

Message

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**From:** Leland Frost [LFrost@nam.org]  
**Sent:** 11/16/2017 2:16:36 AM  
**To:** Brown, Byron [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=9242d85c7df343d287659f840d730e65-Brown, Byron]; Minoli, Kevin [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=c9c0070d651a4625ac20258369f9b050-KMINOLI]; Wehrum, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=33d96ae800cf43a3911d94a7130b6c41-Wehrum, Wil]  
**Subject:** NAM holiday party

Hi Byron, Kevin, and Bill,

I wanted to let you know that you should have received an invitation today to NAM's holiday party. If you did not receive it, please let me know. I think the invites sometimes get caught in spam filters.

If you plan to attend, please make sure to RSVP because we will have a strict guest list. I wish we had been able to invite more of our friends, but we are already overcapacity. Hope to see you there!

All the best,

Leland P. Frost  
National Association of Manufacturers  
Associate General Counsel  
Email: [lfrost@nam.org](mailto:lfrost@nam.org)  
Direct: Ex. 6  
Mobile:



Message

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**From:** Paul Balsarak [pbalsarak@steel.org]  
**Sent:** 6/5/2017 5:49:05 AM  
**To:** Brown, Byron [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=9242d85c7df343d287659f840d730e65-Brown, Byro]  
**Subject:** Meeting

Byron,

I am planning a meeting with Samantha on steel issues probably late June / early July. You had said earlier that you might like to be invited to that I think. Would you like me to talk to Robin and loop you in? By the way I am on work travel in Taiwan, so I'm not really up at 1:45 in the morning. Thanks

Paul

Sent from my iPhone

Message

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**From:** Sara Decker [Sara.Decker@walmart.com]  
**Sent:** 2/13/2018 8:29:09 PM  
**To:** Brown, Byron [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=9242d85c7df343d287659f840d730e65-Brown, Byro]  
**Subject:** RE: EXT: Re: coffee?

Hey there --

Firstly, **Ex. 6**

Secondly, coffee Friday afternoon? I'm free 2:00 onward.

---

**From:** Sara Decker  
**Sent:** Friday, February 09, 2018 11:46 AM  
**To:** Brown, Byron  
**Subject:** Re: EXT: Re: coffee?

Oh no! I am so sorry! I hope **Ex. 6**

I'll shoot you a note next to find time. Good luck with **Ex. 6**

Sent from my iPhone

On Feb 9, 2018, at 11:43 AM, Brown, Byron <[brown.byron@epa.gov](mailto:brown.byron@epa.gov)> wrote:

Actually I am going to have to cancel and reschedule for last week. **Ex. 6**

**Ex. 6**  
Sent from my iPhone

On Feb 9, 2018, at 9:21 AM, Sara Decker <[Sara.Decker@walmart.com](mailto:Sara.Decker@walmart.com)> wrote:

Don't usually reconfirm but going to this AM as I'm not sure what your situation is with the semi-shutdown...let me know if you need to reschedule. Otherwise, see you this afternoon!

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**From:** Brown, Byron [<mailto:brown.byron@epa.gov>]  
**Sent:** Thursday, February 08, 2018 3:06 PM  
**To:** Sara Decker  
**Subject:** EXT: RE: coffee?

Yes, that should work. The place you're thinking of is called Timgad.

---

**From:** Sara Decker [<mailto:Sara.Decker@walmart.com>]  
**Sent:** Thursday, February 8, 2018 2:41 PM  
**To:** Brown, Byron <[brown.byron@epa.gov](mailto:brown.byron@epa.gov)>  
**Subject:** RE: coffee?

Hey there --

Need to now push this to 1:30 but hopefully that still works in your window. I remember there being a coffee shop right below your building and close to the metro – did you want to meet there?

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**From:** Sara Decker  
**Sent:** Wednesday, February 07, 2018 5:20 PM  
**To:** 'Brown, Byron'  
**Subject:** RE: coffee?

1:00 works! Where shall I meet you?

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**From:** Brown, Byron [<mailto:brown.byron@epa.gov>]  
**Sent:** Wednesday, February 07, 2018 3:28 PM  
**To:** Sara Decker  
**Subject:** EXT: RE: coffee?

Sorry I have had a conflict come up in the morning. I can meet in the afternoon between 1 and 2 pm. Will that work?

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**From:** Sara Decker [<mailto:Sara.Decker@walmart.com>]  
**Sent:** Monday, February 5, 2018 12:55 PM  
**To:** Brown, Byron <[brown.byron@epa.gov](mailto:brown.byron@epa.gov)>  
**Subject:** RE: coffee?

No worries! And Friday is great. How about 11:30? Where is a good place to meet for you?

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**From:** Brown, Byron [<mailto:brown.byron@epa.gov>]  
**Sent:** Monday, February 05, 2018 11:58 AM  
**To:** Sara Decker  
**Subject:** EXT: RE: coffee?

Hi Sara – Sorry for the delay. I should have time later this week, perhaps on Friday after 11 am.

---

**From:** Sara Decker [<mailto:Sara.Decker@walmart.com>]  
**Sent:** Thursday, February 1, 2018 2:06 PM  
**To:** Brown, Byron <[brown.byron@epa.gov](mailto:brown.byron@epa.gov)>  
**Subject:** RE: coffee?

Hi Byron –

Just checking in. Are you free for coffee perhaps early next week?

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**From:** Sara Decker  
**Sent:** Friday, January 26, 2018 4:21 PM  
**To:** Byron Brown ([brown.byron@epa.gov](mailto:brown.byron@epa.gov))  
**Subject:** coffee?

Hi Byron –

Hope you are doing well! Wanted to reach out and see if you had time for some coffee in the near future? Wanted to follow-up on our last conversation and pick your brain a bit on ways we can move forward.

Happy to meet you at your convenience or, if you prefer, we can also just jump on the phone – whatever is easier for you.

Thanks and look forward to hearing from you!

S,

**Sara Decker**

Director, Federal Government Affairs

Walmart \* Save money. Live better.

O:

C:

**Ex. 6**

[Sara.Decker@walmart.com](mailto:Sara.Decker@walmart.com)

<image001.png>

Message

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**From:** Paul Balsarak [pbalsarak@steel.org]  
**Sent:** 6/16/2017 9:15:11 PM  
**To:** Brown, Byron [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=9242d85c7df343d287659f840d730e65-Brown, Byro]  
**Subject:** Meeting

Byron – probably will have about 10 people at our meeting next Tuesday. Just so you know. Thanks and looking forward to it.

**Paul Balsarak**  
Vice President, Environment

American Iron and Steel Institute  
25 Massachusetts Ave. NW, Suite 800  
Washington, DC 20001

**Ex. 6** (office)  
(mobile)

Message

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**From:** Paul Balserek [pbalserek@steel.org]  
**Sent:** 6/8/2017 1:43:54 PM  
**To:** Brown, Byron [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=9242d85c7df343d287659f840d730e65-Brown, Byro]  
**Subject:** RE: thanks / question

got them both, thanks very much!  
Paul

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**From:** Brown, Byron [brown.byron@epa.gov]  
**Sent:** Thursday, June 08, 2017 9:21 AM  
**To:** Paul Balserek  
**Subject:** RE: thanks / question

You should have received a separate invite for meeting with Sarah for 10 am meeting.

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**From:** Paul Balserek [mailto:pbalserek@steel.org]  
**Sent:** Wednesday, June 7, 2017 6:08 PM  
**To:** Brown, Byron <brown.byron@epa.gov>  
**Subject:** thanks / question

I see the 11-12 time with you on June 20. That's great, thanks very much. I'm sorry though, but i'm just unclear. Is that time also for our mtg with sarah greenwalt? or will the Sarah meeting be coming in another invite? If so, please try to avoid 2-4pm on June 20. Thank you very much,  
Paul

Message

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**From:** Jay Timmons [Jay.W.Timmons@nam.org]  
**Sent:** 11/15/2017 6:41:03 PM  
**To:** Brown, Byron [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=9242d85c7df343d287659f840d730e65-Brown, Byro]  
**Subject:** Please Join Us for the NAM Holiday Party

Can't see the invitation? [View it online.](#)



# CREATORS WANTED

Jay Timmons and the National Association of  
Manufacturers invite you to the official  
holiday celebration for manufacturers in  
America. Join us to toast the people who are  
creating the future.

**DECEMBER 14**  
**5:00 - 8:00 P.M.**

NAM HEADQUARTERS  
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WASHINGTON, D.C. 20001

**RSVP NOW ▶**

**Please RSVP by December 4**

This event has been designed to meet the "reception exception" as  
stated by the Senate Select Ethics and House Ethics Committees.  
Invitation is non-transferable.



Message

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**From:** Paul Balserek [pbalserek@steel.org]  
**Sent:** 8/17/2017 2:47:09 PM  
**To:** Brown, Byron [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=9242d85c7df343d287659f840d730e65-Brown, Byro]  
**Subject:** FW: 42 Members of Congress Call on EPA to Scrap CERCLA Rule  
**Attachments:** 2017 08 08 Klobuchar-Franken CERCLA Letter.pdf; EPA - Reps. Nolan & Bergman - CERCLA108(b) Iron Ore Letter\_170731.pdf

Hi Byron,

Attached are two letters from congressional representatives of the iron ore mining districts in Minnesota and Michigan to EPA. Also, below please find a another letter submitted by a coalition of congressional representatives requesting EPA to take no action. You may have already seen these, but wanted to make sure.

Hope all is well.

Paul

**Paul Balserek**  
Vice President, Environment

American Iron and Steel Institute  
25 Massachusetts Ave. NW, Suite 800  
Washington, DC 20001

**Ex. 6**

(office)  
(mobile)



**For Immediate Release**  
Contact: Tanner Hanson

**Date:** July 31, 2017  
[Tanner.Hanson@mail.house.gov](mailto:Tanner.Hanson@mail.house.gov)

## **42 Members of Congress Call on EPA to Scrap Obama-era CERCLA Rule**



**WASHINGTON, D.C.** – Today, Congressional Western Caucus **Chairman Paul A. Gosar D.D.S. (AZ-04)**, Western Caucus Members **Congressman Trent Franks (AZ-08)** and **Congressman Andy Biggs (AZ-05)**, and the **National Mining Association** released the following statements after 42 Members of Congress sent a letter to EPA Administrator Scott Pruitt urging him to scrap the Obama Administration’s burdensome new financial requirements for the hardrock mining (HRM) industry in the form of the proposed CERCLA Rule:

“The Left continues to go after any industry they can get their hands on. They suffocate hard-working American industries with excessive regulations and financial burdens – all in the name of serving the planet instead of its people. These punitive regulatory actions needlessly damage American families and jobs. We must continue to roll-back Obama-era regulations and get our country back on track,” said **Congressman Franks**.

“Imposing billions of dollars in new financial costs on job creators in rural communities in order to enact duplicative government mandates defies common sense,” **Chairman Gosar** said. “The Obama CERCLA rule is a solution in search of a problem. Like many of the previous administration’s senseless regulations, this misguided proposal was concocted to kill jobs in the mining industry and pander to the “Keep It in the Ground” extremists. I am hopeful that Administrator Pruitt and the Trump Administration will heed our call and scrap this fundamentally flawed, duplicative and unnecessary rule that usurps states’ rights.”

**Congressman Biggs** stated, “The Obama-era CERCLA rule is a burdensome regulation that nefariously targets our nation’s mining industry, inserting unwelcome federal bureaucracy where it did not belong. Unsurprisingly, radical environmentalist groups, with the help of the Obama administration, took advantage of CERCLA and other regulatory obstructions to wreak havoc on this industry for the past eight years. That undue influence stops now. I am pleased to join more than 40 of my colleagues in this call to undo the previous administration’s job-killing agenda. I hope President Trump’s administration continues to reset the regulatory climate in our nation.”

“EPA’s proposal is wholly without merit. To conclude that today’s mining industry presents the level of risk that justifies an expansive, costly and duplicative regulation, EPA had to ignore modern mining practices, existing state and federal environmental, reclamation and financial assurance requirements, and a sensible reading of the law. NMA is grateful to our allies in

Congress who have pushed back against this duplicative and dangerous rulemaking,” said the **National Mining Association**.

**Background:**

Today, 42 Members of the House signed and sent a letter to U.S. Environmental Protection Agency (EPA) Administrator Scott Pruitt urging him to scrap the Obama Administration’s burdensome new financial requirements for the hardrock mining (HRM) industry in the form of the proposed CERCLA Rule. To read the full signed letter click [HERE](#).

The proposed rule was published in the lame duck on January 11, 2017 and in the twilight of the Obama Administration’s regulatory authority.

The proposed regulation is duplicative of existing state programs and federal financial assurance obligations for the HRM industry. It therefore does not accomplish anything additionally meritorious in the area of financial assurance for the aforementioned companies, while imposing extensive compliance costs on state governments and mining companies.

The letter signers state that EPA’s assessment of the HRM industry failed to appropriately account for the comprehensive federal and state programs and associated financial assurance safeguards already in place. Such programs ensure that all phases of mining, reclamation, closure and post-closure are designed and operated to provide protection against the very same risks EPA seeks to address in the rule. As a further consequence, if EPA finalizes this rule as proposed, it will usurp states’ regulatory purview. The complexity of this industry and its variability across states makes it suited for even more state oversight—not less, as the rule as proposed would force.

Because the new requirements are duplicative, they present no additional environmental benefit.

The letter also makes clear that the totality of available evidence and study shows that the Obama Administration’s rule would have devastating economic consequences for companies, the families they support, and the states and localities to which they provide revenues. The industry in question provides more than 1.2 million jobs and generates approximately \$3 trillion in added value to our nation’s gross domestic product (GDP).

Agency *and* private analysis of the redundant rule both show its requirements would result in significant economic damage to this important industry.

EPA’s Regulatory Impact Analysis estimates that the rule will impose \$7.1 billion in new financial responsibility obligations on the HRM industry. According to EPA’s data, the proposed rule will require HRM facilities to incur \$171 million per year in new financial responsibility costs, while only saving the government \$15.5 million per year.

Analyses conducted by affected industries include more comprehensive considerations and detailed assumptions derived from knowledge of industry operations. Such analyses estimate the cost of this new federal program to be significantly higher than EPA’s already-crippling projections.

On July 20, 2017 Bret Parke, Deputy Director of the Arizona Department of Environmental Quality, testified on the proposed CERCLA rule before the House Committee on Natural Resources Subcommittee on Energy and Mineral Resources. In his testimony, Deputy Director Parke stated:

*“ADEQ recently conducted a financial screening analysis modeled under the proposed rule based on an EPA-provided example that suggests the financial impacts to Arizona mines could be extreme: totaling \$1.8 billion in additional financial responsibility for just the two Arizona mines. This is an extraordinarily high financial burden on mine operators, and the state and its citizens that is not warranted, given the lack of evidence to support EPA’s assertion that the proposed rule would yield an environmental benefit.”*

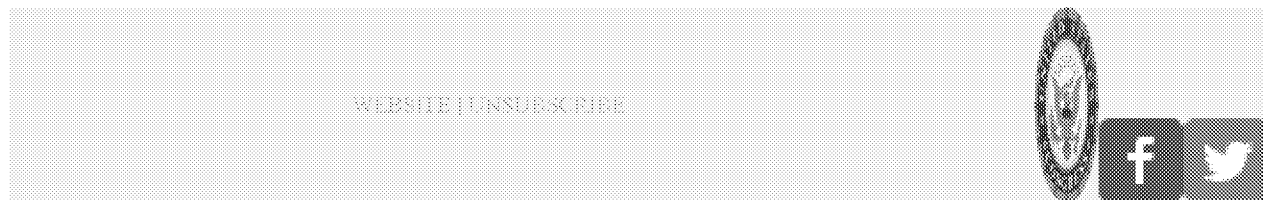
*“The CERCLA 108(b) proposed rule on which I have provided testimony on today, is largely duplicative and fails to recognize the complexities of our existing regulatory and environmental ecosystem. If enacted, the proposed rule will yield significant negative economic and state program impacts in Arizona. It will also have an outsized effect on the limited number states with hardrock mining, and the generally rural communities in which they exist. As a result, we strongly encourage EPA to withdraw the proposed rule.”*

\* \* \*

**The letter was endorsed by:** American Exploration & Mining Association, Industrial Minerals Association – North America, National Mining Association, Arizona Mining Association, Colorado Mining Association, Idaho Mining Association, MiningMinnesota, Montana Mining Association, Utah Mining Association.

**Letter cosigners (42):** Representatives Amodei, Babin, Biggs, Rob Bishop, Brat, Buck, Cheney, Cook, Cramer, Jeff Duncan, Emmer, Flores, Franks, Gianforte, Gibbs, Gosar, H. Morgan Griffith, Hice, Bill Johnson, Mike Johnson, Jones, King, Labrador, LaMalfa, Lamborn, Love, Marshall, McClintock, McKinley, McMorris Rodgers, Mooney, Tim Murphy, Palmer, Pearce, Schweikert, Simpson, Jason Smith, Stewart, Tipton, David G. Valadao, Yoho and Don Young.

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# United States Senate

WASHINGTON, DC 20510

August 8, 2017

The Honorable Scott Pruitt  
Administrator  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave NW  
Washington, DC 20460

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

Dear Administrator Pruitt:

We write regarding the Federal Register notice published on January 11, 2017, regarding updates to requirements under section 108(b) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). We have heard concerns about the proposed rule, which includes iron ore mining as one of the classes of hardrock mining subject to new financial responsibility.

The original Notice of Proposed Rulemaking from December 2016 specifically called for reconsideration of iron ore mining being classified as high risk for financial assurance purposes. The number of iron ore facilities in active operation, their physical size, their annual amount of hazardous substances released, and the extent of their environmental contamination, all point to a misclassification under the proposed rule – particularly given that there have been no iron ore mining sites on Environmental Protection Agency's (EPA) National Priorities List and no federal government expenditures related to CERCLA remediation at these sites. Iron ore (ferrous mining) should not be categorized as the same level of risk factor as, for instance, uranium mining.

Furthermore, the State of Minnesota already has performance-based standards in place that are specifically tailored to address the unique circumstances of individual iron ore mines. As drafted, the proposed rule would create conflicts between the existing State of Minnesota regulatory programs and the EPA.

For these reasons, we ask you to consider including iron ore mining among the categories of low risk mining classes that were excluded from the definition of hardrock mining in the CERCLA 108(b) proposal from December 2016.

Sincerely,



Amy Klobuchar  
United States Senator



Al Franken  
United States Senator

**Congress of the United States**  
Washington, DC 20515

July 31, 2017

The Honorable Scott Pruitt, Administrator  
U.S. Environmental Protection Agency (EPA)  
William Jefferson Clinton Building  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460

RE: Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)  
108(b) Hardrock Mining Financial Assurance Regulations (EPA-HQ-SFUND-2015-  
0781)

Dear Administrator Pruitt:

Representing all eight of the United States' active iron ore mining and processing facilities and the thousands of good-paying jobs they provide, we write to raise concerns regarding the EPA's inclusion of this industry in its proposed Section 108(b) rule<sup>1</sup>.

Specifically, we believe the agency erred by including the domestic iron ore industry as a covered class in its definition of hardrock mining rather than excluding it with other similar hardrock mining classes that present low Superfund risk.

In doing so, EPA exposed approximately 4,500 family-sustaining jobs in Minnesota and Michigan to burdensome and financially devastating regulations that are not commensurate with the level of CERCLA risk posed by this well-established, low risk-industry that has a history of responsible environmental reclamation practices.

As you may know, in its proposed CERCLA 108(b) rule, EPA solicited comments on whether the iron ore industry presents a lower risk of injury as compared to other classes of hardrock mining and whether such a low-risk designation merits excluding the iron ore industry from the rule. As the EPA reviews these comments, we hope you'll see the merits of an exclusion for a number of reasons, including those outlined below.

**Unlike other classes of hardrock mining that rely on heavy chemicals to process mineral commodities, the iron ore sector employs physical separation techniques to separate iron units from the host rock.** These techniques have been employed in Michigan's Upper Peninsula and Northeast Minnesota for approximately 170 years and produce value-added iron ore pellets, which are the critical raw material used in the production of iron and steel. The resulting mined areas have been subsequently used for recreation and public drinking water reservoirs. As a

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<sup>1</sup> This proposed rule is a product of lawsuits brought by environmental groups in 2008 and 2014, leading to a court order requiring EPA to issue a proposed Superfund/CERCLA 108(b) rule covering the hardrock mining sector by December 2016 and further requiring a final financial assurance rule or determination to be fully promulgated by December 2017.


result, the iron ore industry has minimal CERCLA liabilities as compared to certain other classes of hardrock mining.


**Compliance with the rule would come on top of current State regulatory authority and financial assurances already in place.** Despite the fact that the iron ore industry has only negligible potential CERCLA liabilities and no history of leaving the federal government on the hook for cleanup costs, we are with the understanding that the proposed CERCLA 108(b) rule would require that the industry post financial assurance for an exorbitant amount that is orders of magnitude larger than any reasonable estimate of the industry's total potential CERCLA liability.

**Any requirement to securitize these inflated liability estimates would deprive capital investment needed to remain cost competitive and cause devastating impacts for the strategically important iron ore and steel industries.** Both of these industries remain in the fledgling stages of recovery following the commodity recession brought on by the steel import crisis of 2015 and 2016.

We thank you for weighing these concerns and understand EPA's desire to protect against future CERCLA expenditures arising from industries that pose significant CERCLA risks to the Superfund. However, we believe the iron ore industry poses no such imminent risk, and look forward to working with you and your staff on this important issue.

Sincerely,

  
Richard M. Nolan  
Member of Congress

  
Jack Bergman  
Member of Congress

CC: Mr. Byron R. Brown, Deputy Chief of Staff for Policy, Office of the Administrator



Message

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**From:** Bromberg, Kevin L. [kevin.bromberg@sba.gov]  
**Sent:** 4/28/2017 7:28:09 PM  
**To:** Fotouhi, David [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=febaf0d56aab43f8a9174b18218c1182-Fotouhi, Da]  
**CC:** Brown, Byron [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=9242d85c7df343d287659f840d730e65-Brown, Byro]; Ward, Thomas [TWard@nahb.org]  
**Subject:** FW: Emailing - CERCLA 108(b) Advocacy Comment Letter - EPA FINAL\_.pdf  
**Attachments:** CERCLA 108(b) Advocacy Comment Letter - EPA FINAL\_.pdf

Good talking to you - look forward to working together. Remember – we are here to provide additional regulatory/legal support as we address the same issues as your office. We can supplement your in-house resources, particularly as EPA staffs up. I have attached our comment letter regarding withdrawal of the 108(b) proposal from January 2017.

Also, reminder for Byron – we need to talk about 108(b) mining and the 108(b) “other industries”. Both are required to be completed by December 1, 2017 under current court order. For mining, we last discussed the need for a NODA on 108(b) mining to be issued in parallel to the current request for comment on the proposal.

In our view, EPA should make a determination to terminate rulemaking for the other industries well before December 1, based on the response to comments to the earlier ANPRM ( I think 2011 or 2012).

Regarding Steam Electric, we are ready to assist as soon as Sarah Greenwalt is ready to move forward.

Tabby Waqar in my office covers the TSCA and RCRA /CERCLA issues generally.

Kevin

☐ Kevin Bromberg

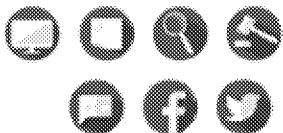
Assistant Chief Counsel for Environmental Policy

☙ SBA // Office of Advocacy

409 3rd St. SW, Washington, D.C. 20416

☎ kevin.bromberg@sba.gov 📠 202.481.2963

Ⓜ **Ex. 6**





January 19, 2017

VIA REGULATIONS.GOV

The Honorable Gina McCarthy  
Administrator  
U.S. Environmental Protection Agency

**Re: Financial Responsibility Requirements for the Hardrock Mining Industry (Docket ID: EPA-HQ-SFUND-2015-0781)**

Dear Administrator McCarthy:

The U.S. Small Business Administration's (SBA) Office of Advocacy (Advocacy) submits the following comments in response to the Environmental Protection Agency's (EPA) proposed rule, "**Financial Responsibility Requirements for the Hardrock Mining Industry.**"<sup>1</sup> The proposed rule would impose costly requirements on hardrock mines owned by small firms, without evidence that a problem exists warranting intervention. The proposal requires mines to acquire financial assurance coverage (i.e. insurance) to cover potential liabilities for releases of hazardous substances from a mine. However, these small mines are already highly regulated by robust state and Federal programs. New Federal standards risk damaging these programs which have, in recent years, effectively addressed the same issues at modern small mines. Further, EPA missed the opportunity to receive important feedback from small businesses through the Small Business Regulatory Enforcement Fairness Act (SBREFA) panel process and did not consider less costly regulatory alternatives as required by the Regulatory Flexibility Act (RFA).

Advocacy strongly recommends that EPA withdraw this ill-advised proposal. At a minimum, EPA should examine the relevant state and Federal programs and identify any "gaps" in their coverage, so that these regulators can move to improve their programs. EPA can then act to address these gaps in a separate proposal, if deemed necessary.

### **The Office of Advocacy**

Congress established Advocacy under Pub. L. 94-305 to represent the views of small entities before Federal agencies and Congress. Advocacy is an independent office within the U.S. Small Business Administration (SBA); as such the views expressed by Advocacy do not necessarily

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<sup>1</sup> 82 Fed. Reg. 3388 (January 11, 2017).



409 3rd Street, SW / MC 3114 / Washington, DC 20416 / 202-205-6533 ph / 202-205-6928 fax  
[www.sba.gov/advocacy](http://www.sba.gov/advocacy)

reflect the views of the SBA or the Administration. The Regulatory Flexibility Act (RFA),<sup>2</sup> as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA),<sup>3</sup> gives small entities a voice in the rulemaking process. For all rules that are expected to have a significant economic impact on a substantial number of small entities, federal agencies are required by the RFA to assess the impact of the proposed rule on small entities and to consider less burdensome alternatives.<sup>4</sup>

The Small Business Jobs Act of 2010 requires agencies to give every appropriate consideration to comments provided by Advocacy.<sup>5</sup> The agency must include, in any explanation or discussion accompanying the final rule's publication in the Federal Register, the agency's response to these written comments submitted by Advocacy on the proposed rule, unless the agency certifies that the public interest is not served by doing so.<sup>6</sup>

### **Background**

Section 108(b) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 directs the agency to develop requirements for classes of facilities to establish and maintain evidence of financial responsibility consistent with the degree and duration of risk associated with the production, transportation, treatment, storage, or disposal of hazardous substances. In a July 2009 Federal Register notice, EPA determined that the agency would first consider financial responsibility requirements under CERCLA section 108(b) for classes of facilities within the hardrock mining industry.<sup>7</sup> The agency supported its determination by citing the billions of dollars that EPA expended historically under CERCLA to address legacy mines. This notice was published without any public input. The National Mining Association wrote to EPA explaining that modern mines under current state and Federal regulations, which are the subject of this rule, do not pose a significant financial risk to taxpayers, and thus no regulation was required by this statute. The EPA determination was strongly opposed by the mining community, mining regulators, and the States, generally finding that current regulation of modern mines, including financial requirements were working and that no Federal rule was required.

In the July 2009 notice, EPA defined hardrock mining to include classes of facilities that extract, beneficiate or process metals (e.g., copper, gold iron, lead, magnesium, molybdenum, silver, uranium, and zinc) and non-metallic, non-fuel minerals (e.g., asbestos, phosphate rock, and sulfur). Certain non-fuel hardrock mining sectors (e.g., construction sand and gravel) were not included among those hardrock mining facilities identified in the notice.

Thirty-six percent of hardrock mining businesses are small businesses, and EPA estimates that these firms will face significant costs under this proposal.<sup>8</sup> The agency estimates that the

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<sup>2</sup> 5 U.S.C. §601 et seq.

<sup>3</sup> Pub. L. 104-121, Title II, 110 Stat. 857 (1996) (codified in various sections of 5 U.S.C. §601 et seq.).

<sup>4</sup> 5 U.S.C. §609(b).

<sup>5</sup> Small Business Jobs Act of 2010 (PL. 111-240) §1601.

<sup>6</sup> *Id.*

<sup>7</sup> "Identification of Priority Classes of Facilities for Development of CERCLA Section 108(b) Financial Responsibility Requirements," 74 Fed. Reg. 37213 (July 27, 2009).

<sup>8</sup> See RIA, pp. 2-8 and 8-2.

proposal would impose costs in excess of three percent of revenue for many small mines, a very significant economic burden. On August 24, 2016, EPA convened a panel, in accordance with SBREFA requirements (hereinafter, “SBREFA panel” or “panel”), but the panel did not complete the panel report during the required 60-day time frame. 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.<sup>9</sup>

On January 11, 2017, EPA issued the proposal.<sup>10</sup> The proposed rule requires an amount of money, called financial responsibility, that mines must have available to cover the costs associated with potential releases of hazardous substances. The rule requires hardrock mining owners and operators to identify a financial responsibility amount for their facility, to demonstrate evidence of financial responsibility for thirteen response categories, and to maintain the required amount of financial responsibility until released from the requirements by EPA. The rulemaking would allow for financial responsibility requirements to be met by a number of instruments, including surety bonds, letters of credit, insurance, and trust funds. The rulemaking specifically proposed two options. Under Option 1, EPA would not allow the use of a financial test or corporate guarantee mechanism to meet financial responsibility requirements. Under Option 2, a financial test based on a credit rating and a corporate guarantee mechanism would be available to owners and operators to meet these requirements.

### **Advocacy’s Comments**

The Office of Advocacy urges EPA to withdraw this proposed rule. There is no statutory need for this regulation, nor are there any significant environmental benefits demonstrated by EPA. Instead, EPA is proposing a rule that would cost the industry \$171 million annually for an annual savings to the government of \$15.5 million by its own estimate, to address risks that are already addressed by state and Federal agencies. The agency has conspicuously failed to articulate a cohesive response to the argument that state and Federal rules address the same risks comprehensively. By its own analysis, many small mines would face annual costs of some unknown amount in excess of three percent of revenue – an extremely high cost.

The lack of environmental benefits has been amply established by the comments received in the SBREFA panel proceeding, and comments authored by the Western Governors, individual states, mining companies and the association of mining regulators.<sup>11</sup> While EPA is unsure that certain response categories<sup>12</sup> are not governed by existing authorities, Advocacy believes, along with the

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<sup>9</sup> Under Executive Order 12866, federal agencies submit draft proposed and draft final regulations of economic or policy significance for review by the OMB Administrator of the Office of Information and Regulatory Affairs and affected federal agencies.

<sup>10</sup> 82 Fed. Reg. 3388 (January 11, 2017).

<sup>11</sup> The Panel report contains the comments of small mining companies and AE&MA; March 29, 2016, Western Governors letter to McCarthy, August 17, 2016 Arizona DEP letter to Krueger, ORCR, EPA; August 19 Florida DEP letter to Barr, ORCR, EPA; August 16, 2016 Interstate Mining Compact Commission letter to Sasseville, ORCR, EPA.

<sup>12</sup> EPA has developed 13 response categories to represent the universe of different remedial actions that are performed at mining sites. Financial assurance amounts are developed for each response category.

U.S. Bureau of Land Management (BLM) and the U.S. Forest Service (USFS),<sup>13</sup> that all response categories are likely covered. Advocacy is concerned that EPA may not have correctly analyzed the relevant documentation. The office is further concerned that EPA is replacing expert site-based analysis of financial assurance, which is the basis for existing federal and state financial assurance requirements, with a simplified formula approach that has been tried and rejected by those states and Federal mining regulators.

***1. The EPA Proposal Would Duplicate Existing Federal and State Regulatory Requirements***

EPA believes that the hardrock mining industry warrants regulation to address the “degree and duration of risk associated with the production, transportation, treatment, storage, or disposal of hazardous substances.”<sup>14</sup> Advocacy agrees with many others that believe that numerous state and federal regulations already address these risks, and that the industry record for modern mining operations (post-1990) show there is no need for additional Federal regulation. The U.S. Bureau of Land Management (BLM) and USFS both reported zero National Priority List (NPL or Superfund)<sup>15</sup> listings for the thousands of modern mines for which plans have been approved post-1990. As stated by the American Exploration & Mining Association: “The fact that no hardrock mining or beneficiation plan of operation approved by the BLM or USFS since 1990 has been added to the CERCLA NPL demonstrates that the ‘degree and duration of risk’ for hardrock mining is too small to regulate.”<sup>16</sup>

In Nevada, where more than 50 percent of the mines subject to this rule are located, the state has called few bonds since 1990. Even these were relatively small mines and small bonds – of up to \$500,000. All or most of these were bonded earlier in the Nevada program, and the bonding requirements have been more recently upgraded, in part, because of the experience gained from administering these mine bankruptcies in the early 1990’s.<sup>17</sup>

In sum, there is little evidence of a need for the proposed CERCLA 108(b) bonding program which EPA estimates to involve tens of billions of dollars. EPA’s scheme would only potentially be justified if modern mines were facing the same type of remedial costs as previous legacy sites that did generate billions of dollars of costs. This rulemaking is not required by statute because the risk is minimal.

It is important to place EPA’s proposed CERCLA § 108(b) hardrock mining rule in historical context. When Congress enacted CERCLA in 1980, there were few financial assurance requirements in either state or Federal regulations, and what requirements existed were largely

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<sup>13</sup> Discussion of Federal and state presentations found in AE&MA SBREFA comments dated September 16, 2016, p. 3.

<sup>14</sup> 82 Fed. Reg. 3388, 3486 (January 11, 2017); proposed 40 CFR 320.1(b) finding.

<sup>15</sup> The Superfund National Priority List contains the list of facilities that are eligible for funding from the Superfund.

<sup>16</sup> July 7, 2016 SBREFA Panel comment letter from American Exploration & Mining Association, pp. 9-10.

<sup>17</sup> See The Evolution of Federal and Nevada State Reclamation Bonding Requirements for Hardrock Exploration and Mining Projects, Jeffrey Parshley, Debra W. Struhsacker, Reno, Nevada ( January 2009). [http://www.srkexploration.com/sites/default/files/file/JParshley\\_ReclamationBondingRequirementsNevada\\_2009.pdf](http://www.srkexploration.com/sites/default/files/file/JParshley_ReclamationBondingRequirementsNevada_2009.pdf)

untested. For example, BLM's surface management regulations for locatable minerals were not yet in effect.<sup>18</sup> In 1980, most state regulations had very limited – if any – financial assurance requirements; Nevada's reclamation regulations only became effective in 1990. There existed a clear regulatory void with respect to a lack of financial assurance requirements for hardrock mines at the time that CERCLA was enacted.

However, in 2017, federal and state mining regulatory and financial assurance requirements are now mature and robust. Both BLM and USFS have effective and comprehensive financial assurance requirements that extend far beyond reclamation (i.e., earthworks and revegetation) and can include long-term financial assurance for sites where warranted. Similarly Nevada, Utah, New Mexico, and South Dakota have robust financial assurance programs established through one or more state regulatory programs in each state. The Federal Land Management Agencies (FLMA) and state agencies have existing comprehensive bonding and regulatory requirements that would be duplicated by every response requirement that EPA intends to address under CERCLA § 108(b).<sup>19</sup>

The regulatory authorities that oversee hardrock mining have decades of experience in evaluating mining operations, determining levels of financial assurance, compelling reclamation and decommissioning, and ensuring that releases of hazardous substances do not occur. As noted in SER comments supplied by Wyo-Ben, Inc.: "...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."<sup>20</sup> SER comments noted that existing federal and state programs have been strengthened by a close working relationship between those agencies and the industry that spans decades.

Although EPA states that these mining regulations are "distinct" from the CERCLA 108(b) requirements, this does not mean that the Federal and state mining requirements do not address the same response categories using other legal authorities and different language. An entirely duplicative CERCLA § 108(b) financial responsibility program would be inconsistent with the "degree and duration" of risk associated with potential releases from current highly regulated and fully bonded hardrock mines. EPA is proposing an additive regulatory scheme in the absence of a clearly articulated need as to why these existing programs are deficient or require additional financial assurance.

Pershing Gold Corporation in comments supplied during the SBREFA Panel process stated:

*EPA's CERCLA 108(b) rulemaking for hardrock mining and beneficiation is a classic "solution in search of a problem;" a problem that clearly does not exist. The hardrock mining states and the federal land management agencies have comprehensive, robust regulatory programs in place that address financial assurance requirements associated with mining and beneficiation, reclamation,*

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<sup>18</sup> The 43 C.F.R 3809 BLM requirements became effective on January 1, 1981.

<sup>19</sup> Discussion of Federal and state presentations found in AE&MA SBREFA comments dated September 16, 2016, p. 3.

<sup>20</sup> July 7, 2007 SBREFA Panel comment letter from Wyo-Ben, Inc., p. 3.

*closure and post-closure issues. These programs substantially reduce, if not eliminate, the risk that a mine will have a release of hazardous substances. The states and FLMA's have the expertise and staff to calculate the appropriate amount of financial assurance based on the unique circumstances and features, including geochemistry of the rock, for each mining operation and to adjust financial assurance as required over the life of the operation, including post-closure.*

*The FLMA's and state's comprehensive, robust regulatory programs are designed to prevent the release of hazardous substances and assure sufficient financial assurance is in place to protect the taxpayer in the event of bankruptcy or an event that requires corrective action.*

*EPA appears to hold the position that somehow the existing federal and state financial assurance programs deal solely with traditional reclamation and mine closure activities (e.g., recontouring and revegetating disturbed areas). This position is incorrect. The existing regulatory requirements for hardrock mining go far beyond reclamation and closure and include many provisions designed to protect the environment. Consequently, they include measures to prevent releases of contaminants from operating and closed mines that would come under the CERCLA 107 hazardous substances definition.<sup>21</sup>*

These regulations minimize the potential for releases and provide effective monitoring requirements to detect potential releases before they occur. The existing state and Federal regulatory schemes provide cradle-to-grave regulatory authority and financial assurance that are the functional equivalent to CERCLA 108(b) requirements. Adaptive management requirements require pre-emptive actions to avoid releases into the environment. As a result of the currently required monitoring, reporting and periodic inspections, regulators are able to respond to potential and actual releases. 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.<sup>22</sup>

Most significantly, Pershing Gold provided a table of the financial assurance requirements for the BLM and Nevada detailing how these financial assurance requirements cover each of the 13 response categories targeted in the proposal. An analogous table can also be produced for the U.S. Forest Service. EPA is proposing to eliminate requirements on a category-by-category basis for all 13 response categories, and yet has failed to explain whether it finds any "gaps" in this coverage.<sup>23</sup> Since BLM, USFS and Nevada, according to the best information available to

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<sup>21</sup> July 7, 2016 SBREFA Panel comment letter from Pershing Gold Corporation, pp. 6-7.

<sup>22</sup> Hardrock Mining on Federal Lands, National Research Council, National Academy of Sciences (1999), <https://www.nap.edu/catalog/9682/hardrock-mining-on-federal-lands>.

<sup>23</sup> In the panel report, EPA states that CERCLA "fills the gap" where regulations "fail to prevent releases or threatened releases of hazardous substances, and it addresses environmental problems as they are identified." Report at 9. EPA provides no analysis or justification to explain how the comprehensive programs in the states and the Federal Land Management Agencies do not address the same situations. The agency appears to believe that making a statement is enough to establish its validity.

us, provide comprehensive coverage in 13 response categories, there is no justification for further Federal intervention in these apparently successful programs.

***2. EPA Preamble Discussion of Current Releases from Modern Mines Does Not Support Need for New Rule – Current Federal and State Programs Are Working To Address Current Releases***

EPA includes a discussion in the preamble about currently operating mines and current and future remedial actions.<sup>24</sup> This discussion (and the underlying background document prepared for the record)<sup>25</sup> is being used by EPA to support the need for the 108(b) rule to address problems at these or other similar sites. The background document discusses sources of releases at approximately thirty recently or currently operating mines and mineral processing facilities that had no previous significant legacy mining issues. EPA states: “These releases to the environment from mining and mineral processing activities, including tailings impoundments, waste rock piles, open pits, and leach pads were subsequently mitigated using CERCLA or CERCLA like actions under Federal and/or state statutory authority. Mines that have predicted future discharges to the environment and have proposed either preventative actions or CERCLA like mitigations also are discussed.”<sup>26</sup> Yet, EPA does not provide any evidence in the record about whether the current regulatory system is handling the releases effectively, or whether there is a need for supplemental EPA expenditures to address recent hazardous substance releases at currently operating/non-NPL hardrock mines. As described above, EPA simply describes evidence of recent releases, while not addressing the fact that the responses to these releases are potentially being handled effectively under the existing regulations. If other Federal and state programs adequately handle these releases, this would undermine, rather than support the foundation for this proposal.

In Advocacy’s review of several mining sites identified by EPA in the preamble as having relatively recent releases of hazardous substances, each firm appeared to be addressing releases from current revenues. Furthermore, each mining regulatory authority also had a financial assurance instrument in place to address potential costs associated with mine closure. In none of the releases that Advocacy reviewed did the mining authority need to make use of the existing bonds. In each case, the mining firm was paying for the remediation, reinforcing the view that this proposal is not necessary.<sup>27</sup>

For example, in the case of the Pole Canyon ODA, there is an ongoing removal and remedial action to address elevated selenium and other contaminants.<sup>28</sup> 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. No USFS bond is being used. This is an illustration of the current system working, not the need for a supplemental EPA rule. Remedial actions at currently operating mines do not, alone, provide support for the need for this rule.<sup>29</sup>

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<sup>24</sup> 82 Fed. Reg. 3388, 3471 (January 11, 2017).

<sup>25</sup> See U.S. EPA, Office of Land and Emergency Management, Memorandum to the Record: Releases from Hardrock Mining Facilities, November 2016; 82 Fed. Reg. 3471 (January 11, 2017) n. 190.

<sup>26</sup> 82 Fed. Reg. 3388, 3471 (January 11, 2017).

<sup>27</sup> SC&A memo to Advocacy, dated January 18, 2017 (available from Advocacy).

<sup>28</sup> Id.

<sup>29</sup> Id.



Contrary to the EPA assertions of the need for CERCLA 108(b) to address response actions from modern mine releases, Advocacy's more targeted review of some of these mines points clearly to the opposite conclusion. If EPA wants to proceed further in this rulemaking, the agency should perform a complete examination of the entire mining sample to determine if the current regulatory system is working. EPA's analysis instead addresses the strawman issue of whether releases occur, and not whether additional financial assurance should be imposed.

### ***3. EPA's Method to Determine Financial Responsibility Is Not Sound; A New Approach Should Be Developed Subject to Peer Review Before Proposal***

EPA's proposed rule employs a formulaic method using multiple subformulas and one to three site-specific variables to determine a mine's financial assurance amount. These subformulas were derived from performing thirteen separate regression analyses using data from currently operating or proposed mines reclamation and closure plans.<sup>30</sup> The small entity representatives universally rejected this uniform national approach in favor of the expert-driven site-specific engineering approach adopted by Federal and state regulators developed over the last few decades. For example, the Nevada Standardized Reclamation Cost Estimator (SRCE) software is a site-specific methodology used to calculate reclamation and closure costs. The State of Nevada, other states, Bureau of Land Management, and the U.S. Forest Service use the SRCE. The site specific approach is used by the mining community and these regulators because it has been found to be much more accurate than simplified schemes, such as the EPA methodology. EPA adopted its simplified approach so that it could reduce its own regulatory implementation burden,<sup>31</sup> without any apparent effort to address the concern that such an approach would be substantially inaccurate for many mines.

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.<sup>32</sup> 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. 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. This overarching approach will, by design, over-predict the costs of small responses and potentially under-predict costs of very large responses. Such an approach is particularly harsh on small mines that would be required to post large, unneeded financial assurance. The

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<sup>30</sup> EPA developed 13 different subformulas to develop financial assurance amounts for the 13 response categories; EPA Formula Background, Chapter 4, Response Component Regression Analysis.

<sup>31</sup> 82 Fed. Reg. 3388, 3401 (January 11, 2017).

<sup>32</sup> "This benchmarking approach is an extremely simplistic approach for creating a cost estimate and cannot account for numerous site specific/project specific conditions that can have profound impacts on the costs. In other words, using the acreage of a tailings impoundment multiplied by some one-size-fits-all cost/acre to determine the cost of a "response activity" for any tailings impoundment will either underestimate the cost, or overestimate the cost." AE&MA September 16, 2016 Letter, p.7; "The SRCE costs are based on equipment type, size, capacity, and the manufacturer's productivity factor for each specific piece of equipment. This analysis illustrates the type of detailed, site-specific information required to provide realistic estimates of reclamation and closure costs that stands in marked contrast to EPA's simplistic and one-size-fits FR Model." September 16, 2016 Pershing Gold Letter, p. 6.

proposed approach would be more appropriate for an insurance-type system where money may be pooled, but not when individual mines must obtain bonding independently.

*A. The Formula Depends on Small Samples with Data Quality and Data Interpretation Issues*

The formula is derived from an analysis of the reclamation and closure plans of 63 currently operating or proposed facilities. However, the proposed formula uses thirteen subformulas derived from regression analysis where sample sizes are often much smaller than 63. The majority of the regressions have samples with 50 percent or fewer of these 63 mines. For many regressions, a key variable is based upon less than 6 mines. Small sample sizes in general harm the robustness of regression analyses. Specifically, in this instance, small sample sizes create two large concerns: potential influence points (i.e. outliers) and the effect of data quality issues.

First, Advocacy is concerned about potential outliers or influence points within the data that may hurt the validity of the formula. Peer reviewers have also highlighted this issue.<sup>33</sup> In its response, EPA identified potential influence points in almost every subformula. These influence points may be unduly altering the formula causing a much higher, or lower, financial assurance value. With so many influence points, it is difficult to have confidence in the internal validity of the formula.

For example, in the case of the open pit cost category, the cost of the Historic Phoenix mine is a strong outlier. 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.<sup>34</sup> EPA's test to identify influence points confirmed this mine's dramatic effect on the Open Pit's final subformula. One reviewer cited this example stating that Phoenix had "huge" response costs - \$223 million was due to the company's mine closure plan that includes backfilling the pit.<sup>35</sup> 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. 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. Similar anomalies are found in the two other costly categories – the waste rock and heap dump response categories.<sup>36</sup>

Second, due to the small sample size, issues with data quality would also be magnified. Errors in data interpretation or transcription could create a large deviation in the predicted costs. 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.<sup>37</sup> EPA in its response

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<sup>33</sup> Response to Peer Review Comments: CERCLA 108(b) Financial Responsibility Formula for Hardrock Mining Facilities Background Document December 2016; Chapter 4 Response Component Regression Analysis.

<sup>34</sup> Formula Background Document, Table G.1, Open Pit Data.

<sup>35</sup> Reviewer #4, p. 5.

<sup>36</sup> Response to Peer Review Comments: CERCLA 108(b) Financial Responsibility Formula for Hardrock Mining Facilities Background Document December 2016; Chapter 4 Response Component Regression Analysis

<sup>37</sup> Reviewer #4, pp. 4-5.

agreed with the reviewer in some instances and promised to alter their allocations in the final analysis.<sup>38</sup>

However, this peer reviewer only evaluated four mines and only a few response categories of these mines. Based on these observations, the reviewer and Advocacy believe that a full review of every mine would uncover many more errors.<sup>39</sup> Even without errors, due to the complexity of these plans and unique site features, significant professional judgment must be used. Therefore, different experts most likely would allocate the reclamation and closure plan costs differently. EPA needs to take additional care when using professional judgment.

The data quality issue can introduce more problematic modeling errors due to the small sample sizes of these regressions. A few mines whose cost allocations or source control tags<sup>40</sup> are incorrect or disputed can cause the final regressions to change dramatically. This would result in very different financial assurance amounts for mines from what are currently proposed.

*B. Resulting Financial Assurance Values are not Verified for Reasonable Accuracy*

The proposed formula creates financial assurance amounts for individual mines that were not checked or tested for reasonableness. The predictions must provide reasonable accuracy in order to achieve the statutory purpose of protecting the environment. EPA established a data quality control target for the response cost estimate derived from their formula, revealed only to the peer reviewers, which was no more than double and no less than half of the expected values.<sup>41</sup> However, this data quality standard was not used in the supporting documentation to this rule.<sup>42</sup>

Before applying the proposal's source control reductions, almost half of the mines identified by EPA would require over \$250 million in financial assurance from only the response aspect of the formula.<sup>43</sup> A few mines would calculate their potential financial assurance as over \$1 billion.<sup>44</sup> These figures are far higher than the response costs found in the reclamation and closure plans used by EPA to develop the formula. While the cost of a CERCLA response may be higher than the costs for a conventional closure, EPA does not evaluate whether its formula creates an appropriate estimate. EPA needs to apply the data quality standard it has established for the methodology.

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<sup>38</sup> Response to Peer Review Comments: CERCLA 108(b) Financial Responsibility Formula for Hardrock Mining Facilities Background Document December 2016; Chapter 6

<sup>39</sup> Reviewer #4, pp. 4, 5 and 9.

<sup>40</sup> Source control tags means describing the engineering measures taken to limit potentially harmful releases of hazardous substances.

<sup>41</sup> Reviewer #4, pp. 1 and 7.

<sup>42</sup> Id.

<sup>43</sup> Regulatory Impact Analysis, Appendix B. The response costs addressing remedial actions alone are separate from the two other cost categories included in the EPA rule: Natural Resources Damages and Health Assessment costs.

<sup>44</sup> Id.

### *C. Costs of Financial Assurance Are Too High for Small Mines*

As demonstrated by the six examples in Table I in the Appendix, the EPA formula creates vastly higher response costs than the estimated reclamation and closure costs, often by one or two orders of magnitude.<sup>45</sup> This can be devastating to small mines. As an example, the Hycroft Mine is owned by a small business that just emerged from a Chapter 11 reorganization last year. Raising its financial assurance requirements from under \$20 million to over \$500 million would be very problematic. Further, based on input from the SERs and state programs, Advocacy has much greater confidence in the accuracy of the expert driven site-specific financial assurance amounts than the estimates derived from EPA simplified nationwide formula.

While the model tries to appropriately estimate the proper financial responsibility for mines, Advocacy is concerned that it is a blunt instrument that will result in very large and unreasonable figures for smaller mines. Based on EPA's own analysis in the Regulatory Impact Analysis (RIA), with costs of many small mines exceeding three percent of sales, these costs could well undermine the viability of these small firms, and impede the development of future mine projects. This is especially troubling, given the minimal justification for requiring any financial assurance for these modern mines.

### *D. The Peer Review Had Significant Flaws and Did Not Precede Development of the Proposal*

EPA began a peer review of their formula methodology in conjunction with this rulemaking, but completed it barely before the proposal was signed. The agency's nonpublic peer review consisted of four individuals with variable experience in hardrock mining and statistics. This peer review appears to have significant flaws. In their comments, three of the peer reviewers expressed confusion about what EPA was attempting to do, the data used in the regression analysis and the purpose of other data included in the peer review record. They also appeared uncertain about the final result of the formula and its significance. Only one of the four peer reviewers managed to provide detailed comments on the formula, and this reviewer was highly critical of the approach.<sup>46</sup> As discussed further below, the peer review material was incomplete, and should have been the subject of a public, not private, peer review. Most importantly, due to the ill-timing of the review, EPA was unable to take the opportunity to improve the methodology as a result of the peer review comments that it did receive.

First, and critically, EPA failed to provide the final results of the model to the peer reviewers to compare with the associated reclamation and closure costs (see Appendix J of the Background Document), which was the source of great confusion for most of the reviewers. Instead, EPA only presented the reviewers with the figures for the initial calculations, before two very large adjustment factors were applied, which vastly inflated the costs.<sup>47</sup> One peer reviewer (number

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<sup>45</sup> The mines selected were presented to the SERs during the Panel Process. "Reported" values were obtained from the source document without inflation or regional adjustment. "Formula" values were obtained from the slides presented to the SERs. Advocacy calculated the net present value of the Reported O&M and Water Treatment costs using the methodology EPA describes in the Formula Background Document pages 4-18 to 4-21.

<sup>46</sup> Peer review comments found in Hardrock Mining Peer Review – Combined Documents; Reviewer #4, pp. 4-9.

<sup>47</sup> Adjustments were made by using a "smearing factor" and a "source control assumption." See details in the Formula Background Document, sections 4.1, 4.2 and 4.4.

3), stated “I got lost several times, despite the fact that I was taking notes while reading the report, and in some places I just cannot follow the logic of the Agency.” More troubling the same peer reviewer stated, “Which dataset was used to run the regressions? I thought it was the one in 2) the first time I read the report, 5) the second time, and I had literally no idea the third time around. Help!” Another reviewer noted that “when looking at the formula, given the logs and powers of 10, it is hard to get an idea of how big the financial responsibility bond will eventually be. After listing the formula, it would be interesting to see what the amount required would be for the average facility.” This reviewer couldn’t comment on the accuracy of the approach.<sup>48</sup>

Second, because the peer review was done late in the rulemaking process, EPA was unable to incorporate any changes to its approach in the proposed rule as a result of the peer review comments. In several passages of the Response to Peer Review Comments, EPA promised to make conforming changes in the final formula documentation when it publishes the final rule.<sup>49</sup>

Third, given that this formula methodology was “highly influential” to this rulemaking, the peer review should have been a public peer review, not a private review by four individuals, of whom only one was able to fully understand the documents.<sup>50</sup> Public peer reviewers could have performed a much more thorough review, and the results of that peer review could have been incorporated into the proposal.

As a result, EPA should (1) reverify its underlying data, (2) rerun the regressions and (3) obtain a peer review in a public review permitting public comment. Based on the problematic peer review alone, Advocacy believes that the agency should reconsider this approach and the need for this rule, as discussed elsewhere.

*E. EPA Did Not Comply with the SBREFA Panel Requirements to Provide Key Information about the Formula Methodology to Small Entity Representatives*

As discussed briefly above, key information was not made available to the SERs in this panel process. If the SERs had been given the critical information underlying the formula methodology, the problems presented by EPA’s methodology would have been identified, and possibly cured.

Below are excerpts from the SBREFA panel report, explaining this problem in more detail.

*Many of the SERs commented on their perceptions of the adequacy of the SBREFA panel process, and expressed frustration about not being provided a draft version of EPA’s financial responsibility formula. SERs expressed concerns with the regulatory approach, particularly regarding the potential costs of complying with requirements for financial assurance for closure and reclamation as well as CERCLA 108(b) financial responsibility. SERs were not able to provide*

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<sup>48</sup> Peer review comments found in Hardrock Mining Peer Review – Combined Documents.

<sup>49</sup> Response to Peer Review Comments: CERCLA 108(b) Financial Responsibility Formula for Hardrock Mining Facilities Background Document, December 2016.

<sup>50</sup> See discussion of “highly influential” products in Section 3.2, EPA Peer Review Handbook, Edition #4 (October 2015).

*information to the Panel about how significant those potential costs would have been for their specific facilities.*

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

Panel Report, p. 26.

Given the lack of information available to them, SERs were not able to provide specific comments to the Panel about how significant those potential costs would have been for their facilities. Based on the limited information provided to them, the SERs could only conclude that the formula was vastly overpredicting the costs, and that they had no idea why this would occur or be needed. Thus, the SERs could not use their expertise to help EPA fix the formula, which resulted in the highly flawed product contained in the proposal. The statutory purpose of providing informed advice to the agency was frustrated by this nondisclosure of the formula details.

#### ***4. EPA Should Allow Credit Reductions for Existing Requirements, Delete Supplemental Engineering Requirements, and Retain the General Performance Standard***

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. The 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. EPA is now proposing specific numeric requirements such as planning for a 200-year storm event, and reducing net precipitation by 95 percent. These conditions override the site-specific judgment and flexibility employed by the mines, and approved by state and Federal regulators.

These engineering provisions require EPA to employ expert judgment about the mine facilities, and would require second-guessing of the Federal and state mining agency site-specific determinations. Indeed, the agency states elsewhere that it has "policy concerns about overseeing other federal and state programs' financial responsibility requirements for adequacy,

given other authorities' expertise with mining regulations.”<sup>51</sup> The very premise of using the simplistic formula approach is the avoidance of expert judgment and second-guessing other mining agencies.

In its approach, EPA has overlooked the fact that not all response categories are needed for all mines. 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 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. If EPA does not do so, it will be unnecessarily raising the costs on the mining facility. EPA needs to explicitly preserve this flexibility in any final rule.

The mining agencies have their own requirements, their own guidance, and states have their own specific requirements which could easily conflict with the one size fits all requirements. In sum, EPA should make the following changes. The agency should delete these supplemental engineering requirements. The agency, instead, should retain the proposed general performance standard to require practices that would minimize the “degree and duration” of releases of hazardous substances in its place. Finally, EPA should provide flexibility for the deletion of unnecessary response categories.

***5. EPA Failed to Comply with the RFA in Failing to Consider Significant Small Business Alternatives Suggested by the SERs; The One EPA Regulatory Alternative Provides No Direct Relief for Affected Small Firms***

The Regulatory Flexibility Act (RFA) requires agencies to consider small business regulatory alternatives that address small business impacts for the rules significantly affecting small firms. Those alternatives considered by the agency become part of the Initial Regulatory Flexibility Analysis (IRFA).<sup>52</sup> However, EPA failed to do so. Instead, the proposed rule includes a regulatory alternative that does not address the significant small entity impacts anticipated by EPA. Under this regulatory alternative, the mine owner/operator could meet EPA's financial assurance responsibility requirement if it is able to pass a proposed financial test. Under this scenario, EPA would allow the owner/operator to self-insure or use a corporate guarantee. Owners or operators unable to qualify for the Option 2 financial test would be required to acquire a third-party instrument or have a trust fund to comply with the rule's financial assurance requirement.

Given their financial standing, small entities did not view this as a viable option for their mines. Without a credit rating, the financial test is unavailable to small firms.<sup>53</sup> In fact, SERs noted that most small entities do not have credit ratings, so they will often have to use cash or significant amounts of collateral.<sup>54</sup> Similarly, other SER commenters noted difficulties that small entities

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<sup>51</sup> 82 Fed. Reg. 3388, 3401 (January 11, 2017).

<sup>52</sup> 5 U.S.C. 603.

<sup>53</sup> Proposed 320.43(a)(1)(i) require at least one-long term credit rating of AAA, AA+, AA, AA-, A+, A, or A- to qualify. No small firm can meet this requirement.

<sup>54</sup> September 16, 2016 AE&MA letter, p. 12.

experience in obtaining financial assurance instruments, and believe that the costs for 108(b) instruments will be prohibitive for these entities.<sup>55</sup>

Advocacy is concerned that EPA's regulatory alternative will serve to create a competitive advantage for large businesses. Having a financial test available as a compliance option would result in a higher proportion of large businesses than small businesses qualifying to self-insure. This scenario will create a significant cost advantage for large firms relative to small firms, which results in the opposite outcome from that intended by the RFA, which is designed to provide regulatory relief to small businesses.

EPA has failed to include in the Initial Regulatory Flexibility Analysis (IRFA) any small business alternatives that minimize small business impacts. 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." These alternatives are fully discussed in the panel report, and were all but ignored by the agency.<sup>56</sup> Thus, EPA did not comply with the RFA requirement to identify small business alternatives in the IRFA. The agency should cure this violation by either withdrawing the proposal, or including true regulatory alternatives in any future rulemaking activities.

#### ***6. EPA Overestimates Regulatory Benefits; Rule Costs Exceed Benefits***

On page ES-14 of the RIA, EPA states the following: "EPA could not monetize all of the rule's benefits due to data limitations. This RIA, however, estimates that the proposed rule would lead to \$511 million to \$527 million in reduced cost to government over 34 years (the period of analysis) by increasing the likelihood that responsible parties would have access to the necessary funds for their CERCLA liabilities."

EPA explains that the \$527 million estimate is based on multiplying EPA's total financial assurance responsibility estimate of \$7,064 million by an assumed firm exit rate (7.5 percent).<sup>57</sup> The agency also acknowledges that assuming that all bankrupt firms are left with all unpaid CERCLA costs is a high-end estimate, because only a fraction of such firms will have remedial costs, and another portion of those will be paid for in the bankruptcy proceeding.

This approach leads to a vastly overstated estimate of benefits of the proposed rule because of these three major EPA assumptions, all of which inflate the benefits individually:

1. All mines for every firm that goes bankrupt will require response actions to address releases;

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<sup>55</sup> September 16, 2016 Pershing Gold letter, pp. 10-11.

<sup>56</sup> 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.

<sup>57</sup> Exhibit ES-3; "In the baseline, the government is burdened with the CERCLA cost if a responsible party defaults, as no third-party instruments will be in place. For the baseline, the government burden rate is estimated using the firm exit rate derived from the Census Bureau's Business Dynamics Statistics (BDS). This represents a high-end estimate that assumes exiting firms fail to meet any of their CERCLA obligations."



2. All mines that require response actions to address releases will require every one of the actions for which EPA modeled costs in their baseline financial assurance responsibility estimate; and
3. Costs for all modeled response actions will be paid under the CERCLA program (i.e., there will be no other entity, including the firm that had been operating the mine, nor the Federal/state mining authorities directly regulating the mine, that will fund any portion of response costs).

Although EPA did partially acknowledge the high-end bias of the third item above, the agency does not address the concerns in either of the first two. To more realistically estimate the benefits of the proposed rule, EPA needs to incorporate estimates into their analyses that reflect the fact that each of these activities will occur with less than 100 percent frequency. Although information is not readily available to develop estimates of the frequency of occurrence for each of the above activities, Advocacy believes that the following conservative estimates (i.e., actual values are likely to be lower) are more realistic:

1. Proportion of firms that go bankrupt that require at least one response action: 50 percent;
2. Of the above firms, the proportion of EPA's total response cost estimate that will actually be incurred: 50 percent; and
3. Of the above total incurred response action cost, the proportion that is paid via the CERCLA 108(b) program: 10 percent.<sup>58</sup>

Based on these conservative estimates, the estimated benefits of Option 1 of EPA's proposed rule in terms of reduced Government Costs would drop from EPA's \$527 million estimate to \$13.2 million. When compared to 34 years of EPA's estimate of Option 1 annual financial assurance responsibility expenditures (\$171 million/year), the cost/benefit ratio demonstrates the huge inefficiency of EPA's regulatory approach. This comparison is displayed below. This comparison is just another way to appreciate the inappropriateness of this proposal, even if one ignores the flaws in the formula methodology. The EPA scheme, in effect, is a huge transfer between mining firms and the financial assurance industry with comparatively small benefits to the public.<sup>59</sup>

<b>34-Year Costs (millions of 2015\$)</b>	<b>34-Year Benefits* (millions of 2015\$)</b>		<b>Costs/Benefits***</b>	
	<b>EPA</b>	<b>Adjusted</b>	<b>EPA</b>	<b>Adjusted</b>
5,814**	527	13	11	447

\* EPA lists the following as non-quantified benefits of the proposed rule: improved efficiency in capital markets due to increased transparency of environmental liabilities; decrease in human and ecosystem exposure to harmful contaminants due to more expeditious site cleanups; and decrease in human and ecosystem exposure to harmful contaminants due to incentivized actions by mining industry to improve environmental performance.

\*\*EPA annual estimate of \$171 million/year x 34 years

\*\*\*Costs/Benefits calculated using EPA method and adjusted method using conservative values

<sup>58</sup> These figures were derived from the SC&A Task 4 memo, draft dated January 12, 2017, based on professional engineering judgment.

<sup>59</sup> In Table ES-4 of the RIA, EPA estimates that the majority of the costs (\$127 of \$171 million) is a transfer between the mining industry and the financial industry.

## **Conclusion**

EPA is proposing a rule that would cost \$171 million annually by its own estimate, to address risks that are already addressed by state and Federal agencies. Given the minimal remaining risks, the statute does not require any regulation under CERCLA 108(b) to address the hardrock mining industry. EPA also greatly overstates the benefits of this rulemaking by failing to incorporate valid estimates of the incremental impact of the proposed rule. When properly evaluated, the costs of the proposed action far outweigh the benefits.

The historical record does not support a determination of risk levels requiring new Federal involvement, especially when EPA has not refuted the assertion that certain regulatory programs provide coverage of the same response actions that EPA plans to cover (e.g., state and Federal mining regulations). Given the lack of evidence for substantial risks, a more reasonable approach is for EPA to focus on reducing any identified residual risks within the current regulatory framework rather than promulgating a new set of EPA-specific financial assurance requirements.

Advocacy urges EPA to give full consideration to the above issues and recommendations. Advocacy is prepared to work with EPA on these issues and would welcome the opportunity to engage in broader consultations on these issues.

If you have any questions or require additional information please contact me or Assistant Chief Counsel Kevin Bromberg (202) 205-6964 or by email at [kevin.bromberg@sba.gov](mailto:kevin.bromberg@sba.gov).

Sincerely,

/s/

The Honorable Darryl L. DePriest  
Chief Counsel  
Office of Advocacy  
U.S. Small Business Administration

Copy to: The Honorable Howard Shelanski  
Administrator  
Office of Information and Regulatory Affairs  
Office of Management and Budget

APPENDIX:

**Table I: Six Mines - Actual Costs from Source Documents vs Modeled Costs from Formula**

<b>Mine 5 Nixon Fork Alaska</b>		
<b>Category</b>	<b>Reported</b>	<b>Formula</b>
Waste Rock	100,000	1,320,000
Tailings	420,000	1,690,000
Underground Mine	56,000	200,000
Drainage	Missing	130,000
Interim O&M	4,355,000	19,540,000
Water Treatment	Missing	67,000
Short Term O&M	64,000	500,000
Long Term O&M	Missing	46,000

<b>Mine 60 Lisbon Valley Utah</b>		
<b>Category</b>	<b>Reported</b>	<b>Formula</b>
Open Pit	156,000	12,610,000
Waste Rock	1,130,000	26,080,000
Drainage	21,000	1,040,000
Interim O&M	4,605,000	44,600,000
Water Treatment	Missing	2,700,000
Short Term O&M	749,000	1,970,000
Long Term O&M	missing	3,840,000

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

<b>Mine 27 Idaho Cobalt</b>		
<b>Category</b>	<b>Reported</b>	<b>Formula</b>
Process Pond	235,000	240,000
Tailings	5,400,000	4,030,000
Drainage	Missing	210,000
Interim O&M	23,389,000	11,380,000
Water Treatment	632,000	130,000
Short Term O&M	2,744,000	680,000
Long Term O&M	missing	750,000

<b>Mine 42 Hycroft Nevada</b>		
<b>Category</b>	<b>Reported</b>	<b>Formula</b>
Open Pit	77,000	197,900,000
Waste Rock	3,567,000	76,790,000
Heap Dump Leach	4,128,000	118,200,000
Process Pond	1,000,000	1,890,000
Drainage	331,000	2,900,000
Interim O&M	95,640,000	69,130,000
Water Treatment	Missing	14,050,000
Short Term O&M	2,385,000	3,930,000
Long Term O&M	missing	11,050,000

<b>Mine 53 Standard Mine Nevada</b>		
<b>Category</b>	<b>Reported</b>	<b>Formula</b>
Open Pit	27,000	4,440,000
Waste Rock	524,000	12,390,000
Heap Dump Leach	2800,000	11,180,000
Process Pond	228,000	170,000
Drainage	3,000	670,000
Interim O&M	16,600,000	35,790,000
Water Treatment	Missing	1,090,000
Short Term O&M	722,000	1,460,000
Long Term O&M	Missing	2,420,000

Message

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**From:** Paul Balserek [pbalserek@steel.org]  
**Sent:** 6/28/2017 4:17:23 PM  
**To:** Brown, Byron [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=9242d85c7df343d287659f840d730e65-Brown, Byro]  
**Subject:** CERCLA 108b  
**Attachments:** CERCLA 108b Hardrock Mining One Pager for EPA Meeting final.pdf

Byron,

Thank you again for meeting with us. Attached is the material we covered. Call with any questions,

Paul

**Paul Balserek**  
Vice President, Environment

American Iron and Steel Institute  
25 Massachusetts Ave. NW, Suite 800  
Washington, DC 20001

**Ex. 6** (office)  
(mobile)

## Summary of AISI Views on CERCLA 108b Hardrock Mining NPRM

### Meeting with Byron Brown

June 20, 2017 11:00 am-12:00 pm

#### Comment

EPA should include iron ore mining among the 59 categories of low risk mining classes that were excluded from the definition of hardrock mining in the CERCLA 108b proposal of Dec 2016.

"§320.60 Applicability (a)(1) The requirements of this subpart apply to owners or operators of hardrock mining facilities within the classes identified in the Federal Register notice issued by EPA at 74 FR 37213 (July 28, 2009) that are authorized to operate, or should be authorized to operate, ..." 82 FR 3503

The 2009 FR Notice stated: "For purposes of this notice, hardrock mining facilities include those which extract, beneficiate or process metals (e.g., copper, gold, iron, lead, magnesium, molybdenum, silver, uranium, and zinc) and non-metallic, non-fuel minerals (e.g., asbestos, gypsum, phosphate rock, and sulfur)." 74 FR 37213

#### Industry Background

The iron ore industry, which is directly reliant on the domestic steel sector, is comprised of eight large, active iron ore mining and processing facilities located in Michigan's Upper Peninsula and the area of Northeast Minnesota known as the Mesabi Iron Range.

- Cliffs owns and/or manages five of these mines, with two mines operated by U.S. Steel and one facility operated by ArcelorMittal USA. These facilities directly employ approximately 4,500 workers.
- The sites where the mines are located vary in size from 4,000 to 17,500+ acres. These sites include open pit mines, processing facilities, stockpiling areas and tailings basins for the deposition of inert earthen material, which is essentially silica sand.

The industry is just emerging from a historic downturn that had its roots in the 2015 – 2016 steel import crisis. During the worst of this commodity recession, six of the eight active domestic iron ore mines were idled for an extended period of time, adversely affecting thousands of workers and their families.

- In the wake of aggressive trade enforcement by the U.S. federal government, the industry is now in the midst of a fledgling recovery and, fortunately, all of our major domestic mines are once again operational. However, the condition of the domestic steel and iron ore sectors remains tenuous at best and we are counting on additional sustained relief from illegal steel imports to result from President Trump's efforts.

In the 1950s and '60s, an innovative process was created to mine low-grade iron-bearing rock (containing ~20% iron), extract the iron from that material, and combine those iron units with bentonite (clay) to form an iron ore pellet containing greater than 60% iron.

- Those pellets are subsequently fired in an indurating furnace to harden the product for shipping. Most domestically-produced iron ore is transported by freighters to blast furnaces on the lower end of the Great Lakes.

## Impact on Iron Ore Mining Operations

The prospect of the iron ore mining sector having to comply with federal CERCLA 108b financial assurance requirements for hardrock mining that are at all similar to the Dec 2016 NPRM would be devastating and impossible to secure.

The formula in the Proposed CERCLA 108b HRM action over-calculates the risk of iron mining.

- The formula estimates FA for the iron ore mining industry to exceed \$8 billion dollars, a figure that exceeds the annual value of domestic iron ore distributed in commerce.
- Further, the financial markets are not available for the amount of FA required. Even if they were it would be cost prohibitive to comply with.
- In developing the rule and cost estimate formula, EPA did not consult with the state agencies responsible for regulating the iron ore industry, EPA's application of non-ferrous risk and cost estimating assumptions is fundamentally flawed and entirely inappropriate.

The 2009 FR notice which first laid out the definition of hardrock mining for purposes of CERCLA 108b does not have a record supporting the inclusion of iron ore mining, and was a final action that did not go through public notice and comment.

The Dec 2016 NPRM specifically called for reconsideration of iron ore mining being classified as high risk for financial assurance purposes. "... EPA further solicits comment on whether classes of mines identified by commenters as presenting a lower level of risk of injury based on facility characteristics and operations could potentially encompass iron ore, phosphate, and uranium mines." 82 FR 3456 (italics added)

- Iron ore mining shares more in common with the mining operations that EPA excluded from the definition of HRM, such as sand and gravel or limestone.

## Iron Ore Mining as a Low Risk Category

According to EPA's own factors, iron ore mining should be considered low risk.

- *Risk factor 1: Annual amount of hazardous substances released to the environment*
  - Tables in the docket listing hazardous substances released from the array of mining categories should not rely on data for "Iron and steel mills" as a surrogate for iron ore mining.
  - Using TRI data from iron and steel mills as a surrogate is inaccurate and misleading as a metric for risk, and thus for inclusion in the definition of HRM for this rule.
  - EPA, Minnesota and Michigan exempted iron ore mining from EPCRA Section 313 Toxic Release Inventory (TRI) reporting. In reaching that determination, EPA concluded:
    - 1. The extraction and beneficiation of iron ore do not routinely use hazardous substances to produce a final product, and toxic chemical releases and transfers were not sufficient quantities to warrant reporting;
    - 2. No facilities were expected to meet the threshold reporting levels under EPCRA
    - 3. Iron ore mining and associated facilities do not make extensive use of toxic chemicals for processing their product
  - Iron ore mining and processing predominantly involves a physical separation process involving use of water, it certainly is not a chemical intensive process such as copper, nickel, gold, lead, zinc, etc.

- The low risk nature of iron ore mining led EPA to include a very narrow list of constituents (iron, TSS, pH) for the ore mining effluent limitation guidelines (ELGs) under the CWA.
- Finally, most of the iron ore mining sites are small quantity generators or conditionally exempt generators of hazardous waste which are sent off-site for treatment.
- *Risk factor 2: Number of facilities in active operation and production*
  - The iron ore industry is small and localized business sector operating eight (8) active facilities, further supporting a low risk profile from a CERCLA perspective.
  - Each open pit mine site included a concentration plant and pelletizing plant
  - 98% of the usable iron ore products in the United States went to steel producers, with the remaining 2% for nonsteel end uses
  - Estimated value of iron ore shipments: \$3.0 – 5.0 billion
- *Risk factor 3: Physical size of the operation*
  - Varies – 4,000 to 17,500+ acres
  - Although the physical size of these operations may be considered large, this industry is governed by an extensive framework of regulations that substantially reduce risks and make any additional requirements under CERCLA 108(b) unwarranted.
  - Formal environmental reviews under NEPA and Minnesota’s Environmental Protection Act (MEPA) have not revealed any material risks associated with iron ore mining.
- *Risk factor 4: Extent of environmental contamination*
  - First, using TRI data from “iron and steel mills” category as a surrogate for iron ore mining is inaccurate and misleading as a metric for risk.
  - Second, it should be clearly stated, no document in the record for the 2009 FRN provides evidence of any kind of high risk for environmental contamination from iron ore mining sites; such evidence in the record is obvious for other types of mining, gold, copper, etc.
  - Many of the former mine pits offer safe and reliable public resources, such as recreational lakes and drinking water sources for some local communities.
  - Finally, the industry is highly regulated which further prevents wide spread potential for contamination.
- *Risk factor 5: Number of sites on the CERCLA Site Inventory (National Priority List (NPL) sites and Non-NPL sites)*
  - This factor ties most directly with the overall purpose of the rule – i.e., to identify mining categories most likely to one day need Superfund monies for cleanup.
  - EPA’s Phase II review of this category identified nine NPL sites (Gold – 6, Copper – 2, Molybdenum – 1)
  - Iron ore NPL and Non-NPL Sites: 0 (there have never been any)
- *Risk factor 6: Government expenditures / Risk factor 7: Projected clean-up expenditures*
  - Both are \$0
- *Risk factor 8: Corporate structure and bankruptcy potential*
  - Larger International Corporations

### Conclusions

In sum, we believe that EPA’s risk factors, assessed correctly, would result in iron ore mining being excluded from the CERCLA 108(b) definition.

We think iron ore mining is low risk and should have been included in the 59 other categories of mining deemed by EPA to be low risk back in 2009 in the FR notice.

Further, the NPRM specifically called out this question regarding the low risk nature of iron ore mining, making a new definition that excludes iron ore mining a logical outgrowth of the public comments received.

The proposed formula for establishing hardrock mining liability includes blast furnace as a mineral processing unit. Blast furnaces are not co-located with iron ore mines, but are in different states. They should not be included in the iron ore mining category for purposes of this CERCLA 108b action.



Message

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**From:** Doern, Martin [Martin.Doern@xcelenergy.com]  
**Sent:** 6/28/2017 1:24:02 PM  
**To:** Brown, Byron [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=9242d85c7df343d287659f840d730e65-Brown, Byro]  
**Subject:** RE: Contact Info

Thanks, Byron. It was great to see you. Congratulations on the new job, it must be pretty exciting.

---

**From:** Brown, Byron [mailto:brown.byron@epa.gov]  
**Sent:** Wednesday, June 28, 2017 9:14 AM  
**To:** Doern, Martin  
**Subject:** Contact Info

**XCEL ENERGY SECURITY NOTICE: This email originated from an external sender. Exercise caution before clicking on any links or attachments and consider whether you know the sender. For more information please visit the Phishing page on XpressNET.**

Hi Martin – nice to run into you yesterday. Hope all is well. – Byron

Byron R. Brown  
Deputy Chief of Staff for Policy  
Office of the Administrator  
U.S. Environmental Protection Agency

**XCEL ENERGY SECURITY NOTICE: This email originated from an external sender. Exercise caution before clicking on any links or attachments and consider whether you know the sender. For more information please visit the Phishing page on XpressNET.**

Message

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**From:** Paul Balserek [pbalserek@steel.org]  
**Sent:** 7/19/2017 9:38:14 PM  
**To:** Brown, Byron [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=9242d85c7df343d287659f840d730e65-Brown, Byro]  
**Subject:** CERCLA 108b Hardrock Mining Comments on Iron Ore Mining  
**Attachments:** MDEQ OGMD Resp USEPA HardRock Mining Rules 2017.pdf; IMA - CERCLA 108b Final 7 11 17.pdf; Proposed FR Rule for the Hardrock Mining Industry.pdf; CERCLA 108b Hardrock Mining One Pager for EPA Meeting final.pdf; AISI -- Comments on EPA Financial Responsibility Requirements under CERCLA 108b for Hardrock Mining.pdf; CERCLA 108(b) Proposal -- Industry Coalition Comments.pdf

Dear Byron,

Thank you again for meeting with my members and me on June 20th regarding the CERCLA 108b hardrock mining proposed rule. Attached for your convenience are comments/materials specific to the iron ore mining issue which were submitted to EPA by the July 11, 2017 comment period due date. Included are the following:

- AISI Comments on the CERCLA 108b Hardrock Mining Proposed Rule
- AISI CERCLA 108b Hardrock Mining One Pager for June 20 2017 EPA Meeting
- Michigan DEQ Comments on CERCLA 108b Hardrock Mining Proposed Rule
- Minnesota DNR Comments on CERCLA 108b Hardrock Mining Proposed Rule
- Iron Mining Association Comments on CERCLA 108b Hardrock Mining Proposed Rule

I have also attached comments prepared by a coalition of industry groups, including AISI, which address more generally the CERCLA 108b Hardrock Mining proposed rule requirements.

We continue to believe that the CERCLA 108b hardrock mining requirements as laid out in the Dec 2016 proposal would be impossible for our industry to comply with if finalized as is. We also continue to believe that iron ore mining should have never been included among the high risk mining categories that will ultimately be subject to the final rule requirements. If we can answer any questions or aid in any way, please do not hesitate to let me know. Hope you are doing well.

Best regards,

Paul

**Paul Balserek**  
Vice President, Environment

American Iron and Steel Institute  
25 Massachusetts Ave. NW, Suite 800  
Washington, DC 20001

**Ex. 6** (office)  
(mobile)

July 11, 2017

The Honorable Scott Pruitt, Administrator  
U.S. Environmental Protection Agency  
William Jefferson Clinton Building  
1200 Pennsylvania Avenue, NW  
Washington, D.C. 20460

**Re: Proposed Rule; Financial Responsibility Requirements Under CERCLA § 108(b) for Classes of Facilities in the Hardrock Mining Industry, 82 Fed. Reg. 3,338 (Jan. 11, 2017); Docket ID EPA-HQ-SFUND-2015-0781**

Administrator Pruitt:

The American Iron and Steel Institute (AISI) appreciates this opportunity to comment on the Environmental Protection Agency's proposal to include iron ore mining as a form of "hardrock mining" requiring financial responsibility regulation pursuant to CERCLA § 108(b) (Financial Responsibility Requirements Under CERCLA § 108(b) for Classes of Facilities in the Hardrock Mining, 82 Fed. Reg. 3,388 (Jan. 11, 2017)).

For over 150 years, AISI has sought to effectively influence public policy, educate, and shape public opinion in support of a strong, sustainable U.S. and North American steel industry committed to manufacturing products that meet society's needs. AISI serves as the voice of the North American steel industry in the public policy arena and advances the case for steel in the marketplace as the material of choice. AISI also plays a lead role in the development and application of new steels and steelmaking technology. AISI comprises 19 member companies, including integrated and electric furnace steelmakers, and approximately 120 associate members who are suppliers to or customers of the steel industry. AISI members have a direct interest in the Proposed Rule, which, as currently drafted, would impose onerous and financially crippling new requirements on their operations with no resulting benefit to the public. As explained below, these proposed new requirements are unwarranted for the iron ore mining sector.

AISI's goals are manifold: to optimize the North American steel industry operations in an expanding market and secure market share from competing materials and imports; to maintain the steel industry's favorable environmental, health, and safety performance; and to support steel producers and investment in manufacturing technologies that support a strong steel demand. Historically, the iron ore mining operations of the steel industry have demonstrated very low environmental and public health risks, as evidenced by the negligible hazardous chemicals involved in iron ore mining and related operations, the lack of listings of iron ore mining sites on the CERCLA National Priorities List over the life of the program, and the breadth of regulatory controls over this industry that effectively manage any existing risks. In fact, the inclusion of iron ore mines and associated operations in the proposal appears largely to have been the result of EPA's inappropriate attribution to the iron ore mining sector characteristics of a separate sector (Iron and Steel Mills) that has a notably different environmental footprint, toxic release inventory (TRI) profile, and hazardous waste output. To impose such unnecessary financial assurance requirements on the iron ore mining industry now would not only hinder AISI's larger mission, but would also pose a threat to a critical U.S. industry that is at that core of this country's productivity, security, and potential for economic growth.

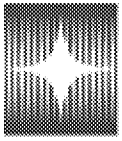
Please contact me (pbalserak@steel.org, Ex. 6) if you or members of your team have any questions regarding AISI's comments.

Sincerely,

*Paul Balserak*

Paul Balserak  
*Vice President, Environment*  
*American Iron and Steel Institute*

Attachment



**American  
Iron and Steel  
Institute**

Comments of the American Iron and Steel Institute  
on Financial Responsibility Requirements under CERCLA § 108(b) for  
Classes of Facilities in the Hardrock Mining  
Proposed Rule

Docket ID No. EPA-HQ-SFUND-2015-0781

July 11, 2017

## I. Introduction

The American Iron and Steel Institute (AISI) respectfully submits these comments to urge EPA to reconsider and reject its unwarranted proposal to include “iron ore” mining as one of the classes of “hardrock mining” that should be subject to new financial responsibility regulation under CERCLA § 108(b), 42 U.S.C. § 9608(b). Iron ore mining is a centuries-old,<sup>1</sup> well-regulated, and safe enterprise that has never before been subjected to federal financial assurance requirements, and nothing has changed that makes such regulation necessary now. “Iron ore is the source of primary iron for the world’s iron and steel industries . . . [and] is therefore essential for the production of steel, which in turn is essential to maintain a strong industrial base” in the United States.<sup>2</sup> EPA’s proposal to include iron ore mining in this regulation is based on inappropriate data, and the Agency’s estimate for financial assurance liability to be borne by the hardrock mining industry exceeds the iron ore mining industry’s entire annual revenue twice over. As such, requiring financial assurance for the iron ore industry is inappropriate, would impose an undue burden on the industry not necessitated by any risk posed by iron ore mining or associated operations, and would run afoul of the Administration’s commitment to revitalizing the American steel industry and examining how depressed domestic steel production threatens national security.<sup>3</sup>

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<sup>1</sup> F.L. Klinger, *Iron Ore*, Mineral Facts and Problems, 675 Bureau of Mines Bulletin 385 (1985).

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

<sup>3</sup> *President Donald J. Trump: Standing up to Unfair Steel Practices*, Office of the Press Secretary, The White House (Apr. 20, 2017), <https://www.whitehouse.gov/the-press-office/2017/04/20/president-donald-j-trump-standing-unfair-steel-trade-practices>.

**A. Iron ore mining was inappropriately included under “hardrock mining,” and should now be removed from the new rule.**

Relying heavily on the June 2009 Hoffman and Mahmud Memorandum listing 59 “commodity classes of hardrock mining” to be excluded from financial responsibility requirements under CERCLA § 108(b),<sup>4</sup> EPA proceeded to affirmatively identify hardrock mining as the class for which it would first develop financial responsibility requirements. Iron ore was not listed among the 59 excluded commodity classes, and thus it ended up being captured by the proposal, but without any apparent analytical basis to accurately justify its inclusion as a high risk mining category. In a *Federal Register* notice dated July 28, 2009 (2009 Priority Notice), EPA provided a general definition of “hardrock mining” and has refined that general definition for purposes of this proposal. Significantly, the public was *not* provided the opportunity to offer comment on the hardrock mining definition stated in this 2009 Priority Notice, or to review any data sources that EPA relied on in developing this definition. Given the clear significance of this definition of hardrock mining for purposes of establishing these financial assurance requirements, this lack of public comment represents a major flaw in EPA’s efforts. Therefore, we believe that EPA should place heightened focus on the public comment received on this point in the current proposal under review.

To provide context, this proposed rule “would apply to certain classes of facilities that engage in the extraction, beneficiation, and processing of metals (*e.g.*, copper, gold, iron, lead, magnesium, molybdenum, silver, uranium, and zinc) and non-metallic, non-fuel minerals (*e.g.*,

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<sup>4</sup> See Stephen Hoffman and Shahid Mahmud, EPA Memorandum to The Record, *Mining Classes Not Included in Identified Classes of Hardrock Mining* (June 29, 2009).

asbestos, phosphate rock, and sulfur).”<sup>5</sup> EPA now “further solicits comment on whether classes of mines identified by commenters as presenting a lower level of risk of injury based on facility characteristics and operations could potentially encompass iron ore, phosphate, and uranium mines.”<sup>6</sup> AISI urges EPA to determine that iron ore mining facilities have been improperly included in this proposed rule,<sup>7</sup> and “iron ore mining” should, therefore, be removed from the definition of hardrock mining in any final rule. As presented in greater detail below, iron ore mining presents far less significant environmental risks and hazards than other types of mining that EPA classifies as “hardrock mining” in the Identification of Priority Classes of Facilities for Development of CERCLA § 108(b) Financial Requirements Notice.<sup>8</sup> These minimal environmental risks and hazards warrant this exclusion.

More specifically, none of EPA’s stated reasons for proposing that CERCLA financial responsibility requirements cover certain classes of hardrock mines and associated mineral processing facilities actually applies to iron ore mining. In proposing to require such assurance of *hardrock* mines and associated facilities, EPA states that its “research indicated that the hardrock mining and mineral processing industry typically operates on a large scale, and, in some situations, subsequent exposure of humans, organisms, and ecosystems to hazardous substances

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<sup>5</sup> Financial Responsibility Requirements Under CERCLA § 108(b) for Classes of Facilities in the Hardrock Mining, 82 Fed. Reg. 3,388-3389 (Jan. 11, 2017).

<sup>6</sup> *Id.* at 3456.

<sup>7</sup> *Id.* at 3390.

<sup>8</sup> Identification of Priority Classes of Facilities for Development of CERCLA Section 108(b) Financial Responsibility Requirements, 74 Fed. Reg. 37213 (July 28, 2009).



occurs on a similarly large scale. Hardrock mining facilities generate an enormous volume of waste, which may increase the risk of hazardous substance release.”<sup>9</sup>

Iron ore mining is notably different from other categories of high risk hardrock mining. Like sand, gravel, and limestone mining,<sup>10</sup> which have been properly excluded from EPA’s definition of “hardrock mining,” iron ore mining presents far fewer environmental risks and hazards than other types of mining that EPA classified as “hardrock mining” in the Identification of Priority Classes of Facilities for Development of CERCLA § 108(b) Financial Requirements Notice.<sup>11</sup> Indeed, most of the risks EPA identifies in its proposal appear to relate to Iron and Steel Mills (NAICS code 331110), a *separate* category of facilities and activities that involve the making of metallic iron for use in steel-making, not the mere beneficiation of iron ore. In contrast, iron ore mines (NAICS code 212210) are merely a provider of feedstock to the downstream processes that go into the production of steel. Notably, EPA has not considered the downstream uses of, or processes involving, other exempt mined materials (*e.g.*, limestone) when determining whether the mining of that material constitutes a risk, and it has given no reason for treating iron ore mining differently. It is clearly inappropriate to require one class of facilities, iron ore mines, to undertake financial responsibility for a wholly distinct and separate class of facility, iron and steel mills. EPA’s decision to employ release data from “Iron and Steel Mills” to characterize iron ore mining for purposes of assessing the risks associated with the

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<sup>9</sup> *Requirements for the Hardrock Mining and Mineral Processing Industry*, EPA, <https://www.epa.gov/superfund/superfund-financial-responsibility>.

<sup>10</sup> See Stephen Hoffman and Shahid Mahmud EPA Memorandum to The Record, *Mining Classes Not Included in Identified Classes of Hardrock Mining* (June 29, 2009).

<sup>11</sup> 74 Fed. Reg. 37213 (July 28, 2009).

former is therefore arbitrary and capricious. While the CERCLA definition of “facility” is expansive, it is not expansive enough to cover facilities that are wholly separate and, in most cases, located hundreds of miles away from any iron ore mine. On those grounds, iron ore mining should be excluded from the definition of “hardrock mining” in relation to the proposed financial responsibility regulation under CERCLA § 108(b).

In addition to our comments on why iron ore mining is a low risk activity and should be excluded as a covered class under the definition of hardrock mining, we are also concerned with the proposed rule’s definition of “Mineral Processing.” The definition, when read together with the 2009 Priority Notice’s characterization of processing, suggests that blast furnace operations may fall under the definition of “mineral processing.” EPA’s proposed rule defines “Mineral Processing” as:

*the sequence of activities following extraction of metallic or non-fuel non-metallic minerals to: (1) Separate and concentrate a target metallic or non-fuel non-metallic mineral from the ore, and/or (2) to refine ores or mineral concentrates to extract a target metallic or non-fuel non-metallic material. Mineral processing includes the mechanical, thermal, and/or chemical treatment of naturally occurring earthen materials, either solid or liquid (e.g., rock, ore, mineral or extracted subsurface brine) to recover, purify or create a final mineral product (e.g., dimension stone, expanded vermiculite, or refractory clay) or a feedstock of sufficient purity that it can then be used in further industrial or manufacturing operations.*<sup>12</sup>

And the 2009 Priority Notice’s following characterization of processing also indicates that blast furnace operations may fall under the definition of “mineral processing”:

*the refining of ores or mineral concentrates after beneficiation to extract the target material. . . . For example, mineral processing operations can use pyrometallurgical techniques (the use of higher*

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<sup>12</sup> 82 Fed. Reg. 3504 (Jan. 11, 2017) (emphasis added).

*temperatures as in smelting*), to produce a metal or high grade metallic mixture. *Smelting generates a waste product called slag.* Slag is initially placed directly on the ground to cool, and is often subsequently managed into a wide range of construction materials (*e.g.*, road bed or foundation bedding). Both because of the ways that the facilities covered by this notice fit together, and because of the range of activities that they cover, EPA believes hardrock mining is properly identified as a group and considered to include multiple classes of facilities.<sup>13</sup>

Blast furnace operations are associated with iron and steel mills (NAICS code 331110) and are a separate and distinct activity from iron ore mining (NAICS code 212210). Further, blast furnaces are not co-located with iron ore mining facilities—in fact they are hundreds of miles apart in different states. Accordingly, AISI urges that EPA clarify that blast furnaces are not included under the rule’s definition of “mineral processing facility” and are not subject to the financial responsibility regulation under the current CERCLA § 108(b) hardrock mining action.

**B. The President and EPA are afforded significant discretion in determining whether an industrial sector should be subject to financial assurance regulation under CERCLA § 108(b).**

CERCLA § 108(b) does not require financial assurance of all industrial categories, and the categories themselves need not be defined to be all-inclusive. The statute instead requires EPA to limit its action to the mandate Congress provided and administrative record before the agency. Specifically, financial assurance is required only to the extent “consistent with the *degree and duration* of risk associated with the production, transportation, treatment, storage, or disposal of hazardous substances” from an industrial category.<sup>14</sup> This language calls upon the

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<sup>13</sup> 74 Fed. Reg. 37,215 (July 28, 2009) (emphasis added).

<sup>14</sup> 42 U.S.C. § 9608(b)(1) (emphasis added).

Administrator to exercise his judgment for each industrial classification, to determine whether *any* financial assurance is required under Section 108(b).

That the level of this discretion is significant finds further evidence in Section 108(b)(2), which states that “[t]he level of financial responsibility shall be initially established, and, when necessary, adjusted to protect against the level of risk which the President *in his discretion believes is appropriate* based on the payment experience of the Fund, commercial insurers, courts settlements and judgments, and voluntary claims satisfaction.”<sup>15</sup>

Here, the risks “associated with the production, transportation, treatment, storage, or disposal of hazardous substances” from iron ore mining operations are negligible at best. Indeed, as presented in more depth below, almost all of the risks EPA incorrectly associates with iron ore mining in its proposal come from Iron and Steel Mills, not from iron ore mining.<sup>16</sup> Moreover, “the payment experience [associated with] the [Superfund program], commercial insurers, court settlements and judgments, and voluntary claims satisfaction”<sup>17</sup> in connection with potential

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<sup>15</sup> *Id.* at § 9608(b)(2) (emphasis added).

<sup>16</sup> Separate and apart from the general unsuitability of the TRI data as a surrogate for risk, EPA has erroneously relied on the TRI data from “Iron and Steel Mills” (NAICS code 331110) as a surrogate for hazardous pollutant releases to the environment from the iron ore mining industry (NAICS code 212210). The TRI reports from Iron and Steel Mills identified every U.S. steel mill (including integrated, electric arc furnace mini-mills, coke, finishing mills, service centers, etc.) as falling within the iron ore mining category, and inaccurately estimated 52 million pounds of chemical releases, including numerous chemicals that are simply not associated with the iron mining process. Had EPA actually assessed TRI reporting for the iron ore mining sector, it would have found that iron ore mining was excluded by EPA after the industry demonstrated that releases were below reporting thresholds.

<sup>17</sup> Financial Responsibility Requirements for Facilities in the Chemical, Petroleum and Electric Power Industries, 82 Fed. Reg. 3512 (Jan. 11, 2017).

releases of hazardous substances associated with iron ore mining also demonstrates that no financial assurance should be required.

Ultimately, EPA's proposal to require financial assurance regulation of iron ore mining operations results from EPA's own, deeply-flawed risk analysis. In that faulty analysis, EPA imputes risks to the iron ore mining industry that simply do not exist or that are grossly overstated, and it entirely ignores state and federal regulations that already govern and have substantially reduced any risk from the iron ore industry—regulations that have exponentially grown in number and complexity since CERCLA's enactment in 1980. Under CERCLA, EPA must conduct a risk analysis that reviews all current operating practices and regulatory regimes, including but not limited to those related to permitting, operating, release containment and response, closure, and financial assurance. *Based on this thorough analysis*, EPA is to determine whether a risk exists, the degree of that risk, and whether that risk could give rise to a release that would result in clean-up activity necessitating some unfunded expenditure. EPA, however, has done none of that here. Its Proposed Rule, which seeks to address “all potential risk”<sup>18</sup> rather than the limited, identifiable risks discussed just above, is impermissibly overreaching and overbroad. All this, combined with EPA's failure to collaborate or consult with relevant state agencies, AISI, or AISI member companies, to develop this Proposed Rule further highlights the Rule's flawed foundation.

In short, based on the actual information from the iron ore mining sector, EPA would be would be responsibly concluding, and would be doing so well within its discretion, that *no* financial assurance should be required of iron ore mines and that they therefore should not be

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<sup>18</sup> 82 Fed. Reg. 3405.

included within the definition of hardrock mining. The clear statutory language in fact shows that the need to impose financial assurance requirements is discretionary and limited, and the Proposed Rule fails to meet these simple criteria for iron ore mining as it relies upon flawed historical data for a separate sector category. As a result the Proposed Rule exaggerates the risk from iron ore mining and would require the sector to maintain financial assurances significantly in excess of the risk actually presented and any likely costs for remediation activities. AISI, therefore, firmly believes that any conclusion contrary to excluding iron ore mining from the definition of hardrock mining and requiring no financial assurance under CERCLA 108(b) would be arbitrary and capricious, as the record simply does not support the need for such assurance from iron ore mines or blast furnaces.

AISI further endorses and incorporates by reference the comments on EPA's statutory mandate submitted under separate cover by a coalition of industry associations, including AISI, the National Association of Manufacturers, the National Mining Association, and the U.S. Chamber of Commerce amongst others, on this proposal.

## **II. Analysis**

### **A. EPA's traditional, eight-factor test for assessing necessity of financial assurance points to no need for financial assurance for iron ore mining.**

In its Proposed Rule, EPA points to eight factors that it has historically considered in identifying the risk profile of an industry and determining whether financial assurance regulation of that industry is required. The eight factors are:

- (1) annual amounts of hazardous substances released to the environment;
- (2) the number of facilities in active operation and production;
- (3) the physical size of the operation;
- (4) the extent of environmental contamination;
- (5) the number of sites on the CERCLA site inventory (including both NPL sites and non-NPL sites);
- (6) government expenditures;

(7) projected clean-up expenditures; and (8) corporate structure and bankruptcy potential.<sup>19</sup>

Separately and together, these eight factors weigh strongly if not irrefutably in favor of *not* including iron ore mining and associated operations among the classes of hardrock mining facilities subject to the proposed financial responsibility requirements under CERCLA § 108(b):

- 1) By erroneously relying on data related to “Iron and Steel Mills” (NAICS code 331110), which are distinct from iron ore mines (NAICS code 212210), *EPA has miscalculated and grossly overestimated the annual amount of hazardous substances potentially released to the environment as a result of iron ore mining*. The evidence provided below shows EPA grossly overestimated the hazardous chemical releases associated with iron ore mining and that iron ore mining does not rely on large amounts of hazardous chemicals.
- 2) *A total of only ten active iron ore mining sites exist in the United States,*<sup>20</sup> located in just two states: Michigan and Minnesota. The iron ore mining industry therefore presents a very low and geographically confined risk from a CERCLA perspective.
- 3) *Although iron ore mines can be relatively large, they mostly involve the movement of benign earthen material*, similar to large limestone and gravel rock quarries which are found around the nation and which EPA is correctly excluding from the scope of this Proposed Rule. While size of a facility is a factor in determining the need for financial assurance, it should be of little relevance where, as with iron ore mines, the facilities themselves use few hazardous chemicals and produce little hazardous waste.
- 4) *There is a miniscule environmental contamination risk from iron ore mining and associated operations*. Iron ore mining is a physical (rather than chemical) process, much like gravel and limestone mining. Furthermore, not only is iron mining historically and

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<sup>19</sup> 82 Fed. Reg. 3398 n. 34 (citing 74 Fed. Reg. 37214 (July 28, 2009)).

<sup>20</sup> The Regulatory Impact Analysis (RIA) that accompanies this new proposed rule lists 12 iron ore surface mines that are currently active; however, the CML Iron Mountain mine (Facility No. 64 on RIA) in Utah is no longer operational (*see* Tracy Sullivan, *CML Mines Suspend Production, Layoff More Than 100 Workers*, The Spectrum (Oct. 27, 2014, 9:57 PM), <http://www.thespectrum.com/story/news/local/cedar-city/2014/10/17/cml-mines-suspend-production-layoff-workers/17482735/>), and the Penn Mag Plant 1 (Facility No. 256 on RIA) is no longer an active or even permitted mining operation (*see* Pennsylvania Department of Environmental Protection, *Industrial Minerals Surface/Underground Mines Reporting Productions* (2015)).

heavily regulated, thereby reducing overall risk, but (like gravel and limestone mining) open pits once used for iron ore mining are currently used for activities such as recreation and as safe, reliable public drinking water sources, thus providing ample evidence that there is little to no risk associated with such mines.

- 5) *There are no iron ore mining related sites on EPA's National Priorities List (NPL), despite the listing of thousands of NPL sites in the U.S. since 1983.*
- 6) There have been *no federal government expenditures* related to CERCLA remediation of iron ore mining sites.
- 7) *CERCLA clean-up expenditures are projected to be zero* for this low-risk industry.
- 8) *The iron ore mining sector is quite stable* at present; ironically, this proposed EPA rule would threaten that stability.

We discuss each of the eight factors in detail below, demonstrating how each supports the conclusion that iron ore mining is a small and low-risk industry; is already heavily monitored and well-regulated; and no financial assurance is warranted.

***i. Iron ore mining does not use or generate significant amounts of hazardous substances, and financial assurance regulation is therefore unwarranted.***

Iron ore is mined from large open pits by progressive extraction along steps or benches using *physical* (not chemical) methods to separate the product from overburden. The iron ore beneficiation process primarily involves *physical* separation of materials using water, magnets, and similar physical mechanisms, together with the use of some low-risk chemicals. Waste materials generated as a result of open pit mining include overburden, excess rock, and mine water containing suspended solids and dissolved materials (not acidic in nature).

From an environmental perspective, iron ore mining is quite safe, involving processes that rely on substances that are largely inert. The evidence on which EPA relied in proposing to subject iron ore mines to this new rule is inaccurate and mischaracterizes the risks from iron ore mining. Simply put, EPA shirks its mandated responsibility to accurately assess the types and



degrees of risks by ignoring the well-established evidence that iron ore mining is a longstanding and safe enterprise that does not suddenly warrant financial assurance that has never previously been required. In fact, EPA must assess factors that both contribute to and mitigate against any risks that a specific industry poses before regulating it. Even the language of 108(b) emphasizes that EPA should only promulgate new regulations for operations that are not subject to heavy regulation already.<sup>21</sup> EPA has not done this here: it ignores the current regulatory framework—both state and federal—that already minimizes environmental risk from iron ore mining. For example, and as discussed in further detail below, iron ore mining operations already require several state and federal permits specific to air, water, wetlands, waste, and of course, mining.

These permitting requirements provide additional existing assurances that iron ore mining operations are already conducted in a way that minimizes risks. EPA and the States of Minnesota and Michigan have previously determined that iron ore mining involves, at most, *de minimis* releases of hazardous substances. As a consequence, EPA has excluded the iron ore mining industry from reporting requirements under the Emergency Planning and Community Right-To-Know Act (EPCRA) Section 313 Toxic Release Inventory (TRI). In reaching that determination, EPA concluded: 1) the extraction and beneficiation of iron ore do not routinely use hazardous substances to produce a final product, and toxic chemical releases and transfers are not of sufficient quantities to warrant reporting; 2) no facilities were expected to meet the threshold reporting levels under EPCRA; and 3) iron ore mining and associated facilities do not make

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<sup>21</sup> See S. Rep. No. 96-848, at 92 (1980) (It “is not the intention of the Committee that operators of facilities . . . be subject to two financial responsibility requirements for the same dangers. The purpose of [the provision that became § 108(b)] is . . . to extend financial responsibility requirements to facilities and transporters who are not now covered by any [financial responsibility] requirements . . .”).

extensive use of toxic chemicals for processing their product.<sup>22</sup> Iron ore mining is in fact the only metal mining industry specifically excluded from TRI reporting, while other metal mining industries, such as gold, copper, nickel, lead and zinc must report the chemicals used in their processes.

Submissions made by industry to both Minnesota and EPA to support the exclusion of iron ore mining from the EPCRA Section 313 TRI program included information on a number of bulk metals sent off-site for recycling (chromium, copper, manganese, nickel, zinc), as well as propene used on-site and ammonia used in blasting agents.<sup>23</sup> In addition, EPA's 1994 "Technical Resource Document on the Extraction and Beneficiation of Ores and Minerals" contains chemical analyses indicating that these non-target metals (Ni, Ti, Cu, Mn, Zn, S, and P) are below *de minimis* concentrations for TRI reporting.<sup>24</sup> Ultimately, the TRI reports were amended in the mid-1990s to demonstrate that releases were below reporting thresholds. This compelling

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<sup>22</sup> *Section 313 of the Emergency Planning and Community Right-to-Know Act, Toxic Chemical Release Inventory*, Office of Pollution Prevention and Toxics, EPA 745-B-99-005 (Jan. 1999); *see, e.g.*, Hibbing Taconite Co., Dept of Public Safety, State of Minnesota, Emergency Response Commission Facility Verification Report for the 1993 Reporting Year (1993) (including related correspondence); *see also* LTV Steel Mining Company, Dept of Public Safety, State of Minnesota, Toxic Chemical Release Inventory Report Form R (1993) (including related correspondence).

<sup>23</sup> Ammonia is not a dissolved constituent and thus is not reportable under the TRI. Chromium, copper, manganese, and nickel are constituents of grinding media that meet rule exemptions and thus are not reportable under the TRI. Zinc dust/fume generation was below TRI reportable thresholds, and propene is exempt from TRI reporting under the facility maintenance exemption.

<sup>24</sup> *Technical Resource Document: Extraction and Beneficiation of Ores and Minerals, Vol. 3: Iron*, Office of Solid Waste, EPA 530-R-94-030 (Aug. 1994) [hereinafter *Technical Resource Document: Ores and Minerals*] (Section 1.4.2.3, including support for water from mining generally being recovered to the mill and any unutilized flotation reagent adhering to tailings particles; Section 1.5.1.7, characterizing mine water as having low pollutant levels).

TRI data in EPA's files demonstrates conclusively that the entire basis for this rulemaking proposal as it relates to the iron ore sector rests on a fatally flawed foundation.

- a. Iron ore mines are "small quantity generators" of hazardous wastes, obviating the need for financial assurance under CERCLA § 108(b).

Because iron ore mines and the associated beneficiation and agglomeration processes do not themselves generate any hazardous wastes, iron ore mines are "small quantity generators" (SQG) of hazardous wastes. The small amount of hazardous waste generated in association with iron ore mining is primarily associated with maintenance and laboratory operations, and is managed in accordance with the Resource Conservation and Recovery Act (RCRA).<sup>25</sup> Those wastes are neither stored nor disposed of on-site. These small volumes of wastes are transported off-site for recycling, treatment, or disposal. Among the waste types produced at the various active iron ore mining sites are small quantities of hydrochloric acid, waste flammable liquids, waste aerosols, paint waste, hazardous liquids, waste lab acid, and waste solvents. Moreover, in 1980, through the Bevill Amendment, Congress expressly exempted from regulation as hazardous waste "mining and mineral processing waste . . . generated by extraction, beneficiation, and processing activities."<sup>26</sup> This amendment, and EPA's subsequent confirmation of such exemptions in 2000, further underscores the low-risk nature of iron ore mining wastes and the absence of any need for financial assurance regulation under CERCLA § 108(b).

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<sup>25</sup> 42 U.S.C. § 6901 – 6992k.

<sup>26</sup> *Special Wastes*, EPA, <https://www.epa.gov/hw/special-wastes> [hereinafter *Special Wastes*]; 42 U.S.C. § 6921(b)(3)(A)(ii); see generally Van E. Housman, *The Scope of the Bevill Exclusion for Mining Wastes*, 24 *Env'tl. Law Rep.* 10657 (Nov. 1994).

The characterization of iron ore mining facilities as “small quantity generators,” combined with the fact that any hazardous wastes are not processed, stored, or disposed of on-site, supports the exclusion of iron ore mines from financial responsibility regulation pursuant to CERCLA § 108(b).

b. Iron ore mines manage and use low-risk chemicals in their processes.

Iron ore mining uses minimal amounts of hazardous chemicals, and those that are used in the process already require regulatory approval. For example, the Minnesota Pollution Control Agency has a chemical additive review process.<sup>27</sup> In Minnesota, prior to using a new chemical, increasing dosage, or changing a chemical, a submittal is required with specific information for the agency to evaluate the request. The chemical cannot be used until authorization is received. The review could result in approval, disapproval, or approval with additional monitoring requirements. The iron ore industry has thus actively worked to reduce or eliminate many traditional industrial hazardous substances from properties (*e.g.*, PCB transformers, mercury-containing devices, etc.).

The iron ore beneficiation process also relies on low-risk chemical and physical processes, as it primarily involves physical separation of materials using water, magnets, and similar physical mechanisms, together with the use of some low-risk chemicals that are commonly used throughout industrial settings, not specific to mining, across the United States. Water is frequently used as a dust suppressant to limit nuisance dust, and in some cases, chemical dust suppressants, such as calcium or magnesium chloride, are utilized. Such low-risk

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<sup>27</sup> See *Wastewater: Chemical Additive Approvals*, Minnesota Pollution Control Agency, <https://www.pca.state.mn.us/water/wastewater-chemical-additive-approvals>.

chemicals as calcium, magnesium chloride, and ammonium nitrate/fuel oil are used for various processes, including dust suppressants and blasting at iron ore mine facilities.

These facilities also require the use of various low-risk chemicals for processes other than beneficiation, such as water treatment solutions and sodium hypochloride for drinking water treatment; flocculant, corrosion inhibitors, and microbiocides for process improvement/control, equipment protection, health protection, and scrubber pH control; and frother, amine, flocculant, freeze conditioner scrubber treatment, and sodium hypochlorite for process improvement/control, dry hydrated lime, and potable water treatment. Notably, none of the Material Safety Data Sheets for the foregoing chemicals identifies any constituents of concern for CERCLA.<sup>28</sup> As such, and because iron ore mining and beneficiation is a low-risk process, AISI urges EPA to agree that financial assurance is not needed for iron ore mining.

There is also minimal risk from airborne substances associated with iron ore mines. For example, the National Emission Standards for Hazardous Air Pollutants (NESHAP) Taconite MACT Petition to Delist<sup>29</sup> demonstrates that residual trace elements contained in the iron ore present a very low air emissions-based risk.

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<sup>28</sup> See, e.g., Culligan International Co., *Water Softener Salt Solar Extra Coarse Material Safety Data Sheet* (Mar. 5, 2009); see, e.g., Health, Safety, and Environment Department, Hawkins Inc., *Aqua Hawk D2707 Safety Data Sheet* (Oct. 8, 2012); see, e.g., U.S. Water Services, *CWT 1004 Safety Data Sheet* (Mar. 18, 2015).

<sup>29</sup> See generally *Fact Sheet – Taconite Iron Ore Processing: National Emission Standards for Hazardous Air Pollutants (NESHAP)*, EPA (Aug. 25, 2003), <https://www.epa.gov/stationary-sources-air-pollution/fact-sheet-taconite-iron-ore-processing-national-emission-standards>; see also *Pakootas v. Teck Cominco Metals*, No. 15-35228 (9th Cir. July 27, 2016) (holding that air emissions do not constitute ‘disposal’ under CERCLA); see generally *Potential Impacts of the Federal Regional Haze and Best Available Retrofit Technology Rules on the Taconite Industry in Minnesota, Final Report for the Minnesota Pollution Control Agency*, Barr Engineering Company (Sept. 30, 2003), <https://www.pca.state.mn.us/sites/default/files/aq1-27.pdf>; see

c. Iron ore mines use largely neutral, inert materials.

Because iron ore geology is different from some other mineralized ore bodies, acid-rock drainage (ARD) is not a concern with the iron ore bodies in Michigan and Minnesota. The lack of ARD potential at iron ore mines is a highly relevant factor that warrants EPA dropping this sector from the Proposed Rule. Moreover, EPA itself describes the iron ore mining and beneficiation process as generating wastes that are merely “earthen in character.”<sup>30</sup> Chemical constituents from iron ore mining include iron oxide, silica, crystalline silica, calcium oxide, and magnesium oxide—none of which is a CERCLA hazardous substance.<sup>31</sup> The acid-neutralizing potential of carbonates in iron ore offsets any residual acid rock drainage risks, leading to pit water that naturally stabilizes at a pH of 7.5-8.5. Again, nothing in the wastes suggests any hazard to the environment and public health.

d. EPA relies on inaccurate and improper evidence to support the inclusion of iron ore mines under CERCLA § 108(b).

Perhaps most glaringly incorrect, EPA has erroneously relied on the Toxic Release Inventory (TRI) data from Iron and Steel Mills (NAICS code 331110) as a surrogate for hazardous pollutant releases to the environment from the iron ore mining industry (NAICS code

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*generally Section 112(c)(9) Petition to Delist Taconite Iron Ore Processing From the EPA’s List of Source Categories Under Section 112(B) of the Clean Air Act*, Cleveland-Cliffs, Inc. and Ispat-Inland Mining Co. (Dec. 15, 2003).

<sup>30</sup> EPA, Office of Solid Waste, *Final Technical Background Document, Identification and Description of Mineral Processing Sectors and Waste Streams, Iron and Steel* Chapter, Section B.4 (Aug. 1998) <https://archive.epa.gov/epawaste/nonhaz/industrial/special/web/pdf/part5.pdf> [hereinafter *Final Technical Document: Mineral Processing and Waste Streams*].

<sup>31</sup> See, e.g., Cliffs Natural Resources, CliffsNR Iron Ore Concentrate Safety Data Sheet (Feb. 26, 2015) at 2; see, e.g., Cliffs Mining Co. Safety and Workers Compensation Department, Hibbing Taconite Co. Total Tails, Material Safety Data Sheet (Sept. 27, 2001) at 1.

212210).<sup>32</sup> The TRI reports from Iron and Steel Mills identified *every* U.S. steel mill (including integrated, electric arc furnace mini-mills, coke, finishing mills, service centers, etc.) as falling within the iron ore mining category, and inaccurately estimated 52 million pounds of chemical releases, including numerous chemicals that are simply not associated with the iron ore mining process. This contradicts EPA's own previous findings. For example, in an EPA Report on Environmental and Human Health Damages from Mining Wastes, dated April 1998, EPA discussed state-by-state damages resulting from 25 different types of metal mining, but did not identify *any* damages resulting from iron ore mining.<sup>33</sup> EPA also erroneously listed a ferrochromium (chromite) smelter under the iron and steel category, further exacerbating the inaccuracies that flowed from treating the Iron and Steel Mill category as part of the iron ore mining category.

Ultimately, EPA's proposal provides no information supporting a conclusion that iron ore mining and associated operations should now be subject to onerous CERCLA § 108(b) requirements, when no historical iron ore mining CERCLA sites have ever been listed.<sup>34</sup> EPA has not identified any specific risks associated with ferrous mining. Instead, its proposal to include iron ore mining and associated operations in the rule is apparently based on an inappropriate consideration of the risks associated with a separate category, Iron and Steel Mills.

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<sup>32</sup> *2014 TRI National Analysis: Introduction*, EPA, [https://www.epa.gov/sites/production/files/2017-01/documents/tri\\_na\\_2014\\_complete\\_english.pdf](https://www.epa.gov/sites/production/files/2017-01/documents/tri_na_2014_complete_english.pdf).

<sup>33</sup> *Technical Background Document Supporting the Final Rule Applying Phase IV Land Disposal Restrictions to Newly Identified Mineral Processing Wastes: Human Health and Environmental Damages from Mining and Mineral Processing Wastes*, EPA 530-R-99-037 (Apr. 1998).

<sup>34</sup> *See, e.g., EPA, ORCR and OSRTI, Evidence of CERCLA Hazardous Substances and Potential Exposures at CERCLA § 108(b) Mining and Mineral Processing Sites* (2016).

Applying this new rule to iron ore mines is further inappropriate where the public was not provided the opportunity to offer comment on the hardrock mining definition stated in the 2009 Priority Notice, or to review any data sources that EPA relied on in developing this definition.<sup>35</sup>

**ii. *The number of iron ore facilities in active operation and production is insignificant, and financial assurance is therefore unnecessary.***

Iron ore mining in the United States comprises a small and localized business sector, further supporting a low risk profile from a CERCLA perspective. The majority of iron ore operations are confined to two states: Michigan and Minnesota,<sup>36</sup> and only the following eight<sup>37</sup> iron ore mines are correctly listed as “active” on EPA’s Regulatory Impact Analysis (RIA) supporting this rule:

<b>Michigan</b>	<b>Minnesota</b>
1. Cliffs Natural Resources – Empire (No. 62)	3. ArcelorMittal Minorca (No. 20)
2. Cliffs Natural Resources – Tilden (No. 63)	4. Hibbing Taconite (No. 142)
	5. Northshore Mining Babbitt – Silver Bay (No. 237)
	6. United Tacontie Thunderbird Mine (No. 328)
	7. USSteel Keetac (No. 340)
	8. USSteel Minntac (No. 341)

Moreover, while the physical size of these mines may be considered large, ample existing regulations and requirements already minimize the physical impact of such operations. For

<sup>35</sup> See 74 Fed. Reg. 37213 (July 28, 2009).

<sup>36</sup> See, e.g., Klinger, *supra* note 1, at 386.

<sup>37</sup> The Regulatory Impact Analysis (RIA) that accompanies this new proposed rule lists 12 iron ore surface mines as currently active; however, the CML Iron Mountain mine (Facility No. 64 on RIA) in Utah is no longer operational (Sullivan, *supra* note 20, available at <http://www.thespectrum.com/story/news/local/cedar-city/2014/10/17/cml-mines-suspend-production-layoff-workers/17482735/>), and the Penn Mag. Plant 1 (Facility No. 256 on RIA) is no longer an active or even permitted mining operation (See, PA Dep’t Env’tl Protection, *Industrial Minerals Surface/Underground Mines Reporting Productions* (2015)).



instance, best practices are in place to minimize the facility footprint by utilizing techniques such as in-pit stockpiling, under which overburden stockpiles are constructed, where feasible, in mined-out areas of a pit, rather than creating a new stockpile outside the existing footprint that would increase the facility size.<sup>38</sup>

Given the fact that there are very few facilities in the category and that those that remain active already take steps to minimize their footprint and potential releases, requiring financial assurance under CERCLA § 108(b) is unwarranted.

***iii. The minimal evidence of historical environmental contamination at iron ore mining sites and the current use of former iron ore mining sites for public purposes further indicate that financial assurance is unnecessary.***

Many open pits historically used for iron ore mining have been reclaimed successfully and are currently used as safe and reliable public resources, such as recreational lakes and drinking water sources.<sup>39</sup> For example, the Minnesota Department of Health identifies five communities and two mining companies that rely on water drawn from historic iron ore mine pits as safe and reliable drinking water.<sup>40</sup> To date, many historic iron mining pits are used as drinking water sources, public beaches, recreation areas, campsites, scuba diving areas, and prime, state-stocked fishing areas for lake trout, rainbow trout, and other fish.<sup>41</sup> The fact that

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<sup>39</sup> See, e.g., Klinger, *supra* note 1, at 399.

<sup>40</sup> *Community Public Water Supply*, Minnesota Department of Health, <http://www.health.state.mn.us/divs/eh/water/com/>.

<sup>41</sup> The Laurentian Vision Partnership is a regional coalition that promotes the development of productive post-mining landscapes on the Mesabi Iron Range in NE Minnesota (listing Embarrass Pit, Mott Pitt, Lake Ore Be Gone, Geneva Pit, Schley Pit, Petit Pit, etc.); see, e.g., Michael E. Berndt, *Mercury and Mining in Minnesota, Minerals Coordinating Committee Final*

these common and long-standing uses for former iron ore mining sites exist at many locations is further evidence that they pose little or no risk and that financial assurance for operational sites is not necessary.

In fact, many communities and organizations have actively welcomed the reclamation of land that was once the site of iron ore mining operations. The University of Minnesota's Department of Landscape Architecture, for example, has joined with various stakeholders to reclaim and repurpose such land.<sup>42</sup> In finding that “[b]yproducts and resources removed from mining can . . . be used as building blocks for future reclamation,” these organizations are proactively seeking to set the precedent for land reclamation.<sup>43</sup>

***iv. The existing federal and state regulatory framework governing iron ore mining operations is rigorous and thorough, obviating the need for additional financial assurance requirements.***

Before imposing new financial assurance requirements, EPA should consider current regulatory requirements when evaluating the risk an industry poses to the environment and human health. Iron ore mining is a heavily-regulated industry, and such regulations already adequately reduce and manage associated long-term risks. Federal and state environmental review programs are robust and rigorous, and they already consider potential environmental

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*Report*, Minnesota Department of Natural Resources (Oct. 15, 2003); *see generally*, *Technical Resource Document: Ores and Minerals*.

<sup>42</sup> Jim Romsaas, *Recycle the Range*, Mesabi Daily News (Jun. 28, 2017), [http://www.virginiamn.com/mine/recycle-the-range/article\\_86e1408c-5bc2-11e7-95b4-6fe1a929a696.html](http://www.virginiamn.com/mine/recycle-the-range/article_86e1408c-5bc2-11e7-95b4-6fe1a929a696.html).

<sup>43</sup> *Id.*

impacts from major projects prior to authorizing development and to inform environmental permitting.<sup>44</sup>

In addition, at the state level, Michigan already imposes certain financial responsibility requirements on ferrous (iron) mineral mining.<sup>45</sup> According to the relevant Michigan statute, “the amount of financial responsibility must equal the expected cost of reclamation for each acre, or fraction thereof, of the area subjected to mining. In determining the amount . . . the MDEQ must take into consideration the character and nature of the lands to be reclaimed, the future suitable use of the land involved, and the cost of the reclamation to be required.”<sup>46</sup> The relevant Michigan statute acknowledges that land used for ferrous mining can later be repurposed, further supporting the conclusion that iron ore mining is an inherently low-risk activity from a hazardous substance perspective. In Minnesota, financial assurance for “metallic mineral mining operations from which iron is the predominant metal extracted . . . only requires financial responsibility when the MDNR Commissioner” makes certain site-specific determinations related to compliance with the underlying permitting structure.<sup>47</sup>

At the federal level, as discussed above, iron ore mining processes are already exempt from RCRA regulation under the Bevill Amendment. This strongly indicates that Congress itself would not find necessary any requirement for financial assurance under CERCLA for such

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<sup>44</sup> See, e.g., *Essar Steel Minnesota Modifications Project*, Minnesota Department of Natural Resources, <http://www.dnr.state.mn.us/input/environmentalreview/essar/index.html>.

<sup>45</sup> EPA, EPA-HQ-SFUND-2015-0781-2041, Summary of Michigan Financial Responsibility Requirements (Feb. 6, 2017).

<sup>46</sup> *Id.* at 2.

<sup>47</sup> EPA, EPA-HQ-SFUND-2015-0781-2101, Summary of Michigan Financial Responsibility Requirements (Feb. 6, 2017) at 1.

facilities. In addition, the following permits, authorizations, and regulations are currently applicable, at a minimum, for mining: **Air** (Title V, PSD, National Ambient Air Quality Standards, National Emission Standards for Hazardous Air Pollutants, New Source Performance Standards, etc.); **Water** (National Pollution Discharge Elimination System, State Disposal System, Stormwater, Water Appropriations, Clean Water Act Section 401); **Wetlands** (Clean Water Act Section 404, Wetland Conservation Act (MN)); **Waste** (Solid Waste, Resource Conservation and Recovery Act); **Mining** (State Permits to Mine (MN)<sup>48</sup>, Mineland Reclamation Rules (MN), Part 631 (MI)). These extensive and significant permitting requirements provide additional existing assurances that iron ore mining operations will be conducted in such a way as to minimize risks.

To date, formal environmental review (*e.g.*, EA, EIS) exercises conducted for the iron ore mining industry under NEPA<sup>49</sup> and Minnesota Environmental Protection Act (MEPA)<sup>50</sup> have not revealed any material risks associated with those projects.<sup>51</sup> The low-risk nature of iron ore mining led EPA to include a very narrow list of effluent characteristics—only iron, total suspended solids (TSS), and pH—for the iron ore mining effluent limitation guidelines (ELGs) in Subpart A of 40 CFR §§ 440.10 – 440.15.<sup>52</sup> In addition, not even a single taconite facility is

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<sup>48</sup> Ferrous Metallic Mineral Mining, Minn. R. 6130.

<sup>49</sup> 42 U.S.C. § 4321 *et seq.*; *see also* Minn. R. 4410.0200-4410.6500.

<sup>50</sup> Environmental Impact Statements, Minn. Stat. § 116D.04 (2016).

<sup>51</sup> *See, e.g.*, Minnesota Department of Natural Resources, *supra* note 44, *available at* <http://www.dnr.state.mn.us/input/environmentalreview/essar/index.html>.

<sup>52</sup> *See* 40 CFR §§ 440.10 – 440.15.

listed in EPA's National Enforcement Initiative: Reducing Pollution from Mineral Processing Operations.<sup>53</sup>

- v. *The absence of any iron ore mining sites on EPA's CERCLA Site Inventory (National Priority List (NPL))—despite their longstanding history of operations—further indicates that there is insufficient risk to justify financial assurance requirements.*

Iron ore mining-related sites do not present long-term legacy cleanup risks, as evidenced by their longstanding absence from EPA's CERCLA National Priorities List since 1983 (active, proposed, or deleted sites).<sup>54</sup> No iron ore mining sites are contained on the proposed list either.<sup>55</sup> The lack of any historical federal governmental expenditure on the clean-up of iron ore mining facilities strongly demonstrates that there is no need for additional financial assurance for such sites and associated operations. For over 35 years, EPA has employed a risk-based process through the Hazard Ranking System to evaluate potential NPL sites in every state in the U.S. and EPA has listed over 1,600 NPL sites around the Nation in every state. The absences of a single iron ore mine (active or inactive) strongly attests to the lack of any need for this Proposed Rule for the iron ore sector.

- vi. *The projected clean-up expenditures for iron ore sites are minimal to non-existent, further obviating the need for financial assurance.*

As discussed, iron ore mining is already effectively regulated under both federal and state law, already adequately reducing and managing any associated long-term risks. Because they do

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<sup>53</sup> See *National Enforcement Initiative: Reducing Pollution from Mineral Processing Operations*, EPA, <https://www.epa.gov/enforcement/national-enforcement-initiative-reducing-pollution-mineral-processing-operations>.

<sup>54</sup> See *National Priorities List (NPL) Sites – by State*, EPA (July 7, 2017), <https://www.epa.gov/superfund/national-priorities-list-npl-sites-state>.

<sup>55</sup> *Id.*

not use any uniquely hazardous materials, and because they generate only negligible amounts and types of hazardous wastes, iron ore mines present extremely low risk of triggering a CERCLA clean-up response, and CERCLA clean-up expenditures are, therefore, projected to be zero or near zero.

*vii. Corporate structure and bankruptcy potential*

The iron ore mining sector has recently begun stabilizing; ironically, this proposed EPA rule would threaten that fragile stability by imposing costs on the industry that exceed its revenue, for the misguided purpose of assuring against risks that simply do not exist or are already protected against.

**B. Blast furnaces should also be excluded from new CERCLA § 108(b) financial assurance requirements.**

AISI strongly believes that EPA should explicitly exclude blast furnaces from the “mineral processing facility” definition in the rule because blast furnaces are a separate and distinct activity from hardrock mining, which is the focus of the rule. Further, blast furnaces should be excluded from the new CERCLA § 108(b) financial assurance requirements because they represent a low-risk activity, as described in the following sections.<sup>56</sup> In fact, based on

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<sup>56</sup> At a minimum, AISI urges EPA to conclude that blast furnaces should be considered *separately* from iron ore mining operations in determining whether financial assurance regulation is necessary. A review of the technical documents supporting the proposed rule shows that blast furnaces may trigger the “mineral processing” definition as set forth in the proposed rule. For example, the *Iron and Steel* chapter of *Identification and Description of Mineral Processing Sectors and Waste Streams* (Section B.4) clearly delineates the boundary between beneficiation and processing. It notes that EPA determined that “for this specific mineral commodity sector, the beneficiation/processing line occurs *between* agglomeration (sintering, pelletizing, and briquetting) and reduction of iron ore in a blast furnace.” *Final Technical Document: Mineral Processing and Waste Streams at Iron and Steel Chapter, B.4, available at <https://archive.epa.gov/epawaste/nonhaz/industrial/special/web/pdf/part5.pdf>*. In contrast to the beneficiation process, in which there are no chemical changes to the mineral properties of iron

comments from AISI and the National Slag Association in the 1980s, EPA has previously deemed blast furnace slag as non-hazardous.<sup>57</sup>

First, blast furnaces are not co-located with iron ore mines; often, they are not even located in the same state as the iron ore mine. It thus makes no sense to consider them to be part of the same facility as the iron ore mine. Second, and similar to iron ore mining facilities, blast furnaces use minimal hazardous substances and do not produce hazardous waste. What substances they do use or waste they do generate is, moreover, already adequately regulated at the state and federal level. Further, the co-product of blast furnace operations, blast furnace slag, has long had various practical uses ranging from construction of roadways to application as a key ingredient in cement manufacturing. Studies have even demonstrated that blast furnace slag can help neutralize pH levels in soil. No new blast furnaces have been constructed since the 1960s, and many of those that remain in operation have been modernized, further minimizing any harmful impact they may have on the environment.

Thus, the locations of blast furnaces, combined with their heavily regulated operations and their use of minimally hazardous materials and the lack of generation of hazardous wastes, require that EPA not consider blast furnaces to be parts of the iron ore mines associated with

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ore, EPA identified the starting point of mineral processing as the point at which “a significant chemical change to the iron ore occurs.” *Id.* Finally, in EPA’s Nov. 30, 2016, Technical Support Document for this proposed rule, EPA specifically explained that slag piles from “[i]ron smelting using a blast furnace” are “[p]otential sources and releases of CERCLA hazardous substances.” *See Office of Land and Emergency Management Technical Support Document: Financial Responsibility Requirements under CERCLA 108(b) Hardrock Mining Industry Proposed Rule: Financial Responsibility Reductions*, EPA (Dec. 1, 2016) at 65, A-6.

<sup>57</sup> *See* National Slag Association, *Iron and Steel Slags – Non-hazards* 1, 2 (1980), [http://www.nationalslag.org/sites/nationalslag/files/documents/nsa\\_194-5\\_slag\\_a\\_non-hazard%20%281%29.pdf](http://www.nationalslag.org/sites/nationalslag/files/documents/nsa_194-5_slag_a_non-hazard%20%281%29.pdf).

them and exclude those blast furnaces from being subject to financial assurance regulation under CERCLA § 108(b).

*i. Blast furnace operations are also distinct from “Iron and Steel Mills,” obviating the need for financial assurance.*

Blast furnaces are a type of metallurgical furnace used to produce industrial metals such as iron—essentially, they reduce iron ore to metallic iron. “The purpose of a blast furnace is to chemically reduce and physically convert iron oxides into liquid iron called ‘hot metal.’ The blast furnace is a huge, steel stack lined with refractory brick, where iron ore, coke and limestone are dumped into the top and preheated air is blown into the bottom.”<sup>58</sup> Blast furnaces process the nonhazardous metallic minerals produced by the iron ore mining industry and likewise present minimal risks to health and the environment.<sup>59</sup> Further, EPA did not consider downstream uses of other exempt mining operations. Doing so here is unreasonable and obviates a level playing field.

a. Blast furnaces do not produce hazardous waste.

Blast furnace slag and associated air pollution control dusts and sludges are, like iron ores, low-hazard materials. To start, like with iron ore mining processes, blast furnace processes are excluded from regulation as hazardous waste under RCRA pursuant to the Bevill Amendment.<sup>60</sup> Notably, the co-products from blast furnaces also have been shown to pass the

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<sup>58</sup> See John Ricketts, *How a Blast Furnace Works*, American Iron and Steel Institute, <http://www.steel.org/making-steel/how-its-made/processes/how-a-blast-furnace-works.aspx>.

<sup>59</sup> See e.g., George C. Wang, *The Utilization of Slag in Civil Infrastructure Construction*, (Woodhead Publ’g. 2017).

<sup>60</sup> See *Special Wastes*, available at <https://www.epa.gov/hw/special-wastes>.



Toxicity Characteristic Leaching Procedure (TCLP) test.<sup>61</sup> In fact, rigorous scientific studies have been conducted to demonstrate that blast furnace slag does not pose a human or ecological health risk, and therefore should not be characterized as “hazardous waste.”<sup>62</sup>

From a processing perspective, blast furnaces manage waters from gas cleaning systems through recycle water treatment systems. These water systems are either closed loop or involve a blowdown from the system that is then further treated and discharged under a NPDES permit.<sup>63</sup> Further, blast furnace air pollution control dusts and sludges are disposed of in secure landfills or recycled back to the iron and steel making process.<sup>64</sup> In short, blast furnaces are already well-regulated, and there is no apparent reason for requiring additional financial assurance.

Moreover, blast furnace slag is considered to be a useful *co-product* of the iron-making process.<sup>65</sup> It is managed as a commodity aggregate and used in construction of roadways and as an ingredient in cement manufacturing. It is not considered a waste.<sup>66</sup>

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<sup>61</sup> See generally Proctor et al., *Physical and Chemical Characteristics of Blast Furnace, Basic Oxygen Furnace, and Electric Arc Furnace Steel Industry Slags*, 34 *Env'tl. Sci. & Tech.* 1576-1582 (2000).

<sup>62</sup> See *Id.* at 1581.

<sup>63</sup> See EPA, ORCR and OSRTI, *supra* note 34.

<sup>64</sup> *User Guidelines for Waste and Byproduct Materials in Pavement Construction, Current Management Options*, FHWA, <https://www.fhwa.dot.gov/publications/research/infrastructure/structures/97148/ssa1.cfm>; see EPA, ORCR and OSRTI, *supra* note 34; see generally *Technical Resource Document: Ores and Minerals*; see also *Final Technical Document: Mineral Processing and Waste Streams at Iron and Steel and Elemental Phosphorous* chapters, available at <https://archive.epa.gov/epawaste/nonhaz/industrial/special/web/pdf/part5.pdf>.

<sup>65</sup> *Where Does Slag Come From?*, National Slag Association, <http://www.nationalslag.org/faq/where-does-slag-come>; see generally *Final Technical Document: Mineral Processing and Waste Streams*, available at <https://archive.epa.gov/epawaste/nonhaz/industrial/special/web/pdf/part5.pdf>.

b. Blast furnaces utilize little to no hazardous chemicals.

In addition, no blast furnaces are independently identified as the cause of a RCRA Corrective Action or are listed on the CERCLA NPL, although several lead, copper, and zinc smelters are. Again, this indicates that blast furnaces are low-risk operations from a hazardous waste perspective and that no financial assurance under CERCLA § 108(b) is necessary or should be required.

c. Blast furnace slag has many useful, everyday non-hazardous uses.

Blast furnace slag is one of the key products from blast furnaces, and “consists principally of silicates and alumino-silicates of lime and other bases developed simultaneously with iron in a blast furnace.”<sup>67</sup> Blast furnace slag can be cooled in different ways to create different blast furnace slag products that are most often used in connection with subbase construction.<sup>68</sup> The National Slag Association enumerates the following types of slag and their significant uses:

- Granulated Slag: Granulated slag is rapidly cooled by large quantities of water to produce a sand-like granule that is primarily ground into a cement commonly known as GGBS (Ground Granulated Blast Furnace Slag), or Type S slag cement. It is also mixed with Portland cement clinker to make a blended Type 1S cement.

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<sup>66</sup> See, e.g., “Whitetopping” Thin Concrete Overlays us Blast Furnace Slag in Wayne County, National Slag Association., [http://www.nationalslag.org/sites/nationalslag/files/nsa\\_205-1\\_bf\\_slag\\_whitetopping.pdf](http://www.nationalslag.org/sites/nationalslag/files/nsa_205-1_bf_slag_whitetopping.pdf).

<sup>67</sup> See *Blast Furnace Slag Base and Subbase Aggregates Product Information*, National Slag Association, [http://www.nationalslag.org/sites/nationalslag/files/documents/bf\\_prod\\_info\\_sheet.pdf](http://www.nationalslag.org/sites/nationalslag/files/documents/bf_prod_info_sheet.pdf).

<sup>68</sup> *Id.*; see also *Blast Furnace Slag*, National Slag Association, <http://www.nationalslag.org/blast-furnace-slag>.

- Air-cooled Slag: Blast furnace slag is allowed to slowly cool by ambient air, is processed through a screening and crushing plant and is processed into many sizes for use primarily as a construction aggregate. Common uses are as aggregates in ready-mix concrete, precast concrete, hot mix asphalt aggregate, septic drain fields and pipe backfill.
- Pelletized or Expanded Slag: Pelletized or Expanded Slag is quickly cooled using water or steam to produce a lightweight aggregate that can be used for high fire-rated concrete masonry and lightweight fill applications over marginal soils. Due to its reduced weight, it is perfectly suited for aggregate in lightweight concrete masonry, lightweight ready-mix concrete and lightweight precast concrete.
- Air-cooled Blast Furnace Quote: This smaller sized aggregate is primarily used in chip and seal applications, also known as “Chip Seal” or “Aggregate Seal” Coating”, applied to existing pavement surfaces. The primary purpose for Chip and Seal is to achieve a skid resistance on rural pavements and to maximize driving safety. It is also used in concrete masonry, concrete pavement, and hot mix asphalt.
- Air-cooled Blast Furnace Slag rip rap: The largest slag aggregate, riprap is a permanent cover of rock used to stabilize shorelines and streambanks, and prevent erosion along slopes and embankments. It is also used in gabion baskets, Mineral Wool manufacture (insulation), and lightweight fill.
- Slag Cement: Slag cement is commonly found in ready-mix concrete, precast concrete, masonry, soil cement, concrete wallboard, floor leveling compounds and high temperature resistant building products. Its measurable benefits in concrete include improved workability and finishability, high compressive and flexural strengths, and resistance to aggressive chemicals.<sup>69</sup>

These varied and common uses for blast furnace slag further demonstrate the low risk that blast furnaces and their byproducts pose and, therefore, support the exclusion of blast furnaces from requiring financial assurance under CERCLA § 108(b).

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<sup>69</sup> *Id.*

**ii. *The number of blast furnaces are small and diminishing, and financial assurance is therefore unnecessary.***

Blast furnaces support a low risk profile from a CERCLA perspective, especially as there are only 23 blast furnace sites in the United States.<sup>70</sup> Further, the fact that “no new blast furnace has been built in [the United States] since the 1960s”<sup>71</sup> again demonstrates that financial assurance is unnecessary.

**iii. *The minimal evidence of historical environmental contamination by blast furnaces or blast furnace slag and the modernization of old blast furnace technology further indicate that financial assurance is unnecessary.***

In addition to those construction-based uses enumerated above, blast furnace slag has long provided many natural and agricultural benefits.<sup>72</sup> For instance, blast furnace slag has chemical properties that make it “suitable as liming material . . . [serving] not only as a liming agent, neutralizing soil acids, but . . . contain[ing] important micro-nutrients often lacking in soils.”<sup>73</sup> Blast furnace slag can also be “used as a permeable reactive barrier to remove contaminants from water.”<sup>74</sup>

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<sup>70</sup> See General Material Requirements; Buy American Requirements, 60 Fed. Reg. 15478, at 15479 (Mar. 24, 1995).

<sup>71</sup> See John W. Miller, ‘Times Have Changed’: New Plan for a Century-Old U.S. Steel Mill, Wall Street Journal (Jan. 28, 2014, 7:45 PM), <https://blogs.wsj.com/corporate-intelligence/2014/01/28/times-have-changed-new-plan-for-a-century-old-u-s-steel-mill/>.

<sup>72</sup> See, e.g., *Iron and Steel Making Slag – Environmentally Responsible Construction Aggregates*, National Slag Association, [http://www.nationalslag.org/sites/nationalslag/files/documents/nsa\\_202-3\\_environmental\\_tech\\_bulletin.pdf](http://www.nationalslag.org/sites/nationalslag/files/documents/nsa_202-3_environmental_tech_bulletin.pdf).

<sup>73</sup> See *Benefits of Slag Products*, National Slag Association, <http://www.nationalslag.org/benefits-slag-products>.

<sup>74</sup> *Id.*

And even though new blast furnaces have not been built since the 1960s, many of those still in operation have undergone modernization with heavy investment, necessarily leading to technological updates that continue to minimize any harmful environmental impacts blast furnaces could have.<sup>75</sup>

***iv. The existing federal and state regulatory framework governing blast furnace operations is rigorous and thorough, obviating the need for additional financial assurance requirements.***

As discussed above, before imposing new financial assurance requirements, EPA should consider current regulatory requirements when evaluating the risk an industry poses to the environment and human health. Blast furnace operations are regulated to adequately reduce and manage associated long-term risks. For example, the Occupational Safety and Health Administration regulates blast furnace products,<sup>76</sup> as does the Federal Highway Administration.<sup>77</sup> And both the states of Michigan and Minnesota impose various regulations on blast furnace operations.<sup>78</sup> And again, both “Air pollution control dust/sludge from iron blast

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<sup>75</sup> See Miller, *supra* note 71, available at <https://blogs.wsj.com/corporate-intelligence/2014/01/28/times-have-changed-new-plan-for-a-century-old-u-s-steel-mill/>.

<sup>76</sup> See *Description for 3312: Steel Works, Blast Furnaces (Including Coke Ovens), and Rolling Mills*, OSHA, [https://www.osha.gov/pls/imis/sic\\_manual.display?id=683&tab=description](https://www.osha.gov/pls/imis/sic_manual.display?id=683&tab=description).

<sup>77</sup> See Kurt Smith, *Use of Air-Cooled Blast Furnace Slag as Coarse Aggregate in Concrete Pavements*, FHWA, ACPT (Mar. 2012), <https://www.fhwa.dot.gov/pavement/concrete/pubs/hif12031.pdf>, see also 60 Fed. Reg. 15478-15479 (Mar. 24, 1995).

<sup>78</sup> See Minn. R. 7045.0120; see also *Section One: Environmental Regulations*, Department of Environmental Quality, State of Michigan, [http://www.michigan.gov/documents/deq/deq-ess-caap-manufguide-chap1\\_313400\\_7.pdf](http://www.michigan.gov/documents/deq/deq-ess-caap-manufguide-chap1_313400_7.pdf).

furnaces” and “Iron blast furnace slag” are excluded from regulation as hazardous waste under RCRA pursuant to the Bevill Amendment.<sup>79</sup>

- v. *The projected clean-up expenditures for blast furnaces are minimal to non-existent, further obviating the need for financial assurance.*

As discussed, iron ore blast furnaces are already heavily regulated under both federal and state law, thus already adequately reducing and managing any associated long-term risks. They neither use uniquely hazardous materials, nor produce more than negligible amounts and types of hazardous wastes. And there are numerous productive, non-hazardous uses for blast furnace slag. Accordingly, blast furnaces present extremely low risk of triggering a CERCLA clean-up response, and CERCLA clean-up expenditures are, therefore, projected to be zero or near zero.

- vi. *Corporate structure and bankruptcy potential*

Blast furnace operations are stable. Thus, this factor provides no reason to impose financial assurance requirements on them.

### **III. Conclusion**

In sum, AISI believes that EPA’s risk factors, assessed correctly, must result in iron ore mining being excluded from the CERCLA § 108(b) “hardrock mining” definition and from any final financial assurance rule. The historical and current data regarding the iron ore mining industry demonstrate that iron ore mining is a small, well-regulated industry that poses very little risk to human health or the environment. Iron ore mining and the resultant land forms and pit lakes provide a variety of sustainable benefits to surrounding communities, including as drinking water reservoirs, recreational areas, and fisheries for sensitive trout species. The existing federal and state regulatory frameworks adequately address potential CERCLA liabilities from occurring

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<sup>79</sup> See *Special Wastes*, available at <https://www.epa.gov/hw/special-wastes>.

at these low-risk facilities. Subjecting the iron ore mining industry to new regulation for financial responsibility under CERCLA § 108(b) will yield no benefit to the public and will substantially, unduly burden the industry and surrounding communities that benefit from the jobs created and investments made by the industry.

In addition, AISI urges that EPA clarify that blast furnaces are not included under the Proposed Rule's definition of "mineral processing facility" and are not subject to the financial responsibility regulation under the current CERCLA § 108(b) hardrock mining action. Blast furnace operations are associated with iron and steel mills (NAICS code 331110), are a separate and distinct activity from iron ore mining (NAICS code 212210), and are not co-located with iron ore mines. Further, blast furnaces themselves represent a low-risk activity for the reasons described in previous sections; are already adequately regulated at the state and federal level; and produce a co-product—blast furnace slag—that has numerous practical and common uses that are not only non-hazardous, but can be beneficial to the environment. EPA must, therefore, determine *not* to include blast furnaces in the CERCLA § 108(b) hardrock mining regulation.

AISI thanks EPA for its consideration of these comments.

# Morgan Lewis

Ronald J. Tenpas

Partner

Ex. 6

Ronald.tenpas@morganlewis.com

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Docket No. EPA-HQ-SFUND-2015-0781

July 11, 2017

Barbara Foster and Michael Pease  
Program Implementation and Information Division  
Office of Resource Conservation and Recovery  
Mail Code 5303P  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave., NW  
Washington, DC 20460

Re: Comments on Proposed Rule, Financial Responsibility Requirements under CERCLA §108(b) for Classes of Facilities in the Hardrock Mining Industry, 82 Fed. Reg. 3388 (Jan. 11, 2017)

Dear Ms. Foster and Mr. Pease:

### I. Introduction

These comments are submitted on behalf of the American Chemistry Council, American Fuel & Petrochemical Manufacturers, American Iron & Steel Institute, Cement Kiln Recycling Coalition, Industrial Minerals Association – North America, National Association of Manufacturers, National Mining Association, North American Metals Council, Portland Cement Association, Superfund Settlements Project, The Fertilizer Institute, and U.S. Chamber of Commerce. This coalition formed due to common concerns related to the Proposed Rule, Financial Responsibility Requirements under CERCLA §108(b) for Classes of Facilities in the Hardrock Mining Industry, 82 Fed. Reg. 3388 (Jan. 11, 2017) (the “Proposed Rule”). Collectively these organizations represent more than 3 million businesses spanning all sizes, sectors and regions of the country.

Having reviewed the Proposed Rule and EPA’s associated justification and explanation, the coalition members share very deep concerns with EPA’s proposal and regulatory approach. The flaws in EPA’s approach, discussed in more detail below, are of concern not only to those parties engaged in the

### Morgan, Lewis & Bockius LLP

1111 Pennsylvania Ave., NW  
Washington, DC 20004-2541  
United States

+1.202.739.3000  
+1.202.739.3001



hardrock mining and mineral processing (“HRM”) sector but also to those engaged in other industrial sectors because the flaws are illustrative of the additional failures that will follow if EPA stands by its current proposal and then applies the approach to other sectors down the road.

Most notably, EPA’s approach fails to ground the regulatory assessment in a proper and detailed analysis of modern risk conditions associated with contemporary operating practices and, thus, greatly overstates potential risks and liabilities in the HRM industry. At the same time, EPA essentially ignores the current and comprehensive regulatory regime to which the HRM industry is subject, a regime that addresses operations, spill response, closure and reclamation, and financial responsibility requirements. In doing so, the Proposed Rule seeks to address the same risks the states and federal regimes already address. These fundamental flaws in EPA’s approach have particular relevance to this coalition given that all of our industries are already subject to strict and diverse federal and state operating and financial responsibility requirements ranging from environmental review under the National Environmental Policy Act (“NEPA”) or similar state environmental review laws, to chemical manufacture registration and use requirements, to required spill prevention and containment programs and inspections, to mandatory reporting of chemical releases, to Risk Management and Process Safety Management regulations, to closure, corrective action and financial assurance requirements for operating facilities under the Resource Conservation and Recovery Act (“RCRA”), to federal and state-based reclamation and closure programs and associated financial assurance. Given these existing and multi-layered regulatory requirements, the Proposed Rule seeks, and any similar rules for other sectors would be seeking, to address contingencies that will not occur and certainly have not been demonstrated to regularly recur.

Section 108(b) of the Comprehensive Environmental Response, Compensation, and Liability Act (“CERCLA”), 42 U.S.C. §9608(b), permits EPA to adopt or decline to adopt rules requiring that certain “classes of facilities establish and maintain evidence of financial responsibility,” provided also that any such rules must not be more than what is required to be “consistent with the *degree and duration of risk* associated with the production, transportation, treatment, storage, or disposal of hazardous substances.” 42 U.S.C. § 9608(b)(1) (emphasis added). Yet, EPA’s approach in the Proposed Rule results in a financial responsibility requirement that is unnecessary and not calibrated to the “degree and duration of risk” posed. Accordingly, the coalition urges EPA to withdraw the Proposed Rule, recognizing that there is not sufficient risk to warrant any new CERCLA financial responsibility regulations.

It is not surprising that EPA’s proposal and analysis should suffer from such defects given that the Proposed Rule resulted from a rushed process with very little stakeholder input. From the regulated community, to states, to the financial industry and to the Small Business Administration, not a single entity was adequately engaged in the development of the Proposed Rule. Similarly, the very limited peer review that occurred was conducted without transparency and so late in the process EPA could not practically have addressed the myriad issues the peer review raised. As a consequence, EPA has proposed a rule riddled with errors and based on insufficient and unrepresentative data.

Given the many fundamental defects relating to the Proposed Rule's substance and development, the Proposed Rule must be withdrawn as it is arbitrary, capricious, an abuse of discretion, and otherwise not in accordance with law and is in excess of statutory jurisdiction, authority and limitation and short of statutory right. *See* Administrative Procedure Act, 5 U.S.C. § 500 *et seq.* ("APA"). As shown in these comments, and those submitted by many others, a proper evaluation of the degree and duration of risk, accompanied by appropriate attention to the many concerns raised about the Proposed Rule, should lead EPA to conclude that no CERCLA § 108(b) financial responsibility rule is required.

## II. EPA's determination of continuing risk is indefensible.

EPA's statutory directive allows it to adopt rules requiring certain "classes of facilities establish and maintain evidence of financial responsibility consistent with the degree and duration of risk associated with the production, transportation, treatment, storage, or disposal of hazardous substances." 42 U.S.C. § 9608(b)(1) (emphasis added). The statute further states, "[t]he level of financial responsibility shall be initially established, and, when necessary, adjusted to protect against the level of risk which the President in his discretion believes is appropriate based on the payment experience of the Fund, commercial insurers, courts settlements and judgments, and voluntary claims satisfaction . . ." 42 U.S.C. §9608(b)(2). The plain language of the statute is very clear: whether to impose financial responsibility requirements at all is discretionary but, if that discretion is exercised, any rule must be limited to addressing "the degree and duration of risk" and based on "the payment experience of the Fund, commercial insurers, courts settlements and judgments, and voluntary claims satisfaction."<sup>1</sup> The Proposed Rule fails to satisfy the statutory criteria.

### a. EPA ignores CERCLA's mandate to assess the "degree and duration of risk."

The statute's specific direction is embodied in the "degree and duration" limitation. Congress made clear that it wanted any §108(b) regulation to be justified by the real risk of such events. *See, e.g.,* <https://www.epa.gov/superfund/frequent-questions-about-financial-responsibility-requirements-under-comprehensive>; Johnson Declaration at ¶¶ 6, 16. Thus, the statute directs EPA to conduct a risk analysis,

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<sup>1</sup> That EPA previously identified hardrock mining as a class of facilities for which requirements would be first developed does not diminish the Administrator's discretion regarding whether to impose financial responsibility requirements and, if requirements are imposed, which facilities to exclude from such requirements. *See* 82 Fed. Reg. 3398; Opposition of Respondent United States Environmental Protection Agency to Petitioners' Petition for Writ of Mandamus, Appendix A, Declaration of Barnes Johnson at ¶¶26-29, 39, *In re Idaho Conservation League*, No. 14-1149 (DC Cir. Nov. 19, 2014) (hereinafter, "Johnson Declaration"); *see also* Identification of Priority Classes of Facilities for Development of CERCLA 108(b) Financial Responsibility Requirements, 74 Fed. Reg. 37,213 (July 28, 2009) (the "Priority Notice"). As set forth in the notice, additional research and outreach to stakeholders were necessary before publication of a proposed rule. Johnson Declaration at ¶26. EPA cannot "use a notice issued before even a proposed rule, to make any final determinations." Johnson Declaration at ¶28. EPA can only finalize a regulation if "necessary" based on risk. Johnson Declaration at ¶29. Indeed, EPA has already invoked its discretion, altering the universe of potentially regulated facilities from those identified in the initial Priority Notice. *See, e.g.,* 82 Fed. Reg. 3400, 3454-59.

and because such risk is obviously related to the operating practices and regulatory regimes currently in place, the statute clearly requires EPA to assess current operating practices and existing regulatory requirements regarding those operations (including permitting, operating, release containment and response, closure, and financial assurance regulations, among others). Only with such a comprehensive evaluation can EPA determine if risk exists and, if so, the degree of that risk, including whether any release is likely to leave an unmet financial obligation to address any clean-up activity.

EPA has lost sight of what the statute directs and, instead, has crafted a Proposed Rule that seeks to provide assurance against “all potential risk.” 82 Fed. Reg. 3405. For example, EPA makes the unreasonable assumption that every site feature at every operating facility will require remediation under CERCLA.<sup>2</sup> 82 Fed. Reg. 3405. See U.S. EPA, Response to Peer Review Comments: CERCLA 108(b) Financial Responsibility Formula for Hardrock Mining Facilities Background Document, Draft, December 2016 (“Response to Peer Review Comments”) at 3-5 (“the formula conservatively assumes that all portions of a facility could require a CERCLA response tomorrow” while admitting even at historic National Priorities List sites “costs were incurred only at the portion of the facility resulting in a CERCLA response”). EPA makes this assumption despite its failure to produce even a single site where, in fact, each and every site feature required remediation. This assumption is disconnected from reality and renders the Proposed Rule arbitrary and capricious.

EPA also improperly relies on irrelevant and historical information to establish risk and overstates the risk those sites have actually demonstrated. At the same time, EPA ignores that there are existing, pervasive regulatory programs that (1) require owners and operators to adopt safe operating practices to avoid releases, (2) implement programs and designs to minimize the scope of releases when they do occur, and (3) address any resulting environmental conditions the day they occur, at closure, and during post-closure. Many of these requirements are backed by financial assurance, while others must be addressed as needed and a failure to do so could result in fines and penalties. In ignoring these current-day features of modern day operations, EPA has failed to conduct the kind of analysis the statute requires.

**b. EPA’s use of inappropriate current and historic data exaggerates the risks of a release and any likely costs of remediation.**

**i. EPA exaggerates the risk of release by relying on data that are not instructive.**

EPA gathered data from the Emergency Response Notification System (“ERNS”), the Toxic Release Inventory (“TRI”), and the Resource Conservation and Recovery Act Biennial Reports (“RCRA BR”) to establish the presence of hazardous substances at mining sites in a misleading and distorted attempt

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<sup>2</sup> EPA collected information on response costs from 319 sites and costs of specific activities at 438 operable units at 88 sites to generate an estimate of total response costs at the facilities. It then linked specific site features to releases or threatened releases and to remedies. EPA ultimately identified thirteen site features that served as potential sources of release that resulted in remedies within twelve categories. 82 Fed. Reg. 3462. EPA’s formula estimates cost for remediation of every site feature to be funded through financial responsibility instruments.

to demonstrate risk. 82 Fed. Reg. 3476-78. Mere presence does not equal risk. EPA took a similarly flawed approach in seeking to justify its 2009 Priority Notice and 2010 Identification of Additional Classes of Facilities for Development of Financial Responsibility Requirements under CERCLA Section 108(b), 75 Fed. Reg. 817 (Jan. 6, 2010) (the "Identification Notice"). In the Proposed Rule and each of its earlier notices, EPA relied on the data as proof of risk where those data prove nothing of the sort.

The ERNS collects only initial accounts of releases reported to the National Response Center and, thus, those reports are preliminary and of varying reliability. In addition, the statutes and regulations requiring reporting have low reporting thresholds, so the existence of reporting cannot support any risk conclusions related to a likely future unfunded clean-up obligation. Further, this dataset does not include any analysis of the response actions taken by the facilities, meaning it is divorced from any relevant risk evaluation. While the releases reported may be common and unavoidable for many industries, *see* 82 Fed. Reg. 3477, EPA gives no meaningful acknowledgement of the fact that companies are also legally required and equipped to respond to them at the time they occur, including being subject to follow up inspections by state and federal regulators. Finally, and importantly, these reports show that, with only thirty releases per year since 2000, the HRM industry is well-regulated and responsive. *See* 82 Fed. Reg. 3477.

The TRI includes estimates of the volume of hazardous substances that the industry released, recycled, transferred, treated or used for energy recovery. Importantly, the volumes reported include permitted releases and disposal at, or discharge to, permitted facilities, as well as significant recycling activities. In the case of the HRM industry, 85 to 95% of the reported volumes are trace amounts of naturally occurring metal and metal compounds that are present in rock and dirt at mine facilities and that are managed in engineered facilities permitted and regulated by federal and state law. TRI estimates were similarly considered in the Priority Notice and the Identification Notice, a use that industry objected to based on EPA's own caution regarding the misuse of TRI data. Specifically, EPA has repeatedly noted that the TRI release estimates alone are not sufficient to determine exposure levels or to calculate potential risks to human health and the environment. *See, e.g.,* <https://www.epa.gov/toxics-release-inventory-tri-program/what-can-tri-tell-you-about-risk>; *see also* U.S. EPA, TRI National Analysis 2015 (Updated January 2017), *available at* [https://www.epa.gov/sites/production/files/2017-01/documents/tri\\_na\\_2015\\_complete\\_english.pdf](https://www.epa.gov/sites/production/files/2017-01/documents/tri_na_2015_complete_english.pdf); U.S. EPA, "The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data" at 4, *available at* <https://www.epa.gov/toxics-release-inventory-tri-program/factors-consider-when-using-toxics-release-inventory-data> (setting forth five key factors to consider when using TRI data, including that toxicity varies among the covered chemicals; the presence in the environment must be evaluated with the potential and actual exposures and routes of exposures; many options for managing production-related wastes are subject to stringent technical standards and exacting regulatory oversight; regulatory controls apply to many of the releases; and some wastes may be double-counted because of reporting by both the generator and handler). Notwithstanding all of this, in the Proposed Rule, EPA asserts that the presence of hazardous substances provides "some" indication of the "potential" for risk "if" improperly managed.

82 Fed. Reg. 3477. Given EPA's own caveats on how limited the TRI data are in demonstrating any actual risk, citing TRI data does not satisfy the robust "degree and duration" analysis that the statute requires.<sup>3</sup>

EPA takes a similarly failed path with reference to RCRA BR data. These data simply show quantities of hazardous wastes generated and managed *in accordance with law*. The generation of hazardous waste does not correlate to risk of an actual or threatened release of a hazardous substance that requires a CERCLA remedy. Again, this complete lack of connection with risk was pointed out to EPA in response to the Identification Notice, yet EPA continues to maintain that presence alone can be instructive on actual risk.

Finally, EPA attempts to bolster its "continuing risk" determination through a series of reports on releases of hazardous substances at HRM sites. These EPA reports are significantly flawed and undermine, rather than support, this determination. As detailed in the National Mining Association's comments on the Proposed Rule, these sites fall into three major categories: (1) sites that are legacy sites and are simply not comparable to currently operating mining facilities; (2) sites where a release did occur but where it is being promptly remediated by the owner or operator without burdening the taxpayer; and (3) sites where a release occurred and state or federal programs have responded and made regulatory changes to address related future conditions.

In sum, the information EPA has relied upon to justify its conclusion that the HRM industry presents a "continuing risk" and therefore must be subject to §108(b) requirements is not indicative of the reality stemming from current operations, nor could that data serve to demonstrate real risk for any other industry.

**ii. EPA fails to consider the risk reducing effects of modern regulatory regimes, the duplication it will create, and the preemptive impact its program could have on existing state regimes.**

When § 108(b) was enacted in 1980, there were few environmental laws, and those that existed were in their infancy. As EPA stated, "past operating procedures, before the advent of environmental laws, were likely in many cases to give rise to environmental problems that current regulations and modern operating practices **can prevent or minimize.**" 82 Fed. Reg. 3461 (emphasis added). By 2017, the historic regulatory void has been filled with comprehensive and robust federal and state regulatory regimes, including regimes that have evolved and improved since §108(b)'s initial adoption by Congress.

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<sup>3</sup> Separate and apart from the general unsuitability of the TRI data as a surrogate for risk, EPA has erroneously relied on the TRI data from "Iron and Steel Mills" (NAICS code 331110) as a surrogate for hazardous pollutant releases to the environment from the iron ore mining industry (NAICS code 212210). The TRI reports from Iron and Steel Mills identified every U.S. steel mill (including integrated, electric arc furnace, coke, finishing mills, etc.) as falling within the iron ore mining category, and inaccurately estimated 52 million pounds of chemical releases, including numerous chemicals that are simply not associated with the iron mining process. Had EPA actually assessed TRI reporting for the iron ore mining sector, it would have found that iron ore mining was actually excluded by EPA after the industry demonstrated that releases were below reporting thresholds.

The HRM industry, like the other sectors EPA may seek to regulate in the future, is now subject to environmental review under NEPA, 42 U.S.C. §§ 4321 *et seq.*, and similar state environmental review laws; media-specific programs addressing hazardous substances, such as through programs established under the Federal Water Pollution Control Act, 33 U.S.C. §§ 1251 *et seq.*, Clean Air Act, 42 U.S.C. §§ 7401 *et seq.*, and the Solid Waste Disposal Act, 42 U.S.C. §§ 6901 *et seq.*; manufacturing-specific programs, such as chemical registration and review under the Toxic Substances Control Act, 15 U.S.C. §§ 2601 *et seq.*; operating-specific programs, such as Risk Management Plan and Process Safety Management regulations and storage tank regulations; and general emergency response programs, such as under both CERCLA and the Emergency Planning and Community Right-to-Know Act, 42 U.S.C. §§ 11001 *et seq.*

While the HRM industry uses hazardous substances and occasionally has releases, that does not mean that the existing regulatory scheme is not effective. The record indicates that the existing programs are working to address the limited risk currently posed and that every feature at every mine does not fail. To the extent there may be releases, nothing suggests that the HRM industry presents a level of risk that fits within CERCLA's "highest level of risk of injury" and thus fits within CERCLA's direction on where to target regulation. EPA can certainly exercise its discretion to conclude that isolated risk scenarios that might yet be imagined do not warrant or require the whole sector being burdened with an expensive and unnecessary financial responsibility regime.

HRM operations must undertake an extensive permit process to obtain approvals from the appropriate agencies – the United States Bureau of Land Management ("BLM"), the United States Forest Service ("USFS") and the state. These permits address all aspects of operation, including mining, beneficiation, mineral processing, reclamation, closure and post-closure care, and contain strict financial assurance requirements. Permits under these programs cannot be secured if the applicant cannot demonstrate that it will comply with numerous design and operational requirements to minimize the risk of significant spills or other releases that could adversely impact the environment. For example, all western states in which mining occurs have staff dedicated to ensuring that mining facilities are designed, constructed, and operated to minimize risk to the environment and ensure reclamation and closure are completed. *See* Letter from Matthew H. Mead, Governor of Wyoming and Chairman, Western Governors' Association, and Steve Bullock, Governor of Montana and Vice Chair, Western Governors' Association, to Honorable Gina McCarthy, Administrator, United States Environmental Protection Agency, March 29, 2016 ("March WGA Comments").

There is evidence that these programs work. The Small Business Administration Office of Advocacy reports that the BLM and USFS both report no National Priorities List ("NPL") listings for the thousands of mines either agency has approved since 1990, and that states have had to call only a few bonds for small sums. *See*, Letter from The Honorable Darryl L. DePriest, Chief Counsel, Office of Advocacy, U.S. Small Business Administration, to The Honorable Gina McCarthy, Administrator, U.S. Environmental Protection Agency, Re: Financial Responsibility Requirements for the Hardrock Mining Industry (Docket ID: EPA-HQ-SFUND-2015-0781) at 4, January 19, 2017 (EPA-HQ-SFUND-2015-0781-1406) ("Advocacy Comments").

These state and federal programs are especially significant given Congress' evident intent that EPA not over-regulate or duplicate. Congress expressed this intent in multiple ways. For example, CERCLA directs EPA to impose requirements "for facilities in addition to those under Subtitle C of [RCRA] and other Federal law." 42 U.S.C. §9608(b)(1). Similarly, Congress directed EPA to develop a plan to avoid requiring financial assurances that are duplicative of those already required by other federal agencies in its 2014 EPA appropriations bill, H.R. 2279, 113th Cong. §§ 103-105 (engrossed in H.R. Jan. 9, 2014). 160 Cong. Rec. H475, H979 (daily ed. Jan. 15, 2014).

While EPA maintains that the Proposed Rule is "in addition to" and "effectively complement[s]" these other programs, 82 Fed. Reg. 3402, EPA does not support this claim by identifying where the other programs fall short. Nor could it because these programs address risk to such a degree that any CERCLA §108(b) program is unnecessary. EPA concedes that a "highly-developed regulatory landscape [] is already in place for hard rock mining," Johnson Declaration at ¶155, and "federal closure programs [] may have an effect on the risk a facility presents." U.S. EPA, 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 ("MCS") at 3, August 25, 2016. Further, EPA "recognizes that, in requiring implementation of controls pursuant to [the Federal program] objectives, some federal mine closure program requirements help to address releases to the environment and thereby may have the effect of reducing the risk a facility presents." MCS at 6. There is no "may" about it – if a program addresses releases to the environment, which CERCLA seeks to address, that program "will" have the effect of reducing risk. The same can be said for state programs.

CERCLA contains an express preemption provision that demonstrated Congress' long-standing concern to avoid duplication of state or local laws:

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.

42 U.S.C. § 9614.

EPA has long recognized that CERCLA §108(b) rules would have federalism implications. See Johnson Declaration at ¶35. Recognizing that many states have financial responsibility requirements, EPA sought to "carefully consider the effects of its CERCLA section 108(b) rules on other programs to

avoid any unanticipated consequences.” Johnson Declaration at ¶13. State programs are well-established and comprehensive, now having decades of experience and having developed an “expertise” with mining regulation, compared to EPA’s minimal experience in this regulatory space. See 82 Fed. Reg. 3401; Western Governors’ Association, Policy Resolution 2014-07 at 2.

Nevertheless, EPA chose to ignore both Congress’ clear intent to avoid duplication and the robust programs already in place that deal with the same risks EPA is seeking to address under the Proposed Rule. Instead, it has proposed a duplicative, one size fits all financial regulatory program that is overbroad, and which will cause conflict, create unnecessary expense and spur litigation. This is not simply a concern of the commercial enterprises that will be impacted – it is also a matter of importance to the state governments whose programs are being replicated. See March WGA Comments (additional requirements would impair western economies, the industry and fail to address local requirements necessary to protect the environment, particularly water resources).

For example, a significant overlap exists between the site features addressed under the federal and state hardrock mining programs and site features that form the basis for the formula in the Proposed Rule. The engineering cost estimates in EPA’s financial responsibility formula are based on the exact activities conducted as part of closure and reclamation under existing parallel state and federal regulations. In fact, EPA’s Response Data Collection used a sample of 63 facilities’ reclamation and closure plan engineering cost data to develop its formula. 82 Fed. Reg. 3463; RIA at 3-8. Furthermore, EPA acknowledged, “some closure programs conduct activities that reduce CERCLA risks.” 82 Fed. Reg. 3401.

Peer Review Commenter 4 also noted the duplication between what EPA is assuming will be future remedial costs and the activities that companies are already required to undertake under current regulatory regimes:

In the end I have no idea what the relevance is of any of the data presented in Section 2.2 [CERCLA Response Activities]. On page 2-15 EPA states “EPA’s prior experience with CERCLA cleanups leads it to expect that similar types of remedies will continue to be selected for mining facilities in the future.” There is no reason to make any presumptions here – the closure and reclamation plans and data collected in Section 3 indicate exactly what types of remedies are required at current HMFs. The engineering studies relied upon categorize the expense categories (tailings, leach dumps, pit, hazard removal, indirect costs, direct costs, etc., pp. 2-19 – 2-20). Perhaps the idea is that EPA was looking for justification for its methodology in Section 3, feeling it needed to prove that relying on company engineering plans was reasonable and that companies would not be leaving anything important out.



Response to Comments at 6-5.

EPA even acknowledges that there is definite duplication between the Proposed Rule and existing state and federal regulations by holding out the prospect of potential reductions in financial assurance obligations at the back end to account for the existing programs.<sup>4</sup> But that is backwards – under the statute EPA has an obligation to study and recognize the effectiveness of these programs before fashioning regulations that will presumptively apply, not impose an overbroad regulatory regime on the promise that there is a case by case “off ramp” that will solve any duplication its new rules create.<sup>5</sup>

It is EPA’s obligation, in the first instance, to demonstrate that its proposed program is appropriately tailored to and consistent with the statute. This includes an obligation to discuss and assess in detail the other regulatory regimes, which it has failed to do. Those regimes are substantial and, once EPA acknowledges this, it will be clear that EPA can forego any further requirements. EPA is not required to eliminate “all potential risks” and should not require facilities to secure financial responsibility instruments to cover “all potential risks.” CERCLA does not suggest or require such an expansive reading of “risk.” EPA has the authority and responsibility to draw the line between acceptable and unacceptable risks and then only require financial responsibility for those unacceptable risks according to their “degree and duration.” In fact, EPA may lawfully determine that the risks from certain classes of facilities, for whatever reasonable bases, do not warrant financial responsibility requirements at all.

Finally, EPA asserts in a single paragraph that it makes “sound policy sense” to read the statute and the Proposed Rule as not pre-empting state programs. This is nonsense. If the proposed program duplicates the state requirements, then Section 114(d) mandates that an overlapping state program be pre-empted. In simply hypothesizing that no conflict will exist, EPA has failed to address, and has essentially chosen to ignore, one other aspect of the problem – the likelihood that its Proposed Rule will have preemptive effect, with all the attendant policy and legal problems this generates in a federal system that is designed to insure a primary role for the states. State and federal regimes have evolved substantially over the last several decades, creating a much different federalism and pre-emption posture than might have been the case had EPA undertaken this rulemaking at a much earlier date. But EPA did wait, and those state regimes have emerged. EPA’s failure to develop a detailed assessment of those state regimes necessarily means EPA has arbitrarily and capriciously failed to do a serious preemption analysis related to its proposal, given that such a base-line state regime assessment is essential to any preemption analysis. That failure makes the Proposed Rule infirm.

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<sup>4</sup> As discussed later in these comments, however, the proposed reduction methodology is so poorly constructed that any reductions do not appear to be available in reality.

<sup>5</sup> Ironically, EPA rejected a site-specific approach for the assessment of risks because it was too “resource intensive to implement,” 82 Fed. Reg. at 3460, but has simultaneously claimed that the same site-specific approach is appropriate for evaluation for release from the §108(b) program because the agency “has substantial experience making individualized determinations of site risk, as this practice is consistent with EPA’s practice under the Superfund program.” 82 Fed. Reg. at 3415.

**iii. EPA's reliance on historic data overstates potential frequency and severity of releases from current facilities.**

In the Proposed Rule and supporting documents, EPA regularly relies on data from sites that are the product of operations that occurred decades ago to estimate the future scope and clean-up cost from currently operating facilities. In large part, EPA claims that this reliance is appropriate given the similarities between current and historic mining practices. Specifically, EPA concludes that "although some mining waste practices have changed over time, the basic technology for extraction and beneficiation of mineral ores have remained fairly constant over the last 50 years." 82 Fed. Reg. 3475. From this oversimplification, EPA alleges that releases today will be the same in scope and impact as those that occurred historically. EPA wholly ignores the evolution of mining practices and state and federal oversight over the last 30 years, including new technologies, controls and monitoring to minimize, prevent and sometimes eliminate the risk the Proposed Rule ostensibly seeks to address.<sup>6</sup>

EPA's overly simplistic conclusion about the similarities in mining practices also contradicts other statements in the proposal regarding the effectiveness of current regulations. As noted in the prior section, EPA recognizes that "past operating procedures, before the advent of environmental laws, were likely in many cases to give rise to environmental problems that current regulations and modern operating practices **can prevent or minimize.**" 82 Fed. Reg. 3461 (emphasis added). There is abundant evidence regarding the extensive nature of regulations governing today's hardrock mining industry at both the state and federal levels. See Western Governors' Association Policy Resolution 2014-07 and Policy Resolution 2014-09, attached to and incorporated by reference in Letter from Steve Bullock, Governor of Montana and Chair, Western Governors' Association, and Dennis Daugaard, Governor of South Dakota and Vice Chair, Western Governors' Association, to Honorable Gina McCarthy, Administrator, United States Environmental Protection Agency, August 17, 2016 ("August WGA Comments"); Advocacy Comments at 4-7. The evolution of the legal and regulatory environment, and industry technological innovations, have completely changed the landscape and undercut the Agency's conclusions that superficial similarities in mining practices mean that the risks of the past persist.

Given the significant advancements in mining practices, in the event of a release requiring remediation, such remediation would be expected to have a lesser risk and burden profile than that

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<sup>6</sup> EPA also incorrectly assumes significant CERCLA remediation liabilities for low-risk facilities, *e.g.*, iron ore mining, even though there have been no iron ore mining sites on EPA's NPL; there have been no federal government expenditures related to CERCLA remediation at these sites; iron ore mines use largely inert materials; and all of the facilities are small quantity generators of hazardous waste. Further, EPA has excluded the iron ore mining industry from reporting requirements under the Emergency Planning and Community Right-To-Know Act (EPCRA) Section 313 Toxic Release Inventory (TRI) because EPA concluded: 1) the extraction and beneficiation of iron ore do not routinely use hazardous substances to produce a final product, and toxic chemical releases and transfers are not of sufficient quantities to warrant reporting; 2) no facilities were expected to meet the threshold reporting levels under EPCRA; and 3) iron ore mining and associated facilities do not make extensive use of toxic chemicals for processing their product. Additional discussion on low-risk facilities can be found in the American Iron and Steel Institute's comment letter on the draft rule.

from much older operations.<sup>7</sup> Indeed, two of the peer reviewers of EPA's formula raised concerns about the Agency's use of historic data to justify conclusions on the costs of remediation. Peer Review Commenter 1 to EPA's proposal stated, "[o]ne concern with using Actual [historic] Response Cost data from the NPL is that compared to data from currently operating facilities, the facilities on the NPL might be more costly than currently operating facilities to remediate (*e.g.*, you have to be above a threshold in the hazard ranking system). So using NPL sites would result in an overestimate of costs." Response to Peer Review Comments at 3-1. Similarly, Peer Review Commenter 4 concluded:

In the end I have no idea what the relevance is of any of the data presented in Section 2.2 [CERCLA Response Activities]. On page 2-15 EPA states "EPA's prior experience with CERCLA cleanups leads it to expect that similar types of remedies will continue to be selected for mining facilities in the future." There is no reason to make any presumptions here – the closure and reclamation plans and data collected in Section 3 indicate exactly what types of remedies are required at current HMFs.

EPA must heed such criticisms.

### III. EPA conducts a flawed assessment of benefits.

EPA identified the following "benefits" of the Proposed Rule: "a reduction in costs the government must bear to fulfill cleanup obligations, improved environmental practices at mining sites, avoided impacts to impaired waters, and faster cleanups." 82 Fed. Reg. 3396. EPA readily admits that the reduction in government costs is the only measurable benefit. 82 Fed. Reg. 3395-96; RIA at ES-12. The discussion of the other benefits is peppered with words like "may" and "potential." At best, these benefits are speculative and, upon close review, they are completely absent.

EPA's claim of reduction in government cost is flawed in multiple respects. First, as discussed below, the cost estimate relies on an assumption that the response costs estimated are actually representative of costs associated with future CERCLA cleanups. They are not. 82 Fed. Reg. 3394. Moreover, EPA used a high-end estimate that assumes exiting firms fail to meet *any* of their clean-up obligations. *Id.* EPA assumed that all the firms that failed would, in every instance, leave behind CERCLA liabilities *and* all thirteen site features will require a response action *and* absolutely no funds would be available to address any of them. *Id.* There is no support for such a grossly overstated assumption.

EPA also failed to quantify what the cost of the rule will be to the government. In particular, EPA did not quantify government administrative costs, *see* RIA at ES-7, 3-6, 4-11, although these costs could be substantial between development of the electronic portal EPA proposes, on-going review of confidential business information requests, maintenance of the public facing website, and review of financial responsibility calculations (including requests for reductions and release) and procured

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<sup>7</sup> Even with such historic sites, not every site feature generated a CERCLA response action, further undermining the formula in the Proposed Rule that works on a contrary supposition.

financial responsibility instruments. In short, EPA has proposed a regulatory program yet ignored the fundamental costs associated with its implementation.

With regard to EPA's claim that the Proposed Rule would provide an incentive for companies to invest in and implement additional environmental protection technologies, the reality is that such incentives already exist due to the various state and federal regulatory regimes discussed above. Instead, the Proposed Rule would divert funds from other economically beneficial uses, including investments in evolving technology and pollution prevention, by requiring that large amounts of capital assets be put aside to protect against a hypothetical risk in the future, risk that is already covered by the current regulatory regime. Additionally, the reduction criteria are so fatally flawed that they may perversely induce facilities to adopt controls not even relevant to their day-to-day operations. It is not just capital investment that may be impacted by the diversion of funds for financial responsibility requirements. EPA failed to consider the impacts on jobs and the economy by tying up such large amounts of capital. Ironically, in its justification for providing standard wording of financial instruments, EPA states it "does not wish to create a situation where resources that otherwise would have been devoted to cleanups would be expended," *see* 82 Fed. Reg. 3416; yet that is what this proposal, or any proposal like it, will do.

EPA's third potential benefit piggybacks on its claim that the Proposed Rule will result in improved environmental practices: "To the extent that the Proposed Rule leads to improvements in facilities' environmental performance, the rule may reduce acid mine drainage and other discharges into waterways." (Emphasis added). 82 Fed. Reg. 3396. EPA admits that any such benefit is "contingent upon changes in behavior among regulated entities to reduce the environmental risk." 82 Fed. Reg. 3396. Accordingly, the same reasoning that applied to the prior "benefit" applies here – the current regulatory scheme is protective, including addressing any releases to waterways, and the diversion of significant funds is likely to result in productive investment being stifled.

EPA's last claimed benefit is also illusory. The suggestion that this Proposed Rule will, in the future, produce faster clean-ups in meaningful numbers relies on the unfounded assumptions that: (1) a large number of solvent firms will default; and (2) that a cleanup will even be necessary. EPA's failure to conduct a proper risk analysis to determine the likelihood of these events in a modern regulatory regime clouds its identification of perceived benefits. Moreover, the slow pace of Superfund cleanups has been notorious – no matter the funding mechanism – belying any suggestion that changing financial responsibility requirements will improve clean-up times. *See, e.g.*, Memorandum, from E. Scott Pruitt to Deputy Administrator, General Counsel, Assistant Administrators, Inspector General, Chief Financial Officer, Chief of Staff, Associate Administrators, Regional Administrators, re: Prioritizing the Superfund Program, May 22, 2017.

**IV. EPA's approach to analyzing costs is arbitrary and capricious, dramatically underestimates costs to industry and fails to effectively analyze other impacts.**

The lack of environmental benefit is particularly glaring when considering the estimated cost to implement the Proposed Rule. EPA is approaching the height of arbitrary and capricious agency action in proposing a rule that it acknowledges to be cost inefficient. Moreover, the estimated costs appear to be unduly low as a consequence of EPA relying on inadequate data, using a formula laden with errors and unsupported assumptions, and then compounding all these errors by extrapolating to the full universe from an unrepresentative modeled universe.

**a. EPA's estimated costs of compliance are staggeringly high and subject to serious question.**

EPA estimates the annual compliance cost to industry to be \$171 million, without allowing the use of the financial test, or \$111 million, with the financial test.<sup>8,9</sup> 82 Fed. Reg. 3393. These costs do not even include the significant cost that would be incurred in obtaining the financial responsibility instruments. By omitting these expenses, EPA greatly underestimates the total cost and annual costs of procuring instruments under the Proposed Rule. In contrast, EPA estimates that the potential cost to the Government would be a maximum of \$527 million over 34 years, or \$15.5 million per year. 82 Fed. Reg. 3395. To compare:

	Cost to Industry	Government Cost Avoided
Annual Cost	\$111 million to \$171 million	\$15.5 million
Cost over 34 years	\$7.1 billion	\$527 million

This cost/benefit disparity is staggering but is even more disturbing because EPA's cost estimates are substantially underestimated.<sup>10</sup> The estimates EPA has produced are based on insufficient data to accurately model both economic and societal costs. EPA estimates that 221 facilities, owned by 121 ultimate parent companies, would be subject to the Proposed Rule (the "full universe"),

<sup>8</sup> That the estimated costs are so high is hardly surprising when considering the extreme assumption discussed above that every company will default and every site feature will require remediation.

<sup>9</sup> These amounts also do not appear to include the cost to maintain the company website envisioned by the proposed rule. See 82 Fed. Reg. 3393 (listing the administrative costs to industry). These requirements are extensive, intrusive and will result in significant administrative costs, particularly with regard to claims of confidential business information ("CBI"). Indeed, the level of public notice in the proposed rule is excessive. Based on CBI considerations and issues related to competitive advantage, wholesale publication on a company or EPA website of all information the owner or operator is required to submit to EPA, whether CBI or not, would be burdensome and damaging to businesses. For example, publication of this information may invite lawsuits and, in addition, may confuse the public because the sites subject to the Proposed Rule are not current Superfund sites. Similarly, providing for public notice and comment for EPA determinations to lower the amount of financial responsibility, or to fully release financial responsibility, is unnecessary. Such decisions do not appear to be the type of decisions requiring such a complicated, time-consuming and costly public comment procedure, the costs of which do not appear to be accounted for in EPA's calculations.

<sup>10</sup> As just one example, EPA's calculated financial responsibility liability for the entire universe of regulated facilities (221) was \$7.1B, but when the correct values and acreages are used in EPA's financial responsibility calculation, the resulting financial responsibility for the eight active iron mining operations **alone** appears to approach approximately \$8.5B.

although it acknowledges that it may not have accurately identified all facilities that would be subject to the Proposed Rule. 82 Fed. Reg. 3390. Moreover, EPA only obtained facility-specific data for 49 facilities (22%) and financial information for only 21 companies (17%), all of which are publicly traded firms and own only 38 of the facilities (17%) (the “modeled universe”). 82 Fed. Reg. 3390-92.

EPA further assumes that the full universe would have “similar financial characteristics” of the modeled universe, but the preamble acknowledges that there are “uncertainties” with that supposition. 82 Fed. Reg. 3393. The Regulatory Impact Analysis provides a clear picture of just how substantial these uncertainties are. The mining facilities that would be subject to the rule “have a diverse group of owners, including sole proprietors, domestic and multinational corporations, and joint-venture partnerships” with many privately held. RIA at 2-8. The firms also varied substantially in size – approximately 31% of firms each having fewer than 100 employees while the five largest firms have more than 70,000 employees. RIA at 2-9. For the subset of companies for which data was available, 25% of firms each had less than \$15 million in annual revenues, while 25% of firms each had more than \$4 billion in annual revenues. RIA at 2-9. EPA thus concedes that the financial data that were available “may not be representative of smaller entities in the regulated universe” because information was more readily available for large, publicly-traded companies. RIA at 2-9. The Small Business Administration Office of Advocacy indicates that 36% of hardrock mining businesses are small businesses. Advocacy Comments at 2.

**b. The financial responsibility formula is indefensible.**

EPA’s overly simplistic formula bears no relation to reality.

- EPA focused on just three variables (area, precipitation and flow) ultimately using only just one (area) to determine the cost for most site features, as if any industrial site can be reduced to such simplistic terms.
- EPA relied upon data that were inappropriate, with much of it obsolete and/or unrepresentative.
- EPA only had a small data set, which is particularly troubling where the data show widely varying costs and/or include a significant outlier.
- EPA inappropriately excluded certain data, biasing high its estimates.
- EPA incorporated unexplained assumptions, such as its use of smear factors.
- EPA used “hypothetical” cost information that “should not be considered a perfect substitute for actual financial assurance pricing.” RIA at 4-4.

There are also errors within the formula. As detailed in the Office of Advocacy’s comments, the results from the formula are unrealistic. See Advocacy Comments at 9-10. Peer Review Commenter 4 could not replicate a single cost number when conducting spot checks, had “grave concerns about the integrity of the data,” and “suspected there are errors that result from a misunderstanding of the information in the original source documents stemming from a lack of consultation with industry.” Response to Peer Review Comments at 2-8 – 2-9.

Importantly, the proposed financial responsibility reduction methodology, which EPA claims will incentivize environmental improvements and reduce the required level of financial responsibility, is based on a review of a limited number of programs and a poor understanding and misapplication of existing reclamation and closure regulations. EPA chose subjective, inflexible, and arbitrary criteria with no scientific or other rational explanation for why they were chosen. For example, some of the reduction criteria are cherry picked from state regulations (*e.g.*, New Mexico) but completely fail to take into account local considerations, such as geology, climate, seismology and ecology. Moreover, even those that are cherry picked exclude important caveats and additional regulatory language that would make reduction criteria inappropriate in certain circumstances or directly contradict state regulations. In many cases the conditions for a reduction are so highly prescriptive that they can be met only through specific engineering controls which will lead to such controls being adopted even where they serve no real-world purpose in reducing risk. Further, EPA's chosen reduction criteria are likely to provide no practical regulatory relief because they are embedded in an "all or nothing" approach – a mine would get 100% credit or 0% credit. EPA's own RIA shows that only one of the 49 facilities modeled received 100% reductions. *See* U.S. EPA, RIA at B-21.

**c. EPA's extrapolation compounds its flawed analysis.**

While EPA essentially admits that the modeled universe is not representative of the full universe, it nevertheless extrapolated data from the modeled universe to assess the impact on the universe of facilities that will be regulated. The extrapolation process, through multiple actions, further compounded the indefensible cost estimates. These actions included:

- EPA selecting of, without justification, the median cost rather than the mean cost of the modeled universe as the appropriate measure to use for extrapolating the results. *See* 82 Fed. Reg. 3392. Using a mean would more than double the estimated cost to industry and result in an even larger cost/benefit disparity. *See* RIA, Appendix F.
- EPA assuming that those who can self-guarantee likely would do so and extrapolating the results to the full universe. This extrapolation seems unlikely because EPA only had financial information for publicly traded companies, and privately held and smaller companies will likely have a harder time satisfying the stringent financial test. RIA at 5-6.
- EPA applying locality adjustment factors to account for regional variation in labor and material costs but failing to address how these locality adjustment factors then impacted the extrapolation. 82 Fed. Reg. 3391.
- EPA applying risk reductions in a way that it acknowledged involved oversimplification and required that it recognize there are "uncertainties" with the approach. 82 Fed. Reg. 3391.
- EPA assuming the net cost to the owner or operator of acquiring funds is the weighted average cost of capital ("WACC"), which it collected from the 21 firms' websites. 82 Fed. Reg. 3392. EPA makes no meaningful effort to claim or defend that the average WACC used reflects reality for the remaining 83% of facilities.

**d. EPA's assessment of impacts is inadequate.**

EPA then presents a "screening-level" assessment regarding potentially significant impacts. This is a flawed approach in several respects. 82 Fed. Reg. 3395. First, for a rule of this magnitude, a screening level assessment is insufficient to support the Proposed Rule's conclusions. Second, as noted above, the modeled universe does not supply representative data. In addition, EPA assumes there are no collateral or annual costs in obtaining a financial responsibility instrument. For the firms within the modeled universe with cash flow under \$1 million, the annualized costs of financial responsibility relative to cash flow is over 160%, with 5% of companies having impacts of over 10%. 82 Fed. Reg. 3395. In the end, EPA concludes that, consequently, this analysis is completely useless:

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

82 Fed. Reg. 3395. Thus, EPA's economic analysis of the Proposed Rule can only be used to demonstrate that the cost of compliance relative to cash flow will be devastating to many companies, and the cost to industry far outweighs the EPA assumed regulatory benefit. Such a rule is the height of arbitrary and capricious.

EPA similarly fails to present any useful employment impact analysis. Despite recognizing the requirements of Executive Order 13563 to conduct such analysis, EPA "did not have sufficient data to model and quantify the potential changes in mines' employment levels as a result of the proposed regulation." 82 Fed. Reg. 3395; RIA at ES-13. Thus, while EPA showed itself more than willing to speculate about potential benefits and discuss such benefits qualitatively, EPA refuses to do so regarding employment impacts on the other side of the ledger. The reality is that the staggeringly high costs of the Proposed Rule will have real economic impact – substantially impacting existing domestic jobs and investment and, consequently, the communities where mines are located; contracting the domestic mining market; putting American companies at significant global market disadvantage; and diverting productive investment. In a huge understatement, EPA acknowledges only that "it is possible that increased compliance costs will cause individual mines to adjust their employment levels to maintain overall profitability." RIA at 6-6.

Not surprisingly, EPA cannot certify that there is no Significant Impact on a Substantial Number of Small Entities. RIA at ES-13; *see also* Johnson Declaration at ¶35. In fact, the United States Small Business Administration submitted comments on the Proposed Rule, concluding that the Proposed Rule would "impose costly requirements on hardrock mines owned by small firms, without evidence that a problem exists warranting intervention." Advocacy Comments at 1; *see also* RIA at 8-2. The Small Business Administration Office of Advocacy indicates that 36% of hardrock mining businesses are small businesses, Advocacy Comments at 2, and EPA's own estimates indicate that this single regulatory



requirement would impose costs in excess of three percent of revenue for many of these small mines. Advocacy Comments at 3.

Further, EPA's one-to-one transfer of the industry costs as a social benefit to the financial sector is irrational because the real social impact is different. The productivity of the funds in the hands of mining and processing companies, which create jobs and products, cannot be compared to the passive function of the financial industry that will serve as issuers or guarantors of financial instruments.

Overall, the Proposed Rule runs directly contrary to the Administration's regulatory reform agenda as embodied in various recent Executive Orders,<sup>11</sup> as well as other long-standing Executive Orders that seek to foster sound cost-benefit analysis.<sup>12</sup> These orders generally insist on an effective and cost-beneficial regulatory approach that avoids unnecessarily draining resources from private enterprises, instead directing those resources towards beneficial economic use. The Proposed Rule is a text book example of what those orders seek to avoid.

**V. EPA failed to follow the statutory mandate to consult with the financial industry to the maximum extent possible.**

Section 108(b) requires, "[t]o the maximum extent practicable, the President shall cooperate with and seek the advice of the commercial insurance industry in developing financial responsibility requirements." 42 U.S.C. 9608(b). This mandate was emphasized and expanded by Congress in its 2014 EPA appropriations bill. H.R. 2279, 113th Cong. §§ 103-105 (engrossed in H.R. Jan. 9, 2014). There Congress directed EPA to "collect and analyze information from the commercial insurance and financial industries regarding the use and availability of necessary instruments . . . for meeting any new financial responsibility requirements." Johnson Declaration ¶131.

EPA acknowledges numerous unusual aspects to any §108(b) program and the financial instruments it has proposed, aspects which could greatly impact market availability, to say nothing of cost. Among these unique features are the large number of creditor classes that would be given access to the instruments, the lack of a clear mechanism to release financial instruments (even upon transfer of the facility), and the right of direct action against an instrument. This last feature alone presents a potential host of legal and practical problems that will insure such instruments will be very costly to the regulated entities. See 82 Fed. Reg. 3412-14. Even in the limited consultation EPA undertook, this led to "[r]epresentatives of the financial community express[ing] differing levels of comfort regarding these unique aspects of the potential instruments under the EPA's CERCLA 108(b) rulemaking." MCS at 5.

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<sup>11</sup> See, e.g., Executive Order 13777 of February 24, 2017, Enforcing the Regulatory Reform Agenda (directing agencies to identify regulations that eliminate jobs, are outdated, unnecessary or ineffective or that impose costs exceeding benefits); Executive Order 13771 of January 30, 2017, Reducing Regulation and Controlling Regulatory Costs ("it is essential to manage the costs associated with the governmental imposition of private expenditures required to comply with Federal regulations").

<sup>12</sup> See, e.g., Executive Order 12866 of October 4, 1993, Regulatory Planning and Review ("each agency shall assess both the costs and benefits of the intended regulation and . . . adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs").

The Market Capacity Study was conducted too early in the process – before the formula was even developed – to allow meaningful input. Such timing assured that EPA could not satisfy the statutory mandate to consult with the industry to the maximum degree practicable, thus preventing the Market Capacity Study from serving as a sound basis on which the Proposed Rule can be justified as one that will be practicable and effective. The Study contains only cursory analyses focusing primarily on the insurance market in general, rather than environmental risk insurance specifically. It also reviews market capacity for instruments for which the markets are familiar, rather than adequately considering the impacts of the unique instrument features on the available market. Even with review of the traditional framework, EPA recognizes that it is “exceedingly difficult to make inferences or predictions from the data as to future market trends.” MCS at 8. That is why consultation with the industry is so important and why it is critical to move beyond published data in order for EPA to meet its statutory duty to consult. Yet, the Study was conducted without significant input from the financial industry.

Ultimately, EPA has failed to demonstrate that appropriate capacity will be available. First, EPA limited itself to published industry data regarding the existing market for insurance and surety instruments. These data are not sufficiently instructive given the expansive scope and unique instrument features that EPA proposes to adopt under the Proposed Rule. Tellingly, EPA concedes that its conclusion is “highly dependent upon the overall amount of financial responsibility that the market will need to accommodate.” 82 Fed. Reg. 3399.

On the one hand, EPA “assumed that no market capacity constraints exist for the issuance of third-party instruments.” 82 Fed. Reg. 3392. Yet, at the same time, EPA recognizes that “[g]iven the number of unknown factors, the ultimate availability of CERCLA § 108(b) financial responsibility instruments cannot be predicted with certainty until the final rule has been promulgated.” 82 Fed. Reg. 3399. In the Regulatory Impact Analysis, EPA is even more direct: “EPA determined that the market for the types of FR instruments [to be issued by the insurance industry] *does not yet exist* to cover financial responsibility under CERCLA 108(b).” RIA at 4-10 (emphasis added). Given that the market does not currently exist, and the number of unknown factors EPA has acknowledged, it is clear that the Proposed Rule lacks a solid foundation on which to move forward.

EPA’s confidence that sufficient market capacity will be present is also directly at odds with its acknowledgement that the insurance and surety markets for environmental liabilities are contracting. MCS at 2. EPA ultimately appears to be pinning its hopes on the development of the Alternative Risk Transfer market, specifically Risk Retention Groups. MCS at 2-3. The Proposed Rule, however, does not specifically allow access to these markets and they only remain under consideration by the Agency. 82 Fed. Reg. 3399. A regulation that assumes a market solution that the Proposed Rule itself would not allow cannot be sound. EPA also recognizes that, given the contraction of these markets, “a range of diverse financial assurance instruments may be needed to help ensure sufficient coverage for entities potentially regulated under any CERCLA 108(b) rules.” MCS at 3. The Proposed Rule, in contrast, provides a limited range of very constrained instruments.<sup>13</sup> Equally unsound is banking a proposal on

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<sup>13</sup> Among the options that have been overlooked or ignored that would affect financial assurance or its costs are (a)

the hope that the market will respond over time, while conceding the large uncertainties embedded in that hope. *See, e.g.* MCS at 5 (“it is not possible to predict the exact market for these instruments.”).

Even while acknowledging its inability to predict the “exact market,” EPA understates its limits. It is not simply the “exact market” but the market *writ large* that EPA has failed to study sufficiently to offer any meaningful prediction. The huge uncertainties in this market are undeniable. For example, AIG will no longer offer environmental impairment liability coverage. AIG is the largest underwriter of environmental insurance for large scale, long duration environmental risk. MCS at 15. Further, the Market Capacity Study concludes that the marketplace “sh[ies] away from volatile lines of coverage.” MCS at 21. Moreover, it is evident that where it is impossible to meaningfully predict the likely available capacity, it is an even greater leap of faith to predict the premiums to be charged for that capacity. And that premium uncertainty must in turn feed directly into greater uncertainty of EPA’s cost estimates.

The Market Capacity Study did not discuss trust funds because they do not “directly [rely] upon the availability of third-party markets for financing” and thereby concluded there is unlimited market capacity. MCS at 1-2. This conclusion, however, is unsupportable given the unique requirements of the financial instruments derived from either the statute or the Proposed Rule, particularly the direct action provision. In short, while the ability to fund a trust fund may depend solely on one’s credit-worthiness, the ability to identify a third-party trustee willing to take on the risks inherent with the proposed instrument’s structure is a different story.

This is not simply ungrounded speculation. EPA reports that, with the exception of insurance providers, the financial instrument providers expressed “some degree of aversion” to the direct action provision, expressing concerns over invalid claims and legal fees. 82 Fed. Reg. 3414. Similarly, letter of credit providers stated that the direct action provision would be “out of the realm” of typical bank

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allowing captive insurance where the financial stability of a captive entity is separate and distinct from its parent, can be assessed and rated on a separate basis and is subject to its home state’s insurance regulatory department; (b) alternatives to standby trust funds; and (c) eliminating requiring standby trusts where an insurance policy is present. Captive insurance may offer an alternative for entities that produce commodities and products whose value fluctuates greatly in the market. Certain companies can face challenges in accurately predicting whether they will meet the financial ratio criteria for issuing a corporate guarantee at all times, in all market conditions. Thus, for these, captive insurance can be a more attractive financial responsibility mechanism, as compared to the financial test and corporate guarantee mechanisms. A captive holds a defined group of assets—the capital and surplus to cover the risks it insures—and under bankruptcy laws, the captive’s assets must be used first to pay claims that are made on the policies it has written. If the captive has surplus assets left over after all such claims are paid, then, and only then, will those surplus assets become available to the captive’s parent company, and used to pay other creditors in the event of a parent company bankruptcy proceeding. As to requiring standby trusts where insurance or another financial instrument is available, a series of standby trusts merely adds thousands of dollars of additional costs each year, and no good purpose or environmental benefit is served by requiring owners and operators to pay a trustee to establish and hold an empty trust account for decades. If an insurance policy, letter of credit or bond is triggered, and if a trust fund is needed to hold the proceeds, then a trust fund can be set up at that time. These recommendations are merely meant to maintain maximum flexibility of third-party instruments available if the agency were to finalize this rule or any other rule under CERCLA §108(b). It is not meant to suggest that it can solve the inherent market capacity issues (*e.g.*, availability and affordability) presented in this rulemaking.

responsibilities, and banking institutions that serve as trustees stated that trust institutions would not participate in a program where the institution can be subject to any liability. MCS at 7. Thus, EPA's own record undermines its companion claims that: (1) the establishment of trust funds and procurement of letters of credit depend primarily on creditworthiness; and (2) the market is "essentially unlimited."

Ultimately, because EPA did not seek advice from the financial industry "to the maximum extent possible," or even to any reasonable amount, EPA has been left to guess at what the financial industry would find palatable. See 82 Fed. Reg. 3415. This has left the Agency in the position of seeking, via the Proposed Rule comment process, the feedback that should have preceded the Proposed Rule's announcement, as required by statute. 82 Fed. Reg. 3414.

Finally, and amazingly given all the uncertainty regarding market capacity, EPA has proposed eliminating the Financial Test and Corporate Guarantee, even as it concedes that including a financial test will help alleviate pressure on third-party surety markets to ensure greater market capacity, 82. Fed. Reg. 3399, and would provide significant cost savings. 82 Fed. Reg. 3431. As an initial matter, this is contrary to the plain language of the statute, which states, "[f]inancial responsibility may be established by any one, or any combination, of the following: insurance, guarantee, surety bond, letter of credit, or qualification as a self-insurer" (emphasis added). 42 U.S.C. § 9608(b)(2). Thus, EPA can promulgate only a Proposed Rule that affirmatively includes a self-insurance option. Second, even absent the statutory language, the financial test is a proven successful option for financial responsibility. Including a financial test and corporate guarantee will have the benefit of easing the anticipated market constraints. Moreover, while EPA suggests concerns about using the financial test in the HRM sector, EPA has set for itself a higher bar for determining whether a financial test should be available, given its claim that these regulations will provide the model and will become applicable to any later sector for which §108(b) financial responsibility is required. Among the issues that were not adequately considered are the test thresholds that EPA has proposed, which are unnecessarily strict, such as linking use of the financial test to a higher than investment grade rating. This is particularly a concern when considering other industries that may become subject to these regulations given the EPA's failure to calibrate these levels with any application other than the HRM industry in mind.

Every aspect of EPA's failure to adequately consult with and understand the financial markets will be seriously exacerbated if EPA moves forward to regulate other industrial sectors under § 108(b). Limited availability and high costs of such instruments will have a devastating impact on regulated industries and, correspondingly, the United States economy.

**VI. The rulemaking conducted by EPA was significantly flawed.**

**a. EPA's rush to propose a rule resulted in an indefensible rule developed without adequate stakeholder input.**

The Proposed Rule's flaws flow, at least in part, from its rushed development. EPA did not allow appropriate time for study, deliberation, consultation with important stakeholders, such as industry and

state and federal regulators, and reasoned consideration of the costs, benefits and consequences of the rules. While EPA maintained adoption of a final rule by August 2019 would be “aggressive,” Johnson Declaration at ¶ 73, the agency negotiated behind closed doors with the petitioners an even more expedited timeframe for a final rule by January 1, 2017. *See In re Idaho Conservation League*, No. 14-1149 (DC Cir. January 29, 2016). Given EPA’s greatly accelerated and aggressive rulemaking schedule, EPA did not have an adequate opportunity to properly consider the need for the rule, let alone develop a rule that is based on all appropriate consideration and cost/benefit analysis. Indeed, as predicted by Barnes Johnson in 2014, the abbreviated timeframe has prevented EPA from developing a “carefully crafted proposal” due to “procedural [and] analytical shortcuts that [] jeopardize the soundness of the regulations, their legal defensibility [], and raise the potential for unintended consequences on state financial assurance programs and for the regulated community.” Johnson Declaration at ¶37.

EPA now presents a Proposed Rule without appropriate study or deliberation, without necessary stakeholder participation, and without heeding the striking cost/benefit imbalance that its own truncated analysis demonstrates. The determination of the “degree and duration of risk” associated with any industrial sector is complex and requires significant data and analysis. *See Johnson Declaration* at ¶¶6, 12, 16, 33. EPA rebuffed many offers of assistance by the HRM industry to supply operational data, ignored information provided by affected states regarding the comprehensive regulatory programs already in place, and barely engaged with the financial industry regarding market capacity and appropriate instruments. This approach suggests a pre-conceived bias and lack of fairness in the EPA assessment. Because there has been little stakeholder input, the Proposed Rule relies on limited information that is not complete or representative. The WGA Comments and Advocacy Comments describe the lack of substantive consultation, EPA’s failure to provide the most basic of information, and EPA’s complete disregard of concerns raised regardless of the requirements to address federalism and small business impacts. *See August WGA Comments, March WGA Comments, Advocacy Comments; see also Executive Order 13132 (August 4, 1999) and Small Business Jobs Act of 2010 (P.L. 111-240).*

Similarly, the rush to publish the Proposed Rule by the court-ordered deadline compromised EPA’s peer review process, which fell far short of the requirements in OMB and EPA peer review guidelines. *See U.S. Office of Management and Budget, Final Information Quality Bulletin for Peer Review, M05-3, December 16, 2004; U.S. EPA, Peer Review Handbook 4th Edition (EPA/100/B-15/001) (October 2015).* The process was extremely limited, reviewing, for example, limited aspects of only the formula. The reduction criteria and reports on “continuing risk,” among other things, were not peer reviewed. The process also was rushed and completed only a short time before the proposal was issued, raising serious doubts that the peer review comments were substantially considered before the Proposed Rule was signed. Notwithstanding this, even with the limited and abbreviated peer review and inadequate time for proper inclusion, the only conclusions that can be drawn from the results of the peer review process is that the Proposed Rule must be withdrawn.

**b. The rule violates the Information Quality Act.**

Congress enacted the Information Quality Act (IQA) in December 2000 as Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001. (Public Law 106-554). The Act required the Office of Management and Budget (OMB) to issue guidance to federal agencies designed to ensure the “quality, objectivity, utility, and integrity” of information disseminated to the public. It also required agencies to issue their own information quality guidelines. In short, the IQA, OMB guidelines and EPA guidelines require that information be accurate, reliable, and unbiased, and presented in a complete and unbiased manner. *See e.g.*, Office of Management and Budget, Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies; Notice; Republication, 67 Fed. Reg. 8452 (February 22, 2002) (“OMB Guidelines”); United States Environmental Protection Agency, Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by the Environmental Protection Agency, EPA/260R-02-008 (October 2002, as revised June 24, 2004 and May 13, 2005) (“EPA Guidelines”).

There are additional requirements for scientific information that is deemed to be “influential”; *i.e.* information that has a clear and substantial impact on important public policy or private citizens. Such influential information must also be “reproducible” according to commonly accepted scientific, financial, or statistical standards so that a third party could conduct the same analysis and arrive at substantially the same result. EPA Guidelines at 21. These standards apply not only to the substance of the information but also to EPA’s analysis of that information and its presentation. As demonstrated herein, the Proposed Rule clearly violates these requirements, and this violation makes finalizing the Proposed Rule unlawful.

Pursuant to EPA’s guidelines, information includes any communication or representation of knowledge such as facts or data in any medium or form that, when disseminated, must meet “a basic standard of quality,” defined in terms of objectivity, utility and integrity. EPA Guidelines at 3, 15. EPA disseminates information when it prepares and distributes information to, among other things, formulate or support a regulation. EPA Guidelines at 15.

“‘Objectivity’ focuses on whether the disseminated information is being presented in an accurate, clear, complete, and unbiased manner, and as a matter of substance, is accurate, reliable and unbiased.” EPA Guidelines at 15. Influential information must have a higher degree of transparency that will facilitate reproducibility according to commonly accepted scientific, financial or statistical standards. EPA Guidelines at 20-21. The presentation must be comprehensive, informative and understandable, and must specify: (1) each population addressed; (2) the expected risk or central estimate of risk for each population; (3) each appropriate upper- or lower-bound estimate of risk; (4) each significant uncertainty and studies that would assist in resolving the same; and (5) peer-reviewed studies that support, are directly relevant to, or fail to support estimates and methodologies used to reconcile inconsistencies in data. EPA Guidelines at 22-23.

The EPA Guidelines further incorporate by reference the EPA Peer Review Policy. Guidelines at 11; *see also* United States Environmental Protection Agency, Peer Review and Peer Involvement at the USEPA (June 7, 1994); United States Environmental Protection Agency, Science and Technology Policy Council, Peer Review Handbook, 4th Edition, EPA/100/B-15/001 (October 2015). Among other things, the Guidelines indicate every effort should be made to complete the peer review prior to the proposal stage. Peer Review Handbook at 28. Furthermore, peer review should be transparent and be conducted in an open and rigorous manner. 67 Fed. Reg. 8454, 8459-60.

The studies and analyses purported to support the Proposed Rule do not meet these standards. The private, incomplete peer review that is discussed above provides more than adequate evidence of this failure. Not only does the peer review not satisfy the requirements because neither a compliant review was completed in advance of the proposed rule nor conducted in a transparent manner but, based on the comments from the reviewers, the data are not accurate, reliable, unbiased or reproducible. As discussed above, Peer Review Commenter 4 could not replicate a single cost number when conducting spot checks, and "expressed concern about the procedure used to collect cost and acreage data from the reclamation and closure plans." Commenter 4 suspects there are errors that result from a misunderstanding of the information in the original source documents and argued that EPA should redo the data collection using mining industry specialists. Response to Peer Review Comments at 2-8 – 2-9. Reviewers had concerns about sample and data representativeness, data integrity, sources of data, statistical methods, regression error, and model accuracy, among other things. Response to Peer Review Comments at 2-1, 2-8 to 2-10, 2-12, 3-1 to 3-4, 3-10 to 3-11, 3-15 to 3-19. In short, three of the four Peer Reviewers "suggested EPA provide a more detailed description of the data and how it was used to construct the formula in order to improve transparency." Response to Peer Review Comments at 6-1.

The OMB Guidelines mandate that agencies establish, "[a]s a matter of good and effective agency information resources management," a "pre-dissemination review" process. Under this process, agencies are to review (and substantiate) the quality of information at every step in its development, from creation, collection and maintenance to dissemination. The EPA Guidelines incorporate this pre-dissemination review process, but there is no evidence that EPA complied with that process in this case. To the contrary, as discussed above, there is significant evidence that EPA developed the Proposed Rule behind closed doors and refused to disseminate information to affected parties including affected states, the Small Business Administration and potentially regulated entities.

Based on the foregoing, the following conclusions can be made:

- First, the quality requirements established by the IQA, OMB Guidelines, and EPA Guidelines apply to information disseminated by EPA in all cases, regardless of whether a correction request is ultimately filed. That is the point of the pre-dissemination process.

●Second, failure to meet these requirements in all cases will make agency action "unlawful" as "not in accordance with law" or "without observance of procedure required by law."

●Third, failure to use objective information in a rulemaking is a failure to exercise reasoned decision-making, and hence is arbitrary and capricious.

●Finally, failure to present information in a rulemaking in an objective way is arbitrary and capricious. This result is consistent with courts' construction of the APA as requiring that an agency "make its views known to the public in a concrete and focused form so as to make criticism or formulation of alternatives possible."

**c. The Proposed Rule is so riddled with errors, it is neither factually nor legally defensible.**

The flawed analyses and conclusions in the Proposed Rule are not limited to EPA's failure to properly assess risk, conduct defensible cost estimates, develop a formula based in reality or identify financial instruments that would be palatable and available to financial markets. Rather, the Proposed Rule has many provisions that are arbitrary and capricious or so vague in their terms and meaning that the Proposed Rule is rendered invalid, even without EPA's failure to comply with the statute's direction to assess the "degree and duration of risk" and consult with the financial industry.

For example, as noted above, the proposed reduction methodology to reduce the required financial responsibility amount is based on a review of a limited number of programs and a weak understanding and misapplication of existing financial responsibility programs. As another example, for a reduction in financial responsibility amounts, an owner or operator would have to demonstrate that it is subject to, and in compliance with, requirements that will result in a "minimum" degree and duration of risk. 82 Fed. Reg. at 3505; Proposed Section 320.63(c). EPA fails, however, to provide any information on what would constitute a "minimum" degree and duration of risk and how that would be demonstrated. Similarly, to be released from the financial responsibility obligations, the owner or operator would have to submit "evidence" demonstrating the degree and duration of risk to be "minimal." 82 Fed. Reg. at 3489; Proposed Section 320.27. Upon receipt, EPA will evaluate it and make a determination. However, EPA offers no explanation of what "evidence" is required, what constitutes "minimal" risk, or in what time period a decision will be made, leaving the regulation excessively vague.

Yet another example of a fatal defect in the Proposed Rule is EPA's approach to the natural resource damages ("NRDs") component of the formula. First, inclusion of NRDs at all is in excess of EPA's statutory authority. EPA's §108(b) authority is directed at insuring that clean-up costs are met – NRDs are not such costs. Under CERCLA the President has delegated authority to EPA to ensure that hazardous substance response costs are paid by the parties responsible for releasing them into the environment. Exec. Order No. 12580, 52 Fed. Reg. 2923 (Jan. 23, 1987); 42 U.S.C. § 9601 *et seq.* NRDs are not response costs under CERCLA Sections §§101(6) and (25). 42 U.S.C. §§ 9607(6), (25). Including them within the formula for required financial responsibility thus unduly expands EPA's authority



beyond its current limitations. Moreover, EPA is not an authorized claimant for NRDs arising from the HRM industry, and EPA cannot demand or collect a bond for a damage claim that it is not legally authorized to bring. Including NRDs within the financial responsibility amount that must be provided unlawfully expands the scope of §108(b).

Additionally, the Proposed Rule attempts to enable a variety of other persons who are not authorized to bring NRD claims to demand and collect payment from CERCLA §108(b) financial responsibility for those damages. EPA's proposed rule improperly seeks to allow other government agencies and third-party CERCLA claimants to recover NRDs in situations where those entities are not authorized to bring such claims under CERCLA §107(f)(2) and have no legal obligation to use the recovered funds to restore natural resources for the public's benefit. Under CERCLA §107(f), appointed natural resource trustees are the only persons with the authority to bring NRD claims, recover such damages, and use the funds to restore, replace, or acquire equivalent natural resources. 42 U.S.C. § 9607(f). Congress clearly limited the ability to pursue NRD claims to those natural resource trustees that are expressly identified as such by the President, the Governor of each State, or recognized Indian Tribes, under CERCLA Section 107(f)(1)-(2). 42 U.S.C. § 9607(f)(1)-(2). Congress further limited the use of all sums recovered by an authorized natural resource trustee "for use only to restore, replace, or acquire the equivalent of" the injured resources under CERCLA Section 107(f)(1). 42 U.S.C. § 9607(f)(1). CERCLA does not require, and in fact prohibits, the payment of NRDs to persons who are not designated natural resource trustees and who have no legal obligation to use the recovered funds to restore resources for the public's benefit.

Even if including NRDs were legally defensible, the generalized approach to estimating NRDs is indefensible, given the site-specific nature of NRDs. First, because EPA modeled the NRD costs as a percentage of response costs, all the concerns and issues associated with the response cost formulas are transferred and present in EPA's NRD cost estimates. In addition, NRDs are driven by the resources proximate to a site and the remedy implemented. Any justification of the NRD approach would have to be based on a more accurate and robust data set than what the Agency has relied upon; *e.g.*, the data would include sites for which there have been zero NRD costs and consider only HRM facilities. Similarly, in developing the NRD multiplier, EPA relied on data from facilities whose NRD estimates with vastly different operating profiles, including steel facilities and chemical processing plants. EPA's use of data across unrelated and disparate industries contradicts the statutory purpose of the formula imbedded in the Proposed Rule: to create a sector-specific cost estimate that fairly reflects the sector. Finally, the use of the mean versus the median data point cannot be justified. *See, e.g.*, Response to Peer Review Comments at 4-10.

EPA also fails to recognize the interrelation between achieving an effective clean-up and reducing NRDs. A more extensive remedy will greatly reduce or potentially eliminate NRDs. EPA itself acknowledges that NRDs and response costs are dependent on each other, but its formula does not reflect this fact. During the remedy selection phase of CERCLA, responsible parties will, among other things, look at the amount of natural resource injuries - if any - that will remain after a particular remedy

is constructed or completed. If a less extensive remedy that is protective of human health and the environment is likely to leave natural resource injuries unaddressed, responsible parties can estimate the value of the likely NRD claim for those injuries, and consider whether a different remedy would reduce or avoid natural resource injuries and whether that remedy would provide a more cost effective solution for the site. EPA's simplistic approach to address NRDs cannot account for this inter-dependency, nor has EPA even attempted to do so. Instead, under EPA's multiplier approach, companies with the most extensive work plans are asked to post the greatest amount of financial responsibility for NRDs. The formula does not consider the possibility that a more extensive work plan will greatly reduce or eliminate potential natural resource injuries and claims, or vice versa. As a result, the amount of financial responsibility that EPA proposes to require for natural resource injuries may have little or no relationship to actual injuries, if there are any. Put another way, there is no cause to demand financial responsibility to cover hypothetical NRDs that may never arise because extensive remedy work is undertaken, yet EPA's working assumption in the Proposed Rule is that the Proposed Rule will insure that extensive remedies will occur and high NRDs with them. There is thus an inherent tension in including NRDs within the financial responsibility amount required.

In sum, the NRD component has irredeemable flaws.

## **VII. Conclusion**

As set forth above, the Proposed Rule far exceeds CERCLA's statutory directive for EPA to require financial responsibility that is limited to that which is consistent with the "degree and duration of risk" associated with the production, transportation, treatment, storage or disposal of hazardous substances. While there is no question that historical industrial operations and the lack of regulatory control in the early to mid-20<sup>th</sup> century resulted in an unfortunate legacy of contaminated sites, HRM and industrial manufacturing operations since that time have changed drastically, as has their surrounding regulatory regime. Corporate America's modern business practices have evolved to embrace strong internal environmental compliance programs and corporate responsibility metrics. Yet, EPA has proposed a regulatory scheme that rests almost exclusively on past industrial practices and assumes all aspects of every operation will fail and that no owner or operator will have any funds to address those releases. In doing so, EPA exaggerates the risk profile of the HRM industry and risks cementing an approach to assessing risk that will similarly exaggerate the risk profiles of other industry sectors.

Compounding this exaggeration further, EPA greatly overstates the benefits associated with the Proposed Rule and greatly underestimates the costs. The Proposed Rule basis is further compromised by EPA's flawed analysis of financial markets and unsubstantiated hope that capacity will exist to assure this untested market. But, even taking EPA's clearly incorrect analysis at face value, the cost-benefit analysis cannot support the Proposed Rule.

Facilities are better built, better run, and more tightly controlled and supervised as to all pollutants than in prior decades. Existing regulatory and oversight programs promptly address releases

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of hazardous substances and require proper closure and reclamation as assured through existing federal and state financial responsibility requirements. In turn, the Proposed Rule, or anything like it, will impose extraordinary costs on industry without any corresponding environmental benefit or assurance of avoided societal cost. It must be withdrawn.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Ronald J. Tenpas", written in a cursive style.

Ronald J. Tenpas

## Summary of AISI Views on CERCLA 108b Hardrock Mining NPRM

### Meeting with Byron Brown

June 20, 2017 11:00 am-12:00 pm

#### Comment

EPA should include iron ore mining among the 59 categories of low risk mining classes that were excluded from the definition of hardrock mining in the CERCLA 108b proposal of Dec 2016.

"§320.60 Applicability (a)(1) The requirements of this subpart apply to owners or operators of hardrock mining facilities within the classes identified in the Federal Register notice issued by EPA at 74 FR 37213 (July 28, 2009) that are authorized to operate, or should be authorized to operate, ..." 82 FR 3503

The 2009 FR Notice stated: "For purposes of this notice, hardrock mining facilities include those which extract, beneficiate or process metals (e.g., copper, gold, iron, lead, magnesium, molybdenum, silver, uranium, and zinc) and non-metallic, non-fuel minerals (e.g., asbestos, gypsum, phosphate rock, and sulfur)." 74 FR 37213

#### Industry Background

The iron ore industry, which is directly reliant on the domestic steel sector, is comprised of eight large, active iron ore mining and processing facilities located in Michigan's Upper Peninsula and the area of Northeast Minnesota known as the Mesabi Iron Range.

- Cliffs owns and/or manages five of these mines, with two mines operated by U.S. Steel and one facility operated by ArcelorMittal USA. These facilities directly employ approximately 4,500 workers.
- The sites where the mines are located vary in size from 4,000 to 17,500+ acres. These sites include open pit mines, processing facilities, stockpiling areas and tailings basins for the deposition of inert earthen material, which is essentially silica sand.

The industry is just emerging from a historic downturn that had its roots in the 2015 – 2016 steel import crisis. During the worst of this commodity recession, six of the eight active domestic iron ore mines were idled for an extended period of time, adversely affecting thousands of workers and their families.

- In the wake of aggressive trade enforcement by the U.S. federal government, the industry is now in the midst of a fledgling recovery and, fortunately, all of our major domestic mines are once again operational. However, the condition of the domestic steel and iron ore sectors remains tenuous at best and we are counting on additional sustained relief from illegal steel imports to result from President Trump's efforts.

In the 1950s and '60s, an innovative process was created to mine low-grade iron-bearing rock (containing ~20% iron), extract the iron from that material, and combine those iron units with bentonite (clay) to form an iron ore pellet containing greater than 60% iron.

- Those pellets are subsequently fired in an indurating furnace to harden the product for shipping. Most domestically-produced iron ore is transported by freighters to blast furnaces on the lower end of the Great Lakes.

## Impact on Iron Ore Mining Operations

The prospect of the iron ore mining sector having to comply with federal CERCLA 108b financial assurance requirements for hardrock mining that are at all similar to the Dec 2016 NPRM would be devastating and impossible to secure.

The formula in the Proposed CERCLA 108b HRM action over-calculates the risk of iron mining.

- The formula estimates FA for the iron ore mining industry to exceed \$8 billion dollars, a figure that exceeds the annual value of domestic iron ore distributed in commerce.
- Further, the financial markets are not available for the amount of FA required. Even if they were it would be cost prohibitive to comply with.
- In developing the rule and cost estimate formula, EPA did not consult with the state agencies responsible for regulating the iron ore industry, EPA's application of non-ferrous risk and cost estimating assumptions is fundamentally flawed and entirely inappropriate.

The 2009 FR notice which first laid out the definition of hardrock mining for purposes of CERCLA 108b does not have a record supporting the inclusion of iron ore mining, and was a final action that did not go through public notice and comment.

The Dec 2016 NPRM specifically called for reconsideration of iron ore mining being classified as high risk for financial assurance purposes. "... EPA further solicits comment on whether classes of mines identified by commenters as presenting a lower level of risk of injury based on facility characteristics and operations could potentially encompass iron ore, phosphate, and uranium mines." 82 FR 3456 (italics added)

- Iron ore mining shares more in common with the mining operations that EPA excluded from the definition of HRM, such as sand and gravel or limestone.

## Iron Ore Mining as a Low Risk Category

According to EPA's own factors, iron ore mining should be considered low risk.

- *Risk factor 1: Annual amount of hazardous substances released to the environment*
  - Tables in the docket listing hazardous substances released from the array of mining categories should not rely on data for "Iron and steel mills" as a surrogate for iron ore mining.
  - Using TRI data from iron and steel mills as a surrogate is inaccurate and misleading as a metric for risk, and thus for inclusion in the definition of HRM for this rule.
  - EPA, Minnesota and Michigan exempted iron ore mining from EPCRA Section 313 Toxic Release Inventory (TRI) reporting. In reaching that determination, EPA concluded:
    - 1. The extraction and beneficiation of iron ore do not routinely use hazardous substances to produce a final product, and toxic chemical releases and transfers were not sufficient quantities to warrant reporting;
    - 2. No facilities were expected to meet the threshold reporting levels under EPCRA
    - 3. Iron ore mining and associated facilities do not make extensive use of toxic chemicals for processing their product
  - Iron ore mining and processing predominantly involves a physical separation process involving use of water, it certainly is not a chemical intensive process such as copper, nickel, gold, lead, zinc, etc.

- The low risk nature of iron ore mining led EPA to include a very narrow list of constituents (iron, TSS, pH) for the ore mining effluent limitation guidelines (ELGs) under the CWA.
  - Finally, most of the iron ore mining sites are small quantity generators or conditionally exempt generators of hazardous waste which are sent off-site for treatment.
- *Risk factor 2: Number of facilities in active operation and production*
  - The iron ore industry is small and localized business sector operating eight (8) active facilities, further supporting a low risk profile from a CERCLA perspective.
  - Each open pit mine site included a concentration plant and pelletizing plant
  - 98% of the usable iron ore products in the United States went to steel producers, with the remaining 2% for nonsteel end uses
  - Estimated value of iron ore shipments: \$3.0 – 5.0 billion
- *Risk factor 3: Physical size of the operation*
  - Varies – 4,000 to 17,500+ acres
  - Although the physical size of these operations may be considered large, this industry is governed by an extensive framework of regulations that substantially reduce risks and make any additional requirements under CERCLA 108(b) unwarranted.
  - Formal environmental reviews under NEPA and Minnesota’s Environmental Protection Act (MEPA) have not revealed any material risks associated with iron ore mining.
- *Risk factor 4: Extent of environmental contamination*
  - First, using TRI data from “iron and steel mills” category as a surrogate for iron ore mining is inaccurate and misleading as a metric for risk.
  - Second, it should be clearly stated, no document in the record for the 2009 FRN provides evidence of any kind of high risk for environmental contamination from iron ore mining sites; such evidence in the record is obvious for other types of mining, gold, copper, etc.
  - Many of the former mine pits offer safe and reliable public resources, such as recreational lakes and drinking water sources for some local communities.
  - Finally, the industry is highly regulated which further prevents wide spread potential for contamination.
- *Risk factor 5: Number of sites on the CERCLA Site Inventory (National Priority List (NPL) sites and Non-NPL sites)*
  - This factor ties most directly with the overall purpose of the rule – i.e., to identify mining categories most likely to one day need Superfund monies for cleanup.
  - EPA’s Phase II review of this category identified nine NPL sites (Gold – 6, Copper – 2, Molybdenum – 1)
  - Iron ore NPL and Non-NPL Sites: 0 (there have never been any)
- *Risk factor 6: Government expenditures / Risk factor 7: Projected clean-up expenditures*
  - Both are \$0
- *Risk factor 8: Corporate structure and bankruptcy potential*
  - Larger International Corporations

### Conclusions

In sum, we believe that EPA’s risk factors, assessed correctly, would result in iron ore mining being excluded from the CERCLA 108(b) definition.

We think iron ore mining is low risk and should have been included in the 59 other categories of mining deemed by EPA to be low risk back in 2009 in the FR notice.

Further, the NPRM specifically called out this question regarding the low risk nature of iron ore mining, making a new definition that excludes iron ore mining a logical outgrowth of the public comments received.

The proposed formula for establishing hardrock mining liability includes blast furnace as a mineral processing unit. Blast furnaces are not co-located with iron ore mines, but are in different states. They should not be included in the iron ore mining category for purposes of this CERCLA 108b action.



July 11, 2017

The Honorable Scott Pruitt, Administrator  
U.S. Environmental Protection Agency  
William Jefferson Clinton Building  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460

**RE: Proposed Rule; Financial Responsibility Requirements Under CERCLA § 108(b) for Classes of Facilities in the Hardrock Mining Industry, 82 Fed. Reg. 3,338 (Jan. 11, 2017); Docket ID EPA-HQ-SFUND-2015-0781**

The Iron Mining Association of Minnesota (IMA) appreciates this opportunity to comment on the Environmental Protection Agency's proposal to include iron ore mining as a form of "hardrock mining" requiring financial responsibility regulation pursuant to CERCLA § 108(b). (Financial Responsibility Requirements Under CERCLA § 108(b) for Classes of Facilities in the Hardrock Mining, 82 Fed. Reg. 3,388 (Jan. 11, 2017)).

For more than 135 years, Minnesota's iron mining industry has operated in northeastern Minnesota. The IMA's membership includes six taconite iron ore mines as well as 150 vendor members who supply the iron mines with products and services used every day in each facility. The IMA seeks to effectively influence public policy, educate, and shape public opinion in support of a strong, sustainable iron mining industry committed to mining products that meet society's needs. IMA serves as the voice of the iron mining industry in the public policy arena and advances the case for iron mining in the domestic marketplace. IMA members have a direct interest in the proposed rule, which, as currently drafted, would impose onerous and a financially crippling new requirements on current operations with no resulting benefit to the public. As explained below, these proposed new requirements are unwarranted for the iron ore mining sector.

In Minnesota's 135-year iron mining history, taconite operations have demonstrated very low environmental and public health risks, as evidenced by the negligible hazardous chemicals involved in iron ore mining, the lack of listings of iron ore mining sites on the CERCLA National Priorities List over the life of the program, the breadth of regulatory controls over this industry that effectively manage any existing risks, and the productive reuse of some previous mining sites as recreational facilities or public drinking water reservoirs. Iron ore mining closely resembles other mining sectors which utilize physical extraction methods that EPA already has excluded from the rule, including sand, gravel, and limestone. Many of Minnesota's iron ore mines have been reclaimed back to productive use as either a recreational area like the Minnesota Discovery Center (in Chisholm, MN), Giant's Ridge (a golf and ski resort in Biwabik, MN) and Lake Ore-B-Gone (in Gilbert, MN) or as an invaluable drinking water source for one of the largest cities in the region (Virginia, MN).

In fact, the inclusion of iron ore mines and associated operations in the proposal appears largely to have been the result of EPA's inappropriate attribution to the sector of characteristics of a *separate* sector (Iron and Steel Mills) that has a different NAICS code and represents a significantly different environmental footprint, toxic release inventory (TRI) profile, and hazardous waste output. To impose such unnecessary financial assurance



requirements on a low-risk industry like iron ore mining now would pose a threat to a critical U.S. industry that is at the core of this country's productivity, security, and potential for economic growth.

According to a recent U.S. Homeland Security study, the iron ore mining industry and supporting manufacturers support \$1.1 trillion in economic activity and employ 11 million people. The consequences of adopting this rule with no basis in real risk will have far-reaching financial implications on an industry that is currently struggling to keep its operations open in the face of global industry pressure.

The proposed changes to Financial Responsibility Requirements Under CERCLA § 108(b) for Classes of Facilities in the Hardrock Mining Industry, are redundant for the iron ore mining industry and better managed and administered by the states where operations currently are conducted. In addition, the following permits, authorizations and regulations are currently applicable, at a minimum, for mining: **Air** (Title V, PSD, National Ambient Air Quality Standards, National Emission Standards for Hazardous Air Pollutants, New Source Performance Standards, etc.); **Water** (National Pollution Discharge Elimination System, State Disposal System, Stormwater, Water Appropriations, Clean Water Act Section 401); **Wetlands** (Clean Water Act Section 404, Wetland Conservation Act (MN)); **Waste** (Solid Waste, Resource Conservation and Recovery Act); **Mining** (State Permits to Mine (MN), Mineland Reclamation Rules (MN), Part 631 (MI)). These extensive and significant permitting requirements provide additional existing assurances that iron ore mining operations will be conducted in such a way as to minimize risks. No Federal rule is needed, as risk management is already addressed at the state level.

The Iron Mining Association and its membership remain committed to strong environmental policies but does not believe that the proposed rule will advance environmental standards for the iron ore mining industry. EPA did not consult with the state of Minnesota nor with iron ore mining industry representatives. It appears that EPA was rushed in pulling together the proposed rule to comply with the court ordered December 1, 2016 deadline. As a result, numerous material errors were made in assessing the risk of the iron ore mining industry. EPA's Proposed Rules understate the cost, overstate risk, and would impose a financial responsibility burden on the iron ore mining industry. If EPA reviews the iron ore mining industry risk factors in its totality using accurate information in consultation with states and iron ore industry representatives, we believe EPA will have ample objective evidence to exclude "iron ore" from the definition of CERCLA HRM scope, as it has excluded other similar mining sectors that utilize physical extraction methods.

Very Truly Yours,

A handwritten signature in black ink, appearing to read 'KJ', with a long horizontal flourish extending to the right.

Kelsey Johnson  
*President*  
*Iron Mining Association*



RICK SNYDER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
LANSING



C. HEIDI GREYER  
DIRECTOR

July 11, 2017

The Honorable Scott Pruitt, Administrator  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave, NW  
Washington, D.C. 20460

Dear Mr. Pruitt:

**SUBJECT:** Comments on proposed rule under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Section 108(b) for Facilities in the Hardrock Mining Industry

On behalf of the Michigan Department of Environmental Quality's (MDEQ), Oil, Gas, and Minerals Division (OGMD), I am writing to express concerns regarding the United States Environmental Protection Agency's (U.S. EPA) proposed rule, *Financial Requirements Under CERCLA Section 108(b) of Facilities in the Hardrock Mining Industry*, published in the Federal Register January 11, 2017. Michigan was not consulted in, or informed of, the development of U.S. EPA's proposed rule; however, we appreciate the opportunity to comment at this stage of the process.

The MDEQ agrees that owners and operators of hardrock mining facilities should have sufficient financial assurance to cover future possible cleanup and restoration under CERCLA requirements. However, the MDEQ has concerns over the proposed rule for several reasons, and we recommend that the U.S. EPA reconsider the proposed rule provisions.

The proposed rule does not provide for site-specific or sector-specific considerations. A "one-size-fits-all" approach is not appropriate. Michigan has a long history of properly regulating mines, recognizing the unique nature of not just hard rock mining, but individual mines. For example, the risk at iron mines, regardless of size, is quite low relative to other mines or industrial facilities. There are hundreds of iron mines in Michigan that were reclaimed even before modern environmental regulations that have very little negative environmental impact. Former mining properties are now used for recreational purposes and nature preserves, and some former workings are even used as sources of drinking water for communities.

It appears the proposed rule is based at least in large part on the U.S. EPA's experience with legacy mine problems—i.e., environmental impacts that arose from mining practices that are no longer used nor allowed under current statutes and rules. The proposed rule does not adequately take into account the modern statutory and regulatory requirements that many mining states, including Michigan, have in place. The MDEQ has developed comprehensive rules and policies designed to prevent environmental problems in the hard rock mining industry. Each mine is comprehensively regulated under applicable permitting and monitoring programs.

The Honorable Scott Pruitt

July 11, 2017

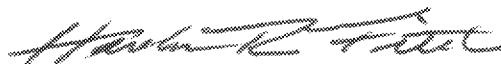
Page 2

These include delegated federal programs under the Clean Air Act, Clean Water Act, and Resource Conservation and Recovery Act; and state-level programs under Michigan's inland lakes and streams, wetlands, and mining and reclamation statutes. Michigan's mining statutes and rules incorporate requirements for financial assurance, protective mining practices, proven engineering controls, and reclamation to reduce the degree and duration of risk. Under those statutes, MDEQ staff has authority to increase the amount of financial assurance based on changes to mine plans, geology, hydrology, geochemistry, and waste characteristics. Staff monitor and inspect mining operations on a regular basis to assure compliance. Michigan's financial assurance provisions allow for a site-specific application to address the unique circumstances associated with each individual mine, and Michigan has expert staff that enforce them. No mine sites that are subject to Michigan's modern mining laws have required a CERCLA response.

The MDEQ urges the U.S. EPA to review the proposed rule action in light of the above considerations. It is our belief that most, if not all, states with significant mining activity have adequate provisions to address financial assurance for hardrock mines, and U.S. EPA rules should not preempt or duplicate state requirements. The MDEQ does not believe that additional financial assurance is necessary or justified for hardrock mines in Michigan. To the extent that is true for other states, the U.S. EPA should take a "no action needed" approach. In the alternative, U.S. EPA should coordinate and cooperate with states to address any perceived gaps in financial assurance.

The MDEQ welcomes any opportunity to collaborate with U.S. EPA and other states to engage further on this issue, please contact me at 517-284-6823; [fitchh@michigan.gov](mailto:fitchh@michigan.gov); or at MDEQ, OGMD, P.O. Box 30256, Lansing, Michigan 48909-7756.

Sincerely,



Harold R. Fitch, State Geologist  
and Division Director  
Oil, Gas, and Minerals Division  
Michigan Department of Environmental Quality  
517-284-6823

cc: Ms. C. Heidi Grether, Director  
Ms. Amy Epkey, Environment Deputy Director  
Mr. Michael McClellan, Environment Deputy Director's Chief of Staff  
Ms. Lynn Fiedler, MDEQ  
Ms. Teresa Seidel, MDEQ



**DEPARTMENT OF  
NATURAL RESOURCES**

July 11, 2017

submitted via regulations.gov

The Honorable Scott Pruitt, Administrator  
United States Environmental Protection Agency  
1200 Pennsylvania Avenue NW  
Washington, DC 20460

Re: Proposed FR Rule Under CERCLA § 108(b) for the Hardrock Mining Industry  
**Docket No. EPA-HQ-SFUND-2015-0781**

Dear Administrator Pruitt:

The Minnesota Department of Natural Resources (MNDNR) submits the following comments on the U.S. Environmental Protection Agency's (EPA's) proposed rule for CERCLA 108(b) financial responsibility requirements for facilities in the Hard Rock Mining Industry (Proposed Rule).

The Proposed Rule is not well-designed to work in concert with the effective regulatory schemes that already exist in several states, including Minnesota. In fact, as written, the Proposed Rule has the potential to create conflicts between state regulatory programs and the EPA. Since 1969, MNDNR has regulated metallic mineral mining operations and reclamation within Minnesota. Minnesota's regulatory program incentivizes the implementation of sound mining practices within the state, thereby substantially decreasing the likelihood of future CERCLA actions at Minnesota's mine sites. Indeed, state law already imposes operational, reclamation, closure, and post-closure requirements on Minnesota's metallic mine permittees.

Minnesota's mine planning, reclamation, and closure requirements are performance-based standards that are carefully developed to address site-specific conditions in order to control the possible adverse environmental effects of mining and encourage good mining practices within the state. The operational controls we impose through permit to mine conditions and in operators' mining and reclamation plans, along with other applicable state and federal regulatory requirements (e.g. dam safety permits and water quality permits), substantially mitigate the risk of potential CERCLA liability. Moreover, mine operators in Minnesota are required to post financial assurance with MNDNR to secure their regulatory obligations. The adequacy and sufficiency of financial assurance is reviewed by MNDNR on an annual basis.

In contrast to Minnesota's site-specific approach, the Proposed Rule takes a formulaic, one-size-fits-all approach to all hardrock mining sites throughout the country. It assumes that Minnesota taconite mines have the same CERCLA risks as uranium in-situ mines and heap leach mines elsewhere in the United States. This formulaic, one-size-fits-all approach relies heavily on the assumption that source control and water treatment are needed at all mines and it uses acreage as a surrogate for CERCLA risk. Such an approach is not appropriate, given the site-specific determinations essential to effectively designing source controls for a specific mine operation. The Proposed Rule fails to adequately recognize that some types of mines present a lower risk than other types, nor is it designed to acknowledge and

**Minnesota Department of Natural Resources – Commissioner's Office  
500 Lafayette Road North, St. Paul, Minnesota 55155**

work with the existing regulatory requirements that significantly lessen the risk of hazardous releases or potential CERCLA liability at Minnesota's mine sites. In some instances, the one-size-fits-all approach may overstate risk to a significant degree.

MNDNR notes that its review of the rulemaking docket identified additional inconsistencies and inaccuracies regarding mining operations and regulatory programs in Minnesota. For example, the Regulatory Impact Analysis identifies PolyMet Hoyt Lakes as an active copper mine. In reality, PolyMet currently has several permit applications pending before the state, and the company's proposed project is not operational.<sup>1</sup> Similarly, the Summary of Minnesota Financial Responsibility Requirements implies that the posting of financial assurance is discretionary under the state's reclamation rules. In fact, financial assurance is statutorily required under Minnesota law. See Minn. Stat. § 93.49.

Like other commenting states, MNDNR is concerned about the possible effect of the Proposed Rule on the state's existing regulatory programs. MNDNR understands that the EPA does not intend the Proposed Rule to have negative effects on the state's ability to secure and manage project-specific financial assurance, but the reality may be far different. As a practical matter, the Proposed Rule, with its lack of a sound risk-based approach and failure to acknowledge and integrate with effective state regulatory programs, would needlessly disrupt MNDNR's mine permitting and regulatory oversight in Minnesota.

I appreciate the opportunity to comment on the Proposed Rule. MNDNR would be very pleased to work with EPA to explore possible ways in which a revised rule could enhance, rather than detract from, Minnesota's established and successful framework for protecting both public health and the environment through robust mining regulation.

Sincerely,



Tom Landwehr  
Commissioner

---

<sup>1</sup> Document EPA-HQ-SFUND-2015-0781-0501 at A-12.

Message

---

**From:** Paul Balserek [pbalserek@steel.org]  
**Sent:** 6/1/2017 10:40:25 PM  
**To:** Brown, Byron [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=9242d85c7df343d287659f840d730e65-Brown, Byro]  
**Subject:** Re: \*\*\*FW: Meeting request

It should be six people the same for both meetings at the most it would be seven not more.

Sent from my iPhone

On Jun 1, 2017, at 6:38 PM, Brown, Byron <[brown.byron@epa.gov](mailto:brown.byron@epa.gov)> wrote:

Trying to accommodate both on same day – 6/20.

---

**From:** Paul Balserek [<mailto:pbalserek@steel.org>]  
**Sent:** Thursday, June 1, 2017 6:26 PM  
**To:** Brown, Byron <[brown.byron@epa.gov](mailto:brown.byron@epa.gov)>  
**Subject:** Re: \*\*\*FW: Meeting request

So I am to understand that it works for Sarah as well, correct? Thank you so much. Will get you info early tomorrow.

Paul

On Jun 1, 2017, at 6:13 PM, Brown, Byron <[brown.byron@epa.gov](mailto:brown.byron@epa.gov)> wrote:

Paul – please let me know how many and if the same number each meeting to determine room size.

---

**From:** Paul Balserek [<mailto:pbalserek@steel.org>]  
**Sent:** Wednesday, May 31, 2017 8:17 PM  
**To:** Brown, Byron <[brown.byron@epa.gov](mailto:brown.byron@epa.gov)>  
**Subject:** Re: \*\*\*FW: Meeting request

Thank you!!!

Sent from my iPhone

On May 31, 2017, at 8:05 PM, Brown, Byron <[brown.byron@epa.gov](mailto:brown.byron@epa.gov)> wrote:

I have time on 6/20 but am checking with Sarah.

---

**From:** Paul Balserek [<mailto:pbalserek@steel.org>]  
**Sent:** Wednesday, May 31, 2017 6:46 PM  
**To:** Brown, Byron <[brown.byron@epa.gov](mailto:brown.byron@epa.gov)>  
**Subject:** \*\*\*FW: Meeting request

Byron --- I know you are crazy busy. Anyway you could help get Sarah to respond to this?

---

**From:** Paul Balsarak  
**Sent:** Wednesday, May 31, 2017 1:25 PM  
**To:** 'Brown, Byron'; 'Greenwalt, Sarah'  
**Subject:** RE: Meeting request

Sarah and Byron,

Could each of you spare 45 mins (30 mins if that's all you've got) on Wednesday, June 21 on the below topics? Any time from 8 am to 5 pm works for us.

Thanks very much,  
Paul

---

**From:** Paul Balsarak  
**Sent:** Friday, May 26, 2017 11:59 AM  
**To:** 'Brown, Byron'; Greenwalt, Sarah  
**Subject:** RE: Meeting request

Hey Byron. So, on CERCLA 108b we are looking for an opportunity to briefly make the case re iron ore mining being deemed low risk, and thus would argue it should be removed from the definition of HRM that was issued in 2009. I would look to your guidance on whether having maybe one person, like Barnes Johnson, there would be beneficial on your end for purposes of follow-thru, or no. On my end, I'm keeping numbers as low as I can to facilitate comfortable discussion, and to make scheduling easier.

Hi Sarah, on conductivity I think a brief meeting with you alone would be best. I know you are both extremely busy. 30 mins is fine if that works much better for you. My folks would be flying in, so it's easier obviously to have CERCLA and conductivity on the same day; we could do consecutive days (e.g., June 20 for CERCLA and 21 for conductivity) if that helps on your end.

Thanks very much,  
Paul

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**From:** Brown, Byron [<mailto:brown.byron@epa.gov>]  
**Sent:** Friday, May 26, 2017 11:42 AM  
**To:** Paul Balsarak; Greenwalt, Sarah  
**Subject:** RE: Meeting request

Hi Paul – Is this a meeting you will want with the program offices in attendance? I don't know that it makes sense to do a joint meeting since the topics are so different. June 20 is probably best for me.

---

**From:** Paul Balsarak [<mailto:pbalsarak@steel.org>]  
**Sent:** Monday, May 22, 2017 9:25 AM  
**To:** Brown, Byron <[brown.byron@epa.gov](mailto:brown.byron@epa.gov)>; Greenwalt, Sarah <[greenwalt.sarah@epa.gov](mailto:greenwalt.sarah@epa.gov)>  
**Subject:** Meeting request

Good morning, Sarah and Byron,

I would like to request a meeting with you on two recent actions by EPA. The CERCLA 108b hardrock mining financial assurance proposal is currently open for public comment, and we have questions regarding this action that are unique to the iron ore industry. The draft Field-Based Methods for Developing Aquatic Life Criteria for Specific Conductivity was issued on Dec 23, 2016, and we submitted comments to EPA on this draft in April.

I know that your time is very limited. I have coordinated schedules with approximately five or six of my federal representatives/environmental managers. The following times windows would work for us. Ideally, we envisioned 45 mins on each topic. We would be happy to have a joint meeting with the two of you, or have separate meetings with each of you (although preferably on the same day so that my members do not have to travel twice). *We are glad to schedule whatever works best for you.* Please let me know if there is a time slot here that works for you. If not, let me know that as well and I will offer different times for consideration.

Tues, June 20, 10:00 to noon

Tues, June 20, 2:00 to 4:00 pm

Wed, June 21, 10:00 to noon (best for us)

Thurs, June 1, 10:00 to noon (least preferable, but we can make this work)

Please feel free to contact me with any questions.

Best,

Paul

**Paul Balserek**

Vice President, Environment

American Iron and Steel Institute  
25 Massachusetts Ave. NW, Suite 800  
Washington, DC 20001

**Ex. 6** (office)  
(mobile)



Message

---

**From:** Paul Balserek [pbalserek@steel.org]  
**Sent:** 5/25/2017 5:20:54 PM  
**To:** Brown, Byron [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=9242d85c7df343d287659f840d730e65-Brown, Byro]  
**Subject:** RE: Should I be nervous ... THANKS VERY MUCH, JUST CHECKING! HANG IN THERE

---

**From:** Brown, Byron [mailto:brown.byron@epa.gov]  
**Sent:** Thursday, May 25, 2017 1:20 PM  
**To:** Paul Balserek  
**Subject:** Re: Should I be nervous ...

No. No problem. I do not have any admin help and have to do my own scheduling and receive multiple meeting requests a day from outside folks that I work through as quickly as possible.

Sent from my iPhone

On May 25, 2017, at 1:12 PM, Paul be. <pbalserek@steel.org> wrote:

... that you aren't replying to my emails?

Paul

**Paul Balserek**  
Vice President, Environment

American Iron and Steel Institute  
25 Massachusetts Ave. NW, Suite 800  
Washington, DC 20001

**Ex. 6** (office)  
(mobile)

Message

---

**From:** Paul Balserek [pbalserek@steel.org]  
**Sent:** 6/20/2017 6:17:25 PM  
**To:** Brown, Byron [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=9242d85c7df343d287659f840d730e65-Brown, Byro]  
**Subject:** Thank you

Byron,

Thanks very much for your time today on CERCLA 108b hardrock mining. My members genuinely appreciated getting to meet and discuss our issues with you. As you think over these matters in the coming weeks and months, should you have any questions at all about the iron ore mining issues please do not hesitate to call.

Thanks, Byron,

Paul

**Paul Balserek**  
Vice President, Environment

American Iron and Steel Institute  
25 Massachusetts Ave. NW, Suite 800  
Washington, DC 20001

**Ex. 6** (office)  
(mobile)

Message

---

**From:** Rashid G. Hallaway [rhallaway@hhqventures.com]  
**Sent:** 1/3/2018 9:32:27 PM  
**To:** Brown, Byron [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=9242d85c7df343d287659f840d730e65-Brown, Byro]  
**Subject:** Call

Hi Byron,

Happy New Year! Want to see if you have a few minutes to connect for a call this week. Please let me know what times/dates work best for you. Thanks for your consideration.

RH

Message



---

**From:** Leland Frost [LFrost@nam.org]  
**Sent:** 11/13/2017 7:57:43 PM  
**To:** Brown, Byron [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=9242d85c7df343d287659f840d730e65-Brown, Byro]  
**Subject:** Chat

Byron,

Great to meet you last week at the Sidley reception. It would be great to chat with you more when you have time. Maybe coffee tomorrow morning or the morning of the 21<sup>st</sup>?

Best,

Leland P. Frost  
National Association of Manufacturers  
Associate General Counsel  
Email: [lfrost@nam.org](mailto:lfrost@nam.org)  
Direct:   
Mobile: 



Message

---

**From:** Paul Balserek [pbalserek@steel.org]  
**Sent:** 4/20/2017 9:01:45 PM  
**To:** Gunasekara, Mandy [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=53d1a3caa8bb4ebab8a2d28ca59b6f45-Gunasekara,]; Brown, Byron [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=9242d85c7df343d287659f840d730e65-Brown, Byro]  
**Subject:** RE: Introduction

Mandy,

10 to noon is open tomorrow. Could make other times work, but would be more difficult. **Ex. 6** is the best #.

Look forward to talking,

Paul

---

**From:** Gunasekara, Mandy [mailto:Gunasekara.Mandy@epa.gov]  
**Sent:** Thursday, April 20, 2017 4:59 PM  
**To:** Paul Balserek; Brown, Byron  
**Subject:** RE: Introduction

Byron,  
Thank you for the introduction. Paul, do you have anytime tomorrow that would work for a quick call? I'm flexible from 10 to 2 pm. Also after 4 pm. If tomorrow works, what is the best number to reach you?  
Best,  
Mandy

---

**From:** Paul Balserek [mailto:pbalserek@steel.org]  
**Sent:** Thursday, April 20, 2017 3:42 PM  
**To:** Brown, Byron <brown.byron@epa.gov>; Gunasekara, Mandy <Gunasekara.Mandy@epa.gov>  
**Subject:** RE: Introduction

Mandy,

Very good to meeting you. I'm happy to catch up if you want, and I can accommodate myself to your schedule. Just let me know.

Byron, thank you for the intro. Hope you are well.

Paul

**Paul Balserek**  
Vice President, Environment

American Iron and Steel Institute  
25 Massachusetts Ave. NW, Suite 800  
Washington, DC 20001

**Ex. 6** (office)  
(mobile)

---

**From:** Brown, Byron [<mailto:brown.byron@epa.gov>]

**Sent:** Thursday, April 20, 2017 1:27 PM

**To:** Gunasekara, Mandy; Paul Balserek

**Subject:** Introduction

Mandy – I wanted to introduce you to Paul Balserek. He worked in the Office of Policy for a number of years, including on many high profile Clean Air Act rules, and now works for the American Iron and Steel Institute.

Paul -- Mandy is the senior advisor to the Administrator for air and radiation issues.

Byron R. Brown  
Deputy Chief of Staff for Policy  
Office of the Administrator  
U.S. Environmental Protection Agency

Message

---

**From:** Rashid G. Hallaway [rhallaway@hhqventures.com]  
**Sent:** 7/18/2017 7:52:18 PM  
**To:** Brown, Byron [/o=ExchangeLabs/ou=Exchange Administrative Group  
(FYDIBOHF23SPDLT)/cn=Recipients/cn=9242d85c7df343d287659f840d730e65-Brown, Byro]  
**Subject:** Thank You

Byron,

Thank you for making time to visit with Paul and me today. Sorry for imposing in the middle of your leadership meetings.

We will follow up with you later in the week regarding potential compliance costs and retirements. Thanks again.

RH

Message

---

**From:** Rashid G. Hallaway [rhalloway@hhqventures.com]  
**Sent:** 7/18/2017 5:54:08 PM  
**To:** Brown, Byron [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=9242d85c7df343d287659f840d730e65-Brown, Byro]  
**Subject:** Re: ACCCE Meeting Request

Byron,

We are through security and checked in. No rush.

RH

Sent from my iPhone

> On Jul 17, 2017, at 12:04 PM, Brown, Byron <brown.byron@epa.gov> wrote:

>  
> Please come to the EPA north building and let me know when you get through security.

>  
> Sent from my iPhone

>  
>> On Jul 14, 2017, at 6:46 PM, Rashid G. Hallaway <rhalloway@hhqventures.com> wrote:

>>  
>> Byron,

>> Thanks so much for your note. I know you're really busy. Tuesday at 2pm works well. Appreciate you making time. Have a good wknd.

>>  
>> RH

>>  
>> Sent from my iPhone

>>  
>>> On Jul 14, 2017, at 5:49 PM, Brown, Byron <brown.byron@epa.gov> wrote:

>>>  
>>> Hi Rashid -- sorry for the delay. I meant to get back to you sooner. Yes, I am happy to meet. Would 2-3 pm on Tuesday work?

>>>  
>>>  
>>> Byron R. Brown  
>>> Deputy Chief of Staff for Policy  
>>> Office of the Administrator  
>>> U.S. Environmental Protection Agency

>>>  
>>> -----Original Message-----  
>>> From: Rashid G. Hallaway [mailto:rhalloway@hhqventures.com]  
>>> Sent: Thursday, July 13, 2017 9:59 AM  
>>> To: Brown, Byron <brown.byron@epa.gov>  
>>> Subject: ACCCE Meeting Request

>>>  
>>> Hi Byron,

>>>  
>>> It's Rashid Hallaway. Want to see if you have time next Monday or Tuesday to visit with Paul Bailey, the CEO of the American Coalition for Clean Coal Electricity. Purpose of the meeting is to discuss the CCR rule.

>>>  
>>> Please let me know if you have any availability. Thanks for your help and consideration.

>>>  
>>> RH

>>>



Message

---

**From:** Paul Balserek [pbalserek@steel.org]  
**Sent:** 5/3/2017 2:52:01 PM  
**To:** Brown, Byron [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=9242d85c7df343d287659f840d730e65-Brown, Byro]  
**Subject:** RE: Note

Great. Thanks! Talk to you then

---

**From:** Brown, Byron [mailto:brown.byron@epa.gov]  
**Sent:** Wednesday, May 03, 2017 10:50 AM  
**To:** Paul Balserek  
**Subject:** RE: Note

Let's plan for 12:30 on Friday. My direct line is 564-1456.

---

**From:** Paul Balserek [mailto:pbalserek@steel.org]  
**Sent:** Wednesday, May 3, 2017 6:18 AM  
**To:** Brown, Byron <brown.byron@epa.gov>  
**Subject:** Re: Note

Byron, could do Thursday anytime except 1-3pm. Friday anytime after 12:30. I know you are swamped. I appreciate the time. Saw Lesley yesterday albeit briefly.

Paul

Sent from my iPhone

On May 2, 2017, at 10:10 AM, Brown, Byron <brown.byron@epa.gov> wrote:

Sure, happy to set up a meeting. Please let me know some dates/times later this week.

---

**From:** Paul Balserek [mailto:pbalserek@steel.org]  
**Sent:** Tuesday, May 2, 2017 10:06 AM  
**To:** Brown, Byron <brown.byron@epa.gov>  
**Subject:** Note

Hi Byron,

I would like to talk with you about the possibility of meeting on several issues. Could you please give me a call at your convenience?

Thanks very much,  
Paul

**Paul Balserek**  
Vice President, Environment

American Iron and Steel Institute  
25 Massachusetts Ave. NW, Suite 800  
Washington, DC 20001

**Ex. 6** (office)  
(mobile)



Message

---

**From:** Rashid G. Hallaway [rhallaway@hhqventures.com]  
**Sent:** 7/17/2017 4:08:18 PM  
**To:** Brown, Byron [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=9242d85c7df343d287659f840d730e65-Brown, Byro]  
**Subject:** Re: ACCCE Meeting Request

Thanks, Byron. See you tomorrow.

RH

On 7/17/17, 12:04 PM, "Brown, Byron" <brown.byron@epa.gov> wrote:

Please come to the EPA north building and let me know when you get through security.

Sent from my iPhone

> On Jul 14, 2017, at 6:46 PM, Rashid G. Hallaway <rhallaway@hhqventures.com> wrote:

> Byron,

> Thanks so much for your note. I know you're really busy. Tuesday at 2pm works well. Appreciate you making time. Have a good wknd.

> RH

> Sent from my iPhone

>> On Jul 14, 2017, at 5:49 PM, Brown, Byron <brown.byron@epa.gov> wrote:

>> Hi Rashid -- sorry for the delay. I meant to get back to you sooner. Yes, I am happy to meet. Would 2-3 pm on Tuesday work?

>>>

>> Byron R. Brown  
>> Deputy Chief of Staff for Policy  
>> Office of the Administrator  
>> U.S. Environmental Protection Agency

>>>

>> -----Original Message-----

>> From: Rashid G. Hallaway [mailto:rhallaway@hhqventures.com]  
>> Sent: Thursday, July 13, 2017 9:59 AM  
>> To: Brown, Byron <brown.byron@epa.gov>  
>> Subject: ACCCE Meeting Request

>>>

>> Hi Byron,

>>>

>> It's Rashid Hallaway. Want to see if you have time next Monday or Tuesday to visit with Paul Bailey, the CEO of the American Coalition for Clean Coal Electricity. Purpose of the meeting is to discuss the CCR rule.

>>>

>> Please let me know if you have any availability. Thanks for your help and consideration.

>>>

>> RH

>>>

Message

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**From:** Wagner, Kenneth [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=048236AB99BC4D5EA16C139B1B67719C-WAGNER, KEN]  
**Sent:** 9/27/2017 7:00:09 PM  
**To:** Williams, Pamela [pamela.williams@santeecooper.com]  
**CC:** Brown, Byron [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=9242d85c7df343d287659f840d730e65-Brown, Byro]  
**Subject:** Re: Thank you again

Byron is great and the right person for Steven to engage. He is copied on this communication.

I enjoyed your presentation as well.

Ken

**Kenneth E. Wagner**  
*Senior Advisor to the Administrator*  
*For Regional and State Affairs*  
**U S Environmental Protection Agency**  
**202-564-1988 office**  
Ex. 6 cell  
**wagner.kenneth@epa.gov**

On Sep 27, 2017, at 2:34 PM, Williams, Pamela <pamela.williams@santeecooper.com> wrote:

Ken:

I want to follow up and thank you again for meeting with the SC folks in Charleston on Monday. It was nice to meet Trey, and we look forward to working with him. After our meeting, I learned that our attorney, Stephen Fotis, along with others, is meeting with Byron Brown on Thursday to discuss the CCR Rule. I understand this meeting is at the request of USWAG. As I said in my remarks, we appreciate EPA's willingness to engage and listen to our concerns. Let me know if we can provide additional information that would be helpful.

Regards,

Pamela

Pamela J. Williams  
Sr. V.P. Corporate Services  
Santee Cooper  
Ex. 6

Confidentiality Notice:

This message is intended exclusively for the individual or entity to which it is addressed. This communication may contain information that is proprietary, privileged, confidential or otherwise legally exempt from disclosure. If you are not the named addressee, you are not authorized to read, print, retain, copy or disseminate this message or any part of it. If you have received this message in error, please notify the sender immediately either by phone or reply to this e-mail, and delete all copies of this message.

Message

---

**From:** Paul Balsarak [pbalsarak@steel.org]  
**Sent:** 5/2/2017 2:23:00 PM  
**To:** Brown, Byron [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=9242d85c7df343d287659f840d730e65-Brown, Byro]  
**Subject:** RE: Note

Thursday morning is wide open; Friday afternoon also wide open. I am happy to come there.

Paul

---

**From:** Brown, Byron [mailto:brown.byron@epa.gov]  
**Sent:** Tuesday, May 02, 2017 10:10 AM  
**To:** Paul Balsarak  
**Subject:** RE: Note

Sure, happy to set up a meeting. Please let me know some dates/times later this week.

---

**From:** Paul Balsarak [mailto:pbalsarak@steel.org]  
**Sent:** Tuesday, May 2, 2017 10:06 AM  
**To:** Brown, Byron <brown.byron@epa.gov>  
**Subject:** Note

Hi Byron,

I would like to talk with you about the possibility of meeting on several issues. Could you please give me a call at your convenience?

Thanks very much,  
Paul

**Paul Balsarak**  
Vice President, Environment

American Iron and Steel Institute  
25 Massachusetts Ave. NW, Suite 800  
Washington, DC 20001

**Ex. 6**

(office)  
(mobile)

Message

---

**From:** Paul Balserek [pbalserek@steel.org]  
**Sent:** 8/22/2017 2:52:16 AM  
**To:** Brown, Byron [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=9242d85c7df343d287659f840d730e65-Brown, Byro]  
**CC:** Paul Balserek [pbalserek@steel.org]  
**Subject:** CERCLA 108b hardrock mining

Byron,

We met with Barnes Johnson and the program on CERCLA 108b hardrock mining today.

Hope you are well,  
Paul

Message

---

**From:** Daigle, Stephanie N., Celanese [stephanie.daigle@celanese.com]  
**Sent:** 3/15/2017 10:23:23 PM  
**To:** Brown, Byron [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=9242d85c7df343d287659f840d730e65-Brown, Byro]  
**CC:** tgibson@steel.org  
**Subject:** Re: sorry I missed you!

Ex. 6

Sent from my iPhone

On Mar 15, 2017, at 6:21 PM, Brown, Byron <[brown.byron@epa.gov](mailto:brown.byron@epa.gov)> wrote:

I have a new appreciation for what your life must have been like when at EPA.

Byron R. Brown  
Deputy Chief of Staff for Policy  
Office of the Administrator  
U.S. Environmental Protection Agency

Message

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**From:** Brown, Byron [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=9242D85C7DF343D287659F840D730E65-BROWN, BYRO]  
**Sent:** 6/28/2017 1:13:32 PM  
**To:** martin.doern@xcelenergy.com  
**Subject:** Contact Info

Hi Martin – nice to run into you yesterday. Hope all is well. – Byron

Byron R. Brown  
Deputy Chief of Staff for Policy  
Office of the Administrator  
U.S. Environmental Protection Agency