary, well-conceived, reasonable and justified, and balance promotion of an efficient functioning economy and private markets. The proposed CERCLA FR rules have not complied with the small business process, or resolved identified gaps and uncertainty in the rule's novel regulatory framework that EPA models predict will have an extreme economic impact on hard rock mining.

Only if EPA identifies the need for the proposed CERCLA FR rules to address risk, does the EPA have the responsibility under law to create a scope for the rules that benefit and promote the economy while achieving the least burdensome regulations to protect public health, welfare and the environment.[2] Pursuant to the court-sanctioned schedule for EPA, EPA does not need the other parties' consent to seek court approval for an extension for the rulemaking process.[3] The rule record provides convincing evidence that important implementing and financial aspects of the rules are not ready for publication as a proposed rule. Time is especially critical given the novel and complex nature of the proposed CERCLA FR rules, and that EPA faces a December 1, 2017 deadline for promulgating final CERCLA FR rules.

I. Inadequate Significant Regulatory Action Analysis

OIRA reviews regulations, identified by a federal agency or by OIRA as significant regulatory actions, pursuant to Presidential Executive Order 12866 ("EO 12866").[4] "Significant regulatory action" means having "an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities."[5]

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[1] *In re: Idaho Conservation League, et al.*, at 4, No. 14-1149 (D.C. Cir. 2016), https://www.cadc.uscourts.gov/internet/opinions.nsf/1F012EA1238D7A3C85257F490054E52E/$file/14-1149-1596081.pdf (last visited 11/10/16); see 42 U.S.C. § 9608(b).

[2] Exec. Order No. 12,866, 58 Fed. Reg. 51735 (October 4, 1993).

[3] *In re: Idaho Conservation League, et al.*, at 4.

[4] Exec. Order No. 12,866.

[5] Id.

Federal agencies should promulgate only such regulations as "are required by law, are necessary to interpret the law, or are made necessary by compelling need, such as material failures of private markets to protect or improve the health and safety of the public, the environment, or the well-being of the American people ..."[6] Pursuant to EO 12866, the EPA shall assess and quantify the anticipated benefits relative to costs of economically significant rulemaking.[7] According to OMB implementing guidance, before recommending federal regulatory action, an agency must demonstrate that the proposed action is necessary and demonstrate the rules are well-conceived, and are reasonable and justified.[8]

For those regulatory actions that are governed by a statutory or court-imposed deadline, the agency shall, to the extent practicable, schedule rulemaking proceedings so as to permit sufficient time for OIRA to conduct its review.[9] "For major rules involving annual economic effects of $1 billion or more, [agencies] should present a formal quantitative analysis of the relevant uncertainties about benefits and costs."[10]

EPA further has duties under the Small Business Regulatory Enforcement Fairness Act ("SBREFA"), to convene a Small Business Advocacy Review ("SBAR") Panel. Finally, EPA has the duty pursuant to the Regulatory Flexibility Act ("RFA") and Executive Order 13132[11] on Federalism EPA to consult with state and local government officials.

The OMB OIRA and EPA identify the proposed CERCLA FR rules as a significant regulatory action that is "economically significant".[12] The US EPA discloses the proposed CERCLA FR rules are "likely to have a significant adverse economic impact on a substantial number" of small businesses.[13] The EPA identifies mining small businesses as operations with 1,500 employees or less.[14] EPA estimates about 184 facilities would be subject to the proposed rule.[15] One estimate from EPA concludes the proposed CERCLA FR rules will impact at least 65 small businesses.[16]

In the case of the EPA proposed CERCLA FR rules, EPA has a court-sanctioned deadline of December 1, 2016, under an order on consent, to promulgate proposed CERCLA FR rules

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[6] Id.

[7] Exec. Order No. 12,866, 58 Fed. Reg. 51735 (Benefits including balancing promotion of efficient functioning of the economy and private markets, and the enhancement of health and safety, the protection of the natural environment, and the elimination or reduction of discrimination or bias.)

[8] OMB Circular A-4 at 2-3, (Sept 17, 2003), https://www.whitehouse.gov/sites/default/files/omb/assets/regulatory_matters_pdf/a-4.pdf (last visited 11/10/16).

[9] Exec. Order No. 12,866 at 51735.

[10] OMB Circular A-4 at 40.

[11] Exec. Order No. 13,132, 64 Fed. Reg. 43255, 43256 (1999) (The standing Executive Order on federalism directs federal agencies to consult with and defer to states where possible when formulating policies that will have "substantial direct effects on the states.") https://www.gpo.gov/fdsys/pkg/FR-1999-08-10/pdf/99-20729.pdf (last visited 11/11/16).

[12] Reginfo.gov XML Reports for EO 12866, http://www.reginfo.gov/public/do/eAgendaViewRule?pubId=201604&RIN=2050-AG61 (last visited 11/8/16).

[13] US EPA Regulatory Development and Retrospective Review Tracker for Financial Responsibility Requirements under CERCLA Section 108(b) for Classes of Facilities in the Hard Rock Mining Industry https://yosemite.epa.gov/opei/RuleGate.nsf/byRIN/2050-AG61#2 (last visited 11/11/16).

[14] Id.

[15] The 184 facilities were derived from the MSHA Mine Data Retrieval System & Mineral and USGS Commodity Surveys data.

[16] Id.

identifying industry sectors and requirements for financial responsibility consistent with the degree and duration of risk associated with the production, transportation, treatment, storage, or disposal of hazardous substances.[17]

EPA has aggressively moved to meet that deadline, abandoning the EO 12866 mandate. Under the court-sanctioned agreement, the period for notice and comment has been reduced from three years, as EPA originally estimated, to one year.[18] The deadline for proposing the CERCLA FR rules has been extended modestly from August 2016 to December 1, 2016.[19] This is impactful, as discussed below, because of the significance to hard rock mining states' existing and overlapping financial responsibility and operational control programs, and the novel and complex nature of the proposed CERCLA FR rules EPA is crafting.

A. Lack of Meaningful EPA Pre-Proposal Small Business Involvement

Recently, Senate Small Business Committee Chairman David Vitter contested EPA compliance with statutory requirements to engage with small businesses in development of its rules.[20]

The EPA intends to issue the proposed CERCLA FR rules December 1, 2016. In its initial engagement, the "EPA sent draft pre-panel outreach materials to the potential SERs [Small Entity Representatives] on May 26, 2016."[21] "These materials were discussed at the June 9, 2016, pre-panel outreach meeting held in Washington, D.C."[22]

The EPA reported "[i]n consultation with the Office of Management and Budget and the Small Business Administration, the EPA formally convened the panel on August 24, 2016.[23] Allowing just more than a two weeks, "a Panel Outreach Meeting with the SERs was held on August 31, and written comments are expected from the SERs by September 16, 2016."[24] "The Panel has 60 days after the convening date to consider SER comments in addition to other rule-related materials prepared by the EPA and prepare its report."[25] Given the December 1, 2016 deadline, this accelerated schedule shows a lack of meaningful engagement by the EPA with the SER Panel.

Chairman Vitter and Chairman Inhofe, for the Senate Appropriations Committee continue to express "concerns regarding EPA's insufficient compliance with the Small Business Regulatory Enforcement Fairness Act (SBREFA), which requires EPA and other federal agencies to assess

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[17] *In re: Idaho Conservation League, et al.*; see 42 U.S.C. § 9608(b).

[18] Id.

[19] Id.

[20] "EPA, Vitter Spar Over Outreach on Mining Insurance", News: Conservation and Resources, (BNA) November 2, 2016 (The EPA "failed" to include small business representatives in its rulemaking process and therefore violated the law.), http://www.bna.com/epa-vitter-spar-n57982082179/; also see http://www.vitter.senate.gov/imo/media/doc/8.16.16%20Vitter-Inhofe%20EPA%20Letter.pdf (last visited 11/10/16).

[21] Letter from Mathy Stanislaus, Asst. Admin., US EPA to Hon. David Vitter, Chairman, U.S. Senate Comm. On Small Bus. and Entrepreneurship, at 1-2 (Sept. 19, 2016), http://src.bna.com/jOl (last visited 11/10/16).

[22] Id.

[23] Id.

[24] Id.

[25] Id.

and mitigate for the potential impacts that federal rules can have on small entities."[26] The Senators are also concerned that the SBAR Panel process is being shortcut by the court-sanctioned timeline. The Senators note that "EPA recognizes in its own guidance, 'the RFA [Regulatory Flexibility Act] requires the Agency to consider the Panel Report in selecting proposed regulatory options to address small entity concerns, and where appropriate, to modify the proposed rule.'"[27] Given the 60 days ordinarily provided after the September 16, 2016 providing of written comments to the Panel, clearly there is no time for EPA to meaningfully engage and to modify the proposal before December 1, 2016.

Regardless, despite numerous requests over nearly 5 months, EPA refused to provide sufficient information during the SBAR Panel process to enable the SERs to determine the likely impacts of the rulemaking on small businesses. Specifically, EPA failed to provide insight into how mines will be identified for inclusion or the basis or amounts of reductions for existing engineering controls or best management practices. EPA fails to provide guidance on how existing state and federal FR will apply. EPA also fails to address corporate self-assurance testing, or the duration of the FR and holding costs relative to operational revenue or credit ratings.

B. EPA Financial Sector Environmental Liability FR Capacity and Availability Study

In addition to the OMB OIRA process, the Senate Appropriations Committee also directed the EPA to collect and evaluate information from the insurance and financial industries regarding the use and availability of financial responsibility instruments for the proposed CERCLA FR rules.[28] The Senate request for information also requests the agency provide an explanation of how the proposed CERCLA FR rules will avoid prescribing financial responsibility requirements that are duplicative of those already required by other federal agencies.[29]

In response, EPA reported on insurance and other FR providers.[30] EPA reports that some aspects of these instruments would be novel and may require new instruments or features not available currently.[31] EPA's financial sector report however, focuses predominantly on the accessibility of insurance and surety instruments generally, not analyzing or reporting on corporate guarantees and duplicative requirements, and ignores the novelty of its proposed FR.

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[26] Letter from Sens. Vitter and Inhofe, U.S. Senate, Comm. On Approp. to Admin. Gina McCarthy, U.S. EPA (Aug 16, 2016), http://www.vitter.senate.gov/imo/media/doc/8.16.16%20Vitter-Inhofe%20EPA%20Letter.pdf (last visited 11/10/16).

[27] Id.

[28] Id.

[29] Id.

[30] 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, US EPA Report to U.S. Senate, Approp. Comm. (Sept 1, 2016)(required by the FY 2016 Omnibus Consolidated Appropriations Act (P.L. 114-113)), https://semspub.epa.gov/work/HQ/196705.pdf (last visited 11/10/16).

[31] 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, US EPA Report to U.S. Senate, Approp. Comm. (Sept 1, 2016)(required by the FY 2016 Omnibus Consolidated Appropriations Act (P.L. 114-113)), https://semspub.epa.gov/work/HQ/196705.pdf (last visited 11/10/16).

The EPA's 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 report ("EPA financial market capacity and availability report") fails to adequately address overlapping state and federal programs, and how such programs result in a formulaic FR reduction. In the report, EPA suggests but does not describe how reductions in FR could be available for response items such as engineering controls, source and draining controls, water treatment and short- and long-term operational maintenance and monitoring.[32]

The EPA financial market capacity and availability report also relies on but does not discuss or disclose trust funds or any corporate financial test that may be applicable for self-assurance.

In the SBREFA SBAR process, EPA acknowledged the Federal Land Policy and Management Act (FLMA) and state mine regulatory and FR programs, coupled with engineering controls and best practices reduce the risks addressed by the proposed CERCLA FR rules. As a result, EPA provided 100% reductions for complying with existing requirements supported by financial responsibility in the 11 mine examples, but has failed in the rule process to provide any definition or guidance on how this will be applied consistently.

C. Disproportionate Financial Impacts on Hard Rock Mining States

The proposed CERCLA FR rules will disproportionately affect hard rock mining states. Arizona, as one of a limited number of states where the proposed hard rock mining FR rules will apply, believe the proposed CERCLA FR rules will result in a substantial impact on the overall economy. The most recent analysis indicates that mining activity in 2014 provided a total of 43,800 Arizona jobs and generated $4.29 billion in total income for workers, business and property owners, and governments in Arizona.[33]

Hard rock mining has a great economic impact with a small number of facilities, which exaggerate and concentrate impact on hard rock mining states and their rural communities. Arizona has 14 active hard rock mining projects with 6 additional projects in permitting. In 2014, Arizona mines produced approximately 65% of the nation's newly-mined copper, along with significant amounts of associated valuable co-products (*e.g.*, gold, silver, selenium, tellurium and molybdenum).

The hard rock mining industry is the economic engine for many of our counties, supporting schools, hospitals, jails and other general government functions. In 2014, the Arizona copper

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[32] Id.; also see EPA webinar on CERCLA section 108(b) Financial Responsibility of May 17, 2016; also see Decl. of Barnes Johnson, Dir. of Office of Res. Conservation and Recovery, Envtl. Prot. Agency ¶¶ 30–31 (Nov. 19, 2014) (Because hardrock mining is already subject to some financial assurance requirements, the impact of new financial assurance requirements may be reduced).

[33] The Economic Impact of the Mining Industry on the State of Arizona 2014, L. William Seidman Research Institute, Arizona State University (Sept 2015) http://www.azmining.com/uploads/AMA%20report%202014%20v2%20.pdf (last visited 11/11/16).

industry employed approximately 12,000 people directly and 50,000 indirectly, and had an estimated direct and indirect impact on the Arizona economy of nearly $5 billion.[34]

Overall, income per worker in the mining industry is $102,860 which is double the average income per worker across all industries in Arizona. Most of the mines in Arizona are located in rural counties and in many are the highest contributor to the local tax base. If the continued operation of the mines in Arizona are severely impacted because of an ill-conceived CERCLA 108(b) rule, it will gravely affect the economic livelihood of those rural Arizona counties.

As was communicated to EPA by Arizona's Department of Environmental Quality ("ADEQ"), ADEQ has run a screening financial analysis (Table 2) based on the example provided by EPA on May 18, 2016 that suggests the financial impacts to Arizona mines could be extreme-totaling $1.8 billion in additional FR under the proposed CERCLA FR rules for just two mines modeled.

TABLE 1 – Screening for Economic Impact at Just Two AZ Mines

MINE	SITE FEATURES (EST.)	ESTIMATED[35] 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

Table 2, by comparison, demonstrates the relative comparison of $1.8 billion to related values.

TABLE 2 – Magnitude of Estimated FR for Just Two AZ Mines

[34] The Economic Impact of the Mining Industry on the State of Arizona 2014.

[35] 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.

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[36])
	156%	of EPA's Superfund Budget for 2015

II. Need, and Benefits versus Costs of the New Regulation

According to information provided by BLM and USFS in 2011, more than 3,300 mine plans of operation have been approved since 1990 and none of those have been added to the CERCLA National Priorities List ("NPL")[37], indicating that existing state and federal regulatory and FR programs are working to reduce the degree and duration of risk as required by CERCLA.

Rather than site-specific conditions, EPA apparently has taken a backward looking risk assessment in the proposed CERCLA FR rules to apply a non-site specific formulaic inputs to create a baseline of FR that may potentially be reduced by consideration of current controls at the facility.

In the litigation phase of the CERCLA 108(b) rule consideration, EPA expressed concern over lack of resources to conduct or implement the framework.[38] EPA has not ordinarily enforced fees for services like the proposed periodic testing and review of FR. EPA typically provides a pathway for states to enforce and implement such FR programs. Given the states traditional primacy over surface water pursuant to the Clean Water Act, states various regulatory programs including state mining reclamation acts and groundwater, and post-mining land use, states are in the best position to meet EPA's goals through a state framework that avoids federalism, duplication concerns. These economically burdensome proposed CERCLA FR rules currently do not harmonize state FA, site specific conditions found across a nationally diverse landscape or credit for existing controls or FA to ensure intended benefits justify the costs as required of law.

The EPA failed in the pre-proposal process is to give transparency as to the proposed formula for FR and the impact of such reductions or credits for existing FR and engineering controls. Without this there is no way for the EPA, the financial markets, the state and local governments, the public or the facilities to assess if the cost is too high for currently operating facilities relative to the risk.

A. Undefined Insurance and Surety Market Capacity and Availability

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[36] http://www.azcommerce.com/resources/economy/gdp

[37] The National Priorities List, under the CERCLA Superfund addresses abandoned hazardous waste sites throughout the United States and its territories.

[38] *Sierra Club, Great Basin Resource Watch, Amigos Bravos, and Id. Consv. League v. Johnson* at 8, (D. Ct. N. Ca. 2009) http://earthjustice.org/sites/default/files/library/legal_docs/cleanup-bonds-decision.pdf (last vistied 11/11/16).

EPA concludes that "additional market capacity likely exists to support entities seeking financial responsibility coverage in response to CERCLA 108(b)", based on inference from broader environmental marketplace premium stability and profitability.[39] EPA then specifically notes "industry advisors and brokerages are uniformly measured about the degree of growth capacity in the environmental insurance marketplace, particularly with respect to volatile risks such as mining."[40] Id.

The EPA financial market capacity and availability report notes that one large insurer, AIG, "recently announced its exit from the environmental impairment liability marketplace in January 2016."[41] Research suggests that the marketplace is continuing to evaluate the impact of this decision, given that AIG is considered to be the largest underwriter of environmental insurance that addresses "large scale, long-tailed environmental risks."[42]

"Further, the specific proportion of the CERCLA 108(b) financial responsibility market for the hard rock mining industry that the (re)insurance and surety marketplace can satisfy depends on facility-specific criteria, including the aggregate limit required for each facility, the residual useful operating life of the facility, specific physical characteristics of the facility, the commodity extracted, the financial condition of the operator/insured and parent company, and the compliance record of the operator and/or owner." [43]

EPA also relies on speculative growth in or Risk Retention Groups ("RRGs"), suggesting RRGs may present an opportunity for creation of additional capacity to serve the financial service needs. Thus, EPA suggests "RRGs may provide a useful solution to expand available capacity beyond that which currently is available by affording greater flexibility of coverage to affected hard rock mining entities." [44]

EPA also fails to address the impact of trust funds or the corporate financial test, explaining "neither of these instruments directly relies upon the availability of third-party markets for financing."[45]

The Surety and Fidelity Association of America ("SFAA"), in commenting to EPA on the proposed CERCLA FR rules concluded that working from the "few example calculations" EPA offered in its May 17, 2016 webinar, "the aggregation of financial assurance [FR] requirements could present availability challenges" based on the risk factors.[46] The SFAA suggested that EPA

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[39] 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 at 8.

[40] Id. at 21.

[41] Id. at 16.

[42] Id. at 15 (Specifically, long-tailed environmental risks are those that span several years, and in some cases, last in perpetuity.)

[43] Id. at 22.

[44] Id. at 2.

[45] Id. at 23 (EPA explained its failure to judge impacts because "the funding of a trust fund or the passage of a financial test is contingent solely upon the credit worthiness of the responsible party.")

[46] Letter to Mr. Mathy Stanislaus, Asst. Admin, US EPA Office of Land and Emergency Management from Robert J. Duke, General Counsel re CERCLA 108(b) Financial Assurance Requirement, Surety & Fidelity Association of America (July 14, 2016).

consider a dual obligee instrument that would satisfy overlapping state and federal requirements.[47]

B. Small Business Uncertainty and Impacts

Businesses need certainty to operate and invest. EPA states that "the timing, pricing and nature of such products will ultimately depend on the requirements established by the final rule."[48] The EPA financial market capacity and availability report concludes, "[i]n terms of timing, EPA expects the rules to phase in the FR requirements over a period up to 4 years, as provided for in CERCLA 108(b)(3)."[49] "This should help to provide lead time for the markets to respond to demand and companies to obtain assurance."[50]

There is concern about the duration of the FR and periodic FR review. A surety's bond "risk and exposure are affected by the scope and nature of the obligation, the size of the obligation and the duration of the obligation", which in turn affects the bonds underwriting requirements.[51] Therefore, the SFAA explains, as the risk levels increase "smaller businesses with limited financial resources may have a particular difficulty in qualifying for the bond."[52] Energy, power and utility, and mining industries have significantly less capacity available to them, with carriers generally not willing to write more than a one- or two-year term.[53]

The SFAA also expresses concern of the impact of bankruptcy (which should not be a triggering event for a claim), overlap of existing state and federal bonds for reclamation obligations. Specifically, the SFAA is seeking clarity "how EPA, other federal agencies (such as BLM) and state regulatory agencies will coordinate activities in making claims involving the same event."[54] The SFAA requests EPA include "measures by which the surety can control the duration, such as a cancellation in the bond" for which "sureties typically raise their underwriting standards, and provide long-term bonds only to the largest and most financially sound operators."[55]

C. Overlap and Preemption

Given the overlap of existing FR for operations and FR for risk of release under the prosed CERCLA rules, there is doubt and confusion as to what instrument would be called upon in the

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[47] Id. ("This dual oblige private bond [whereby the state and federal government are parties to the FR with the mine] would satisfy the [federal] bonding requirement and would eliminate the need for the entity to provide duplicate bonding...")

[48] 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 at 22.

[49] Id.

[50] Id.

[51] Id.

[52] Id.

[53] 2016 Insurance Market Outlook: Insights from Our National Practice Leaders, Wells Fargo Insurance at 16 (as cited by EPA in its 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 https://wfis.wellsfargo.com/insights/clientadvisories/Documents/WCS-1780103-WFI-2016-PC-Mkt-Outlook-WIP-FNL-PG-NoCrops.pdf (last visited 11/11/16).

[54] Letter to Mr. Mathy Stanislaus, Asst. Admin, US EPA Office of Land and Emergency Management from Robert J. Duke, General Counsel re CERCLA 108(b) Financial Assurance Requirement at 3.

[55] Id.

event of a release. EPA's position is that FR required of hardrock mining by other federal agencies is not duplicative or preempted.[56] CERCLA requires preemption if the State FR is "in connection with liability for the release of a hazardous substance".[57]

At the outset, EPA cannot summarily dismiss preemption as not applicable because EPA and the federal government cannot control the interpretation state programs and CERCLA Section 114 by state courts. The Environmental Council of States, SFAA, IMCC, WGA and several states demonstrated conclusively that the proposed CERCLA FR rules duplicate existing FLMA and state mine regulatory and FR programs in violation of Executive Order 12866.

Arizona's FR requirements for hard rock mining facilities are found in its Aquifer Protection Permit Program, the Arizona Mined Land Reclamation Act, and regulations governing lessees conducting hard rock mining on State land. The Aquifer Protection Permit ("APP") program, is a regulatory program, designed to prevent groundwater pollution and remediate unpermitted discharges through closure procedures the same as intended in the proposed CERCLA FR rules.[58] It protects Arizona's aquifers by ensuring that facilities are designed, constructed, operated, maintained and closed in environmentally protective fashion. In other words, Arizona's APP Program ensures that the proposed CERCLA 108(b) rules will never be required for APP permitted facilities.

The FR required as a part of this permit program is available to the State to help it protect and properly address (through closure procedures) the same risk as the proposed CERCLA FR rules in the event that a facility discharges above its permitted limits. Directly duplicative of the proposed CERCLA FR rules, the state FR for "closure" and "post-closure monitoring and maintenance" under the Arizona APP program is defined broadly to include all actions necessary to operate, close, to eliminate possibility of future discharges, and further, to take post-closure corrective action to maintain compliance, if necessary.[59]

Additionally, Arizona's post-mining land use program is found in Arizona's Mine Land Reclamation Act ("MLRA").[60] The MLRA 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 Arizona State Land Department requires FR of its lessees, including those who conduct hard rock mining, to protect the value of the land it

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[56] 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 at 22. ("Having considered this information, the 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.").

[57] CERCLA section 114

[58] A.R.S. §§ 49-241 *et seq.*

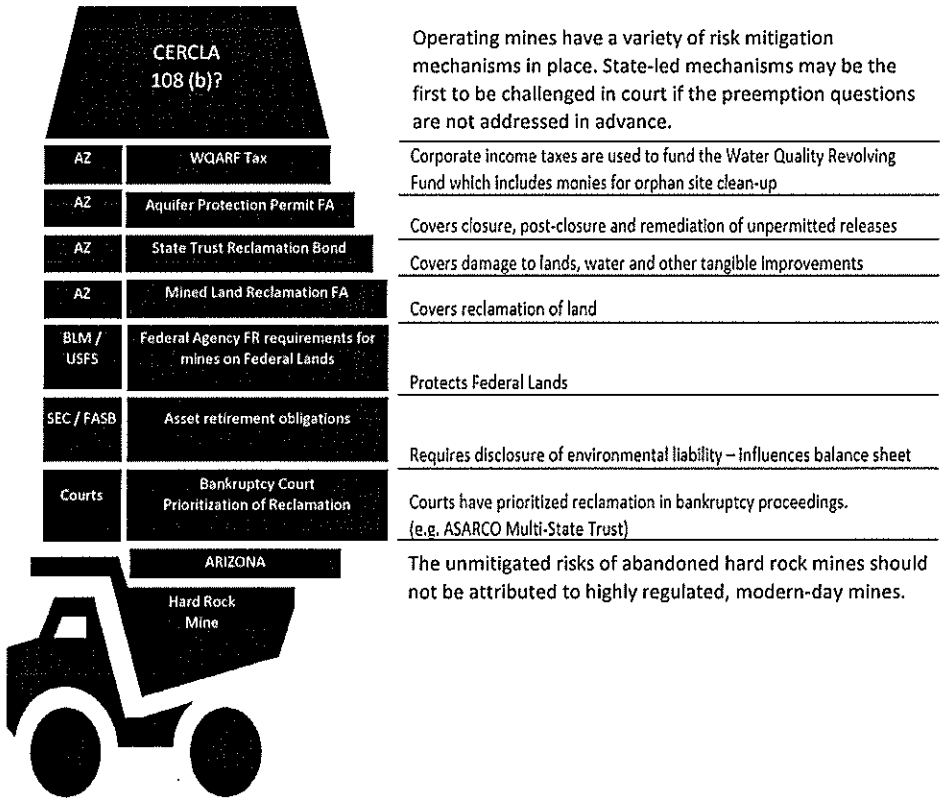
[59] A.R.S. §§ 49-201(5) and 49-201(30) (APP requires permitees for closure, among other duties, undertake "all actions specified in an aquifer protection permit..., as well as elimination, to the greatest degree practicable, of any reasonable probability of further discharge from the facility," and 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.")

[60] A.R.S. § 27-902 *et seq.*

holds.[61] 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 1.

Overlapping new federal CERCLA 108(b) FR upon existing state FR results in preemption based on CERCLA, or at a minimum, compromises and jeopardizes state's ability to mitigate releases during operations in exchange for federal requirements that address environmental impacts as a result of a significant release of hazardous substances. Given the large FA amounts used in the examples in the EPA webinar, and the lack of credits for State reclamation plans and FA, it is almost certain, that when the EPA FA rule is promulgated, the States will be sued under CERCLA 114. Based on the information presented, the proposed CERCLA FR rules are best applied on federal lands in the limited circumstances consistent with the degree and duration of risk associated with the production, transportation, treatment, storage, or disposal of hazardous substances on federal lands.

FIGURE 1 – Risk Mitigation Mechanisms



The above is important because the EPA proposed CERCLA FR rules are acknowledged to be a significant regulatory action with a significant impact on small businesses, and the market has yet to be able to determine its impact, and whether the market can absorb the novel product EPA is creating through its proposed CERCLA FR rules.

[61] Ariz. Admin. Code R12-15-1805(i)

D. Novelty and Complexity of Proposed CERCLA FR rules

The EPA financial market capacity and availability report concludes that "there may be softening in the underwriting of traditionally volatile lines of business, including environmental liability and mining" making it "exceedingly difficult to make inferences or predictions from the data as to future market trends and capacity." [62] In this case, uncertainty regarding third-party claims and "direct action" only add to the uncertainty of available financial market capacity. One of EPA's sources, the Willis report identifies mining as a risk of concern, warranting careful evaluation.[63]

EPA acknowledges that "the CERCLA 108(b) proposed rule is structured somewhat differently from other financial responsibility programs."[64] CERCLA section 108 permits outside third parties to make a claim directly against financial warrantors if there is not financially viable responsible party.[65] "The EPA expects that under the proposed rules, other parties (i.e., other federal agencies, the states, and the public) also could make claims against the owner or operator under Section 107, payable from the instruments."[66] Claims on a bond are traditionally limited to the parties to the bond agreement, whereas the proposed CERCLA FR rules will open the financial responsibility to third parties to make a claim against the FR instrument. The SFAA expresses "a significant concern...mak[ing] the financial assurance [FR] available to multiple potential claimants through the direct action provisions of section 108(c)."[67] Some of those concerns relate to assurances that EPA address "such funds will be used to remediate the effects of the release".[68] There is also concern as to which of overlapping state and federal FR will be applicable and which will have priority.

Every mine will be judged by the financial market based on the asset worthiness being extracted compared with the aggregate limit of coverage required for each facility, but EPA's model fails to produce a site specific FR addressing these concerns. Properly addressing the framework and the economic impact of the rules is important because this is only the first is a series of similar FR rulemakings for additional industries. EPA also issued an advanced notice of proposed rulemaking of its plan to develop FR requirements for: chemical manufacturing; petroleum and coal products manufacturing; and electric power generation, transmission, and distribution.[69]

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[62] 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 at 8.

[63] Marketplace Realities 2016: Bringing the Pieces Together, Willis at 21 (2016) http://www.willis.com/documents%5Cpublications%5CMarketplace_Realities%5CMarketplace_Realities_2016%20-%20v1.pdf (last visited 11/11/16).

[64] 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 at 21.

[65] *See* 42 U.S.C. § 9608(c)(2).

[66] 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 at 21.

[67] Letter to Mr. Mathy Stanislaus, Asst. Admin, US EPA Office of Land and Emergency Management from Robert J. Duke, General Counsel re CERCLA 108(b) Financial Assurance Requirement.

[68] Id.

[69] *Identification of Additional Classes of Facilities for Development of Financial Responsibility Requirements Under CERCLA Section 108(b)*, 75 Fed. Reg. 816, 816 (Jan. 6, 2010).

III. Conclusion

EPA has failed its responsibility under law to create a scope for the rules that benefit and promote the economy while achieving the least burdensome regulations to protect public health, welfare and the environment. EPA has failed to meet its duties to assess the underlying costs anticipated from the regulatory action, including the underlying analysis of costs and to provide an explanation why the planned regulatory action is preferable to potential alternatives. EPA delayed in the identity of industry sectors, promulgation of requirements for thirty years, and in its haste has now given short shrift processes addressing small business and other economic impacts, and the market availability and capacity to cover the novel financial responsibility. The result has been a rulemaking that fails to properly assess and address the environmental and financial risk of the proposed rules, as required by law.

ADEQ requests the OMB return the proposed rule with direction to EPA, and request EPA seek an extension to the proposed rule deadline to address these shortcomings. EPA should meaningfully employ the federalism principles, and the collaboration process to establish rules that allow states to continue to have primacy over CERCLA, and groundwater and post-mining land use. Arizona again offers its support in collaborating with EPA to test the proposed rules, and requests OMB require EPA to engage states and stakeholders as proposed in ADEQ's Aug 17, 2016 letter to evaluate the rules to discover alternatives that produce the highest intended net benefits. In the alternative, Arizona requests OMB OIRA require EPA to elicit comments to the specific question raised in this letter during public comment, and OIRA ensure EPA addresses these comments before regulations become final. Due to the complexity of this rulemaking, Arizona also requests that EPA establish a public comment period of at least 120 days.

Sincerely,

Hunter Moore
Policy Advisor, Natural Resources
State of Arizona

cc: Mathy Stanislaus, Assistant Administrator, Office of Land and Emergency Management
Barnes Johnson, Director, Office of Resource Conservation and Recovery

Attachment C

United States Senate

WASHINGTON, DC 20510

August 23, 2016

The Honorable Gina McCarthy
Administrator
Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Dear Administrator McCarthy,

We would like to bring to your attention concerns related to an upcoming proposed rule regarding financial responsibility for hard rock mining under section 108(b) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). We have a number of questions with the forthcoming rule and the process used to develop it. As such, we urge you to file an extension and work with the State of Arizona to ensure the proposed rule does not undermine financial responsibility programs already in place in the state.

Arizona has a long history of hard rock mining and the industry plays a key role in the state's economy. Arizona also has strong environmental protections in place to ensure mining in the state is conducted in a responsible manner. Robust financial assurances regulations already exist under the Aquifer Protection Permit Program, the Arizona Mined Land Reclamation Act, and regulations governing leases for hard rock mining on state land. Arizona's environmental regulators and miners are rightly concerned about the possible preemption of these Arizona programs.

As we understand it, Misael Cabrera, the Director of the Arizona Department of Environmental Quality (ADEQ), sent the EPA Office of Conservation and Recovery a letter (attached) on August 17, 2016 concerning this very issue. In the letter Director Cabrera requests the EPA file for an extension from the court in order to better consult with the states. ADEQ also extends an offer of assistance to test the new rules and suggests several options to address potential preemption. We urge you to follow their request for an extension and accept their offer of assistance on this troublesome rule. We thank you in advance for your continued time and attention to these issues. As always, we ask that this matter be handled in strict accordance with all applicable agency rules, regulations, and ethical guidelines.

Sincerely,

JEFF FLAKE
United States Senator

JOHN MCCAIN
United States Senator

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

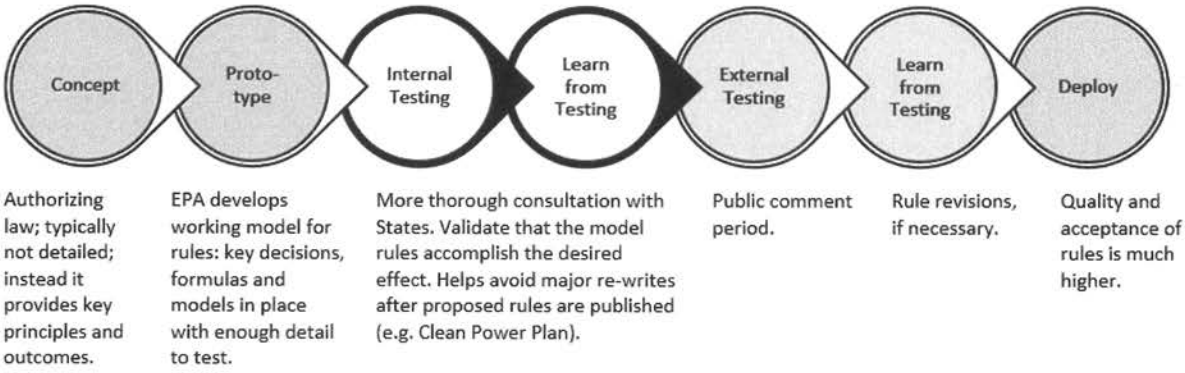
Dear Ms. Krueger:

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.

Corporate income taxes are used to fund the Water Quality Revolving Fund which includes monies for orphan site clean-up	
Covers closure, post-closure and remediation of unpermitted releases	
Covers damage to lands, water and other tangible improvements	
Covers reclamation of land	
Protects Federal Lands	
Requires disclosure of environmental liability – influences balance sheet	
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
U.S. Environmental Protection Agency
Office of Congressional and Intergovernmental Relations
Mail Code 1306A
Washington, DC 20460

Mark W. Rupp
U.S. Environmental Protection Agency
Office of Congressional and Intergovernmental Relations
1200 Pennsylvania Avenue
N.W. Room 3442H
Washington, DC 20460

Arizona State Mine Inspector
JOE HART
1700 W. Washington Suite 403
Phoenix, Arizona 85007-2805
(602) 542-5971
Fax (602) 542-5335

Administrator Scott Pruitt
U.S. Environmental Protection Agency
William Jefferson Clinton Building
1200 Pennsylvania Avenue, N.W.
Mail Code: 1101A
Washington, D.C. 20460

SUBMITTED VIA WWW.REGULATIONS.GOV

July 10, 2017

Re: Docket ID No. EPA–HQ–SFUND–2015–0781 (Proposed Rule: Financial Responsibility Requirements under CERCLA § 108(b) for Classes of Facilities in the Hardrock Mining Industry)

Dear Administrator Pruitt,

The Arizona State Mine Inspector (ASMI) hereby submits these comments in response to the Proposed Rule issued by the U.S. Environmental Protection Agency (EPA), entitled "Financial Responsibility Requirements Under CERCLA § 108(b) for Classes of Facilities in the Hardrock Mining Industry" (hereinafter, the "Proposed Rule").[1]

I. Executive Summary

The Proposed Rule is misguided, unnecessary, and ultimately threatens to upend Arizona's longstanding and effective state regulatory and financial assurance programs that currently govern the hardrock mining industry in tandem with existing federal regulatory programs. Even when viewed in isolation. Arizona's state programs, as explained below, already protect against the same risks contemplated by the Proposed Rule and require the covered mines to demonstrate adequate financial responsibility. Therefore, ASMI does not support EPA's background research, analysis, or proposed regulatory provisions for the hardrock mining industry that are set forth in the Proposed Rule and EPA's accompanying documentation.

Arizona has a unique history with and perspective on hardrock mining. Arizona is the only state with an elected state mine inspector. In addition to its constitutional duties to enforce state mining laws that protect Arizona's environment, ASMI has a special duty to protect the people of Arizona, be they government employees, mine employees, outdoor enthusiasts, and others — all of which comprise ASMI's constituency. ASMI's responsibilities also include identifying and inventorying abandoned mines, given the long history of mining in the State. Further, ASMI's Reclamation Division reviews and approves (or denies) reclamation plans for active hardrock mining operations to ensure that mined lands are suitable for post-mining activities. ASMI also recognizes the

[1] 82 Fed. Reg. 3,388 (Jan. 11, 2017).

important role that mining plays in the broader Arizona economy, including for industries in other sectors. With all this in mind, ASMI is tasked with overseeing thousands of mines, both active and inactive, located throughout Arizona.

ASMI, along with the Arizona Department of Environmental Quality (ADEQ) and other State agencies and groups, has spent the decades since the enactment of CERCLA developing, implementing, and improving the multitude of programs that regulate hardrock mining in Arizona. Among other responsibilities and requirements, these existing regulatory programs adequately protect human health and the environment from the potential release of "hazardous substances" and other risks associated with hardrock mining operations.

ASMI submits these comments and requests that EPA acknowledge the legitimacy, effectiveness, specific experience and expertise, and value of Arizona's existing state and federal programs by taking final action to withdraw or rescind the Proposed Rule. Based on its review, ASMI has determined that the Proposed Rule, if finalized, (1) will impose inappropriate and unnecessary financial responsibility requirements on hardrock mining operations, and (2) will not give appropriate deference to or recognize the inherent authority of the robust and experienced state and federal programs that already control the risks that are the subject of the Proposed Rule. Aside from ASMI's role in regulating hardrock mining operations in Arizona, ADEQ oversees a broad range of long-established regulatory programs that address risks related to potential releases of "hazardous substances" at hardrock mining operations. Although ADEQ bears the heaviest load in protecting public health and the environment in Arizona, other state agencies like ASMI work side-by-side with ADEQ to ensure that there are no significant gaps in regulatory coverage of active mining operations. Thus, these comments avoid listing the state environmental programs administered by ADEQ that successfully protect the people and environment of Arizona (instead, ASMI incorporates and supports ADEQ's comments on this rulemaking). Below, ASMI discusses the additional layers of protection created by the existing rules that it administers; namely, under Arizona's Mine Land Reclamation (MLR) program and Arizona's requirements for hardrock mine operators on State-owned land.

These programs, among other obligations, impose financial responsibility requirements on owners or operators of hardrock mining operations. They stand on their own and provide unique protections, but also join the multitude of existing state and federal programs that collectively protect Arizona's public, industry, economy, and environment. For the reasons set forth below, ASMI respectfully requests that EPA take final action by determining that the Proposed Rule be withdrawn or rescinded as duplicative and unnecessary. First, ASMI registers its objection to the general procedural inadequacies of EPA's rulemaking process that culminated in the Proposed Rule, as well as the likely negative economic impacts that the Proposed Rule could inflict on Arizona's economy, industries, and taxpayers, if finalized.

II. Shortcomings of the Rulemaking Process Culminating in the Proposed Rule

ASMI wishes to express its dismay at the labyrinthine processes EPA has taken in publishing the Proposed Rule. Though the CERCLA 108(b) rulemaking process apparently was decades in the making, EPA has rushed, and made more difficult for stakeholders, the necessary notice and comment process for this rulemaking. EPA's initial comment period was woefully inadequate given the importance and potential impacts of the Proposed Rule. Further, even though EPA eventually extended the comment period, the agency took weeks to upload hundreds of thousands of pages of "supporting documents" for the rulemaking, ostensibly for public review.

These massive and incomplete "data dumps" threaten to upset the rulemaking process, itself.

Useful criticism is an impossibility if stakeholders have inadequate time to properly review documents relevant to the rulemaking and offer their own perspectives in response. In order to avoid such pitfalls in future rulemakings, ASMI implores EPA to effect timelier, more transparent communications with stakeholders — including early outreach to state agency stakeholders in advance of the publication of proposed rules for general public comment.

III. Likely Economic Impacts of the Proposed Rule

For more than a century, mining has played an extremely significant role in developing Arizona's economy and enhancing the productivity of industry in the United States and the world, generally. Indeed, Arizona is one of the top producers of copper in the U.S. and the world, and produces many other commodities, such as molybdenum, coal, gold, silver, and uranium. Cost-effective and well-regulated production of these commodities is indispensable for continued growth and prosperity in Arizona and the United States.

Although many high-tech and other industries have made their homes in Arizona, mining remains a cornerstone of the Arizona economy, employing more than 12,000 people across every county; spending billions purchasing goods and services; generating billions in tax revenue for state and local governments; and accounting for indirect benefits of tens-of-thousands of jobs and additional billions in income.[2] When averaged by employee, mining companies pay over five times more in business taxes than the average Arizona business. Further, mining company employees pay approximately 44% more in individual taxes than the average worker in the State. EPA's 2016 Regulatory Impact Analysis regarding the Proposed Rule discussed, among other issues, the potential economic impacts of the Proposed Rule on hardrock mining states.[3] EPA recognized that the positive economic effects of the hardrock mining industry are skewed regionally, specifically in the west and southwest, and that Arizona has the second most hardrock mining operations in the United States.

In its evaluation of the potential impacts of the Proposed Rule on hardrock mining operation employment, EPA acknowledged that it lacked "sufficient data to model and quantify changes in mines' employment levels."[4] In addition to this uncertainty, EPA, in determining the potential economic impact of the Proposed Rule, did not consider companies' "other existing financial responsibility and financial assurance obligations, and other factors that may affect the pricing of financial responsibility instruments for companies that have to procure [financial responsibility] instruments for multiple facilities."[5]

Due to its sheer number of hardrock mining operations, Arizona will be disproportionately impacted by the Proposed Rule, should it be implemented. EPA's economic analysis of the potential effects of the Proposed Rule on the hardrock mining industry is woefully inadequate, and any conclusions derived therefrom are unreliable. Thus, finalization of the Proposed Rule would be irresponsible, arbitrary, and unsupportable due to major gaps in EPA's supporting analysis. In light of the substantial direct and indirect economic benefits of Arizona's hardrock mining industry and the potentially devastating economic consequences

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2 Arizona State University, *The Economic Impact of the Mining Industry on the State of Arizona 2014* (Sept. 2015), *available at* http://www.azmining.com/uploads/AMA%20report%202014%20v2%20.pdf.

3 EPA, *Regulatory Impact Analysis of Financial Responsibility Requirements under CERCLA § 108(b) for Classes of Facilities in the Hardrock Mining Industry Proposed Rule* (Dec. 1, 2016), *available at* https://www.epa.gov/sites/production/files/2016-12/documents/cercla_108b_ria_12_1_2016.pdf.

4 *Id.*

5 *Id.* at 6-3 n.61.

of the Proposed Rule on companies and individuals in Arizona, ASMI respectfully requests that EPA withdraw or rescind the Proposed Rule.

IV. Arizona's Financial Assurance Programs Administered by ASMI

At the outset, ASMI must emphasize that a multitude of existing state programs and federal programs (some of which Arizona has attained regulatory primacy to administer, directly) already apply to hardrock mining. In some cases, these other regulatory programs include and impose some form of financial responsibility to mitigate or otherwise address the potential risks identified in the Proposed Rule. For instance, mining operations in Arizona generally are subject to the Arizona Aquifer Protection Permit (APP) and MLR programs, the Arizona Pollutant Discharge Elimination System permit program, Arizona's solid and hazardous waste programs, and Arizona's assumption of responsibility for natural resource damage issues under CERCLA.

Collectively, these existing programs regulate risks related to "hazardous substances" and their potential release into the environment, and inherently are applicable to hardrock mine operators. ASMI's experience is that the above-referenced state and federal programs are sufficient, and that they broadly and effectively mitigate the possible duration and degree of risks that can arise during modern hardrock mining operations. In fact, many modern hardrock mines have updated and altered their operations not only to account for new technologies — but also to incorporate and implement applicable regulatory and financial assurance programs under Arizona and federal law.

In contrast, financial assurance and operating requirements for the hardrock mining industry as a whole have never been within the purview of CERCLA, or EPA's implementing regulations. Indeed, although EPA may be in its element in connection with historical releases of hazardous substances at mines that pre-date modern environmental regulation (and, in many cases, were exhausted and abandoned before such regulation), EPA is neither a permitting nor regulatory oversight agency for production activities at contemporary hardrock mines. EPA lacks the specific institutional knowledge and experience regarding mining operations that state and other federal agencies have developed in the more than thirty-five years since CERCLA was enacted.

A. Arizona's Mine Land Reclamation Program

In 1994, the Arizona State Legislature enacted the statute creating Arizona's MLR program, later amending it in 1996 to bring it under the administrative and inspection authority of the ASMI. Arizona's MLR program governs hardrock mines throughout their operational lives, including reclamation, by enforcing financial assurance and reclamation requirements. Such requirements are a small but integral part of the comprehensive collection of existing environmental programs in Arizona, working in concert to regulate hardrock exploration and mining efficiently, including with respect to public health, safety, and protection of the environment. Indeed, the overall purpose of the MLR program is to require reclamation of mined land such that it can be made safe to allow for its future use for other activities.

The MLR program applies to owners and operators of mining operations larger than five acres, and requires reclamation of surface disturbances such that the land may be safely used for the post-mining land uses set forth in the reclamation plan.[6] A reclamation plan must include, among

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[6] "Reclamation" is defined by statute to mean measures that are taken on surface disturbances at exploration operations and mining units to achieve stability and safety consistent with post-mining land use objectives specified in

other things, the following elements:

- Proposed reclamation measures to achieve the proposed post-mining land use including measures to (1) restrict public access to pits, adits, shafts, and other safety hazards; (2) achieve erosion control and stability; (3) address revegetation and conservation; and (4) promote wildlife or fish habitat for surface disturbances where the proposed post-mining land use objective is designated as grazing, fish or wildlife habitat, forestry, or recreation, and
- Estimated costs to perform each of the proposed reclamation measures for purposes of determining financial assurance.[7]

Under the MLR program, reclamation must begin within two years after mining operations cease, but this deadline can be extended by the ASMI for up to fifteen years (*i.e.*, via up to three five-year extensions) if the owner or operator provides reasonable evidence that it will resume mining operations.[8]

In addition to submitting a reclamation plan, the owner or operator of an operation subject to the MLR program must provide adequate financial assurance within sixty days of plan approval, but is not required to duplicate financial assurance in place under other federal or state laws.[9] Adequate financial assurance is equal to the cost to perform reclamation activities as set forth in the owner or operator's ASMI-approved reclamation plan.

Calculation of reclamation costs, which must be appropriately documented and sourced by the owner or operator, is based on performance by a third-party and takes into account a number of factors.[10] These factors include the specific activities set forth in the reclamation plan, such as (1) earth moving, regrading, and stabilization of surface disturbances; (2) revegetation, preparation of seedbed, and planting; (3) demolition of buildings and other structures; (4) any ongoing or long-term activity which are required to maintain the effectiveness of reclamation or are necessary in place of reclamation; (5) equipment mobilization and demobilization; (6) contractor profit; and, (7) administrative overhead.[11] Further, ASMI works with the relevant mine owner or operator to adjust the amount of financial assurance when necessary, but at least every five years, to account for new surface disturbances, inflation, or reclamation plan modifications.[12]

The MLR program allows an owner or operator to provide financial assurance using any one, or combination, of the following forms: (1) surety bond; (2) certificate of deposit; (3) trust fund with pay-in period; (4) letter of credit; (5) insurance policy; (6) certificate of self-insurance; (7) cash deposit with the State Treasurer; (8) evidence of ability to provide self-insurance or corporate

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the reclamation plan. Ariz. Rev. Stat. (A.R.S.) § 27-901(13). Next, "surface disturbance" means clearing, covering or moving land by means of mechanized earth-moving equipment for mineral exploration, development and production purposes but does not include surveying, assessment and location work, seismic work, maintenance and other such activities that create a de minimis disturbance. *Id.* § 27-901(16).

7 *Id.* § 27-971(B)(9), (11).

8 *Id.* § 27-926(A) & (B).

9 *Id.* § 27-994.

10 An owner or operator may obtain a reduction in financial assurance costs if it demonstrates certain financial ability to perform the reclamation measures. *See id.* § 27-992(B).

11 *See* Ariz. Admin. Code (A.A.C.) § R11-2-802; *see also* A.R.S. § 27-992.

12 A.R.S. §§ 27-992, 27-993; A.A.C. § R11-2-802.

guarantee; (9) annuities; and, (10) other mechanisms approved by the ASMI,[13] subject to the qualifying conditions found in A.A.C. § R11-2-804-812.

If an owner or operator has performed some or all of the necessary reclamation at its mine site, it may submit an application for a partial or full release of its financial assurance, which must include (1) a description of performed reclamation; (2) a description of planned surface disturbances that have not been disturbed; and, (3) a cost estimate of remaining reclamation.[14] Within sixty days of receipt of the complete application, the ASMI will inspect the operation and render a decision.[15] A release of financial assurance is subject to a holdback of 10% for the costs of care, monitoring and one reseeding, if necessary, for areas that have been revegetated.[16] An owner or operator may also obtain a release of its financial assurance by providing ASMI an alternate approved form of financial assurance. [17]

ASMI has broad enforcement authority to deal with noncompliant owners or operators — it can perform inspections of mining operations, issue compliance orders, suspend, withdraw, or revoke reclamation plans, apply for injunctive relief, and issue civil penalties.[18] In addition, under certain conditions (*e.g.*, failure to operate in accordance with prescribed timeframes, failure to initiate or complete reclamation, failure to comply with financial assurance, and ceasing business due to insolvency, or bankruptcy), an owner or operator may forfeit its financial assurance.[19]

On balance, the MLR program effectively mitigates or eliminates risks related to "hazardous substance" impacts at hardrock mining facilities during their operational lives and after reclamation by (1) requiring approval of reclamation plans to begin mining operations; (2) subjecting owners and operators to inspections and potential enforcement actions; (3) requiring the process as a whole to be backed up by financial assurance, which can be used to complete reclamation (if necessary); and (4) working in concert with other state programs, such as ADEQ's longstanding APP program, to ensure there are no gaps in regulatory coverage for the protection of human health and the environment over the lifetime of a given hardrock mine. Indeed, Arizona and other states have spent decades attaining experience and crafting, implementing, and developing regulatory programs specifically applicable to hardrock mining and the environment. The Proposed Rule, if implemented, threatens to upset the balance of these state programs, thus increasing potential future human health or environmental risks.

B. Requirements for Mining on Arizona State Trust Lands

In addition to the MLR program, any operator that desires to conduct hardrock mining operations on state land must enter into a mineral lease and post a bond in "a reasonable principal amount" for the purpose of protecting against "damage to lands, livestock, water, crops or other tangible improvements."[20] This type of bond is wholly separate from the financial assurances required by the MLR program, APP program, and other Arizona programs noted above. Thus, it acts as an additional protection to mitigate or address risks related to "hazardous substances" for the

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13 *Id.* § 27-991(B).

14 *Id.* § 27-996(A).

15 A.A.C. § R11-2-817(B); A.R.S. § 27-996(B).

16 A.R.S. § 27-996(B).

17 A.A.C. § R11-2-817(E).

18 *See* A.R.S. §§ 27-1021 to 27-1026.

19 A.A.C. § R11-2-818(A).

20 *Id.* § R12-5-1805(I)

approximately nine million acres of land in Arizona managed in trust by the Arizona State Land Department.

V. Conclusion

The MLR program, APP program, and other existing state and federal programs —which have been developed and improved from decades of specific experience — effectively protect Arizona's public and environment from the risks identified in the Proposed Rule, including potential releases of "hazardous substances." These expansive and robust programs impose focused and efficient financial responsibility requirements tied to site-specific factors, in contrast to the general, uninformed algorithms envisioned by EPA (nearly all of which appear to have been based on historical mining practices, rather than solely modern mining processes). For these reasons alone, the Proposed Rule is unnecessary, redundant, arbitrary, and does not provide additional protection or risk mitigation. Indeed, Arizona's substantive regulatory programs have helped to make hardrock mining what it is today — *i.e.*, an industry devoid of many of the risks associated with the historic mining operations to which EPA inappropriately attributes its reasoning for the Proposed Rule. Such operations preceded modern environmental regulations and in no way should inform additional regulation of the modern hardrock mining industry.

For these reasons, in addition to the uncertain, but likely devastating, economic impacts on Arizona's public, industries, and economy, EPA should defer to state expertise regarding Arizona's environment, citizens, economy, and industry. In light of the existing state and federal regulatory programs discussed above, ASMI respectfully requests that EPA take final action by withdrawing or rescinding the Proposed Rule as duplicative, unnecessary, and likely damaging to Arizona's state agencies, public, and economy.

Sincerely,

Joe Hart

Joe Hart, Arizona State Mine Inspector