Proposed CERCLA Financial Responsibility Rules for the Hardrock Mining Industry
Summary of Comments by Freeport-McMoRan Inc.

On January 11, 2017, EPA proposed financial responsibility regulations for certain classes of facilities in the hard rock mining sector under Section 108(b) of the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA").[1] The proposal's stated purpose was to "transfer risk associated with CERCLA liabilities [at currently operating hard rock mines] from the taxpayer to the private sector," and to create incentives for improved environmental performance. The proposal would require owners and operators of covered facilities to calculate a level of financial responsibility according to EPA's formula, obtain and demonstrate sufficient financial responsibility through instruments that meet EPA's stringent criteria, and update and maintain financial responsibility until EPA finds that a site no longer presents a risk of response costs, and releases the owner or operator.

As demonstrated by the scores of comments submitted by state and federal agencies, the mining industry, trade associations, and others, the proposal suffers from numerous fatal flaws. It violates clear statutory commands; is premised on a flawed and unrealistic assessment of risk; would impose disastrous levels of financial responsibility untethered from actual risk and likely exceeding what the market can provide; establishes de facto nationwide command-and-control regulation of the mining industry by an agency that lacks expertise or statutory authority; and would displace robust state programs that are tailored to local conditions and adequately manage risk today.

In addition to these concerns, the proposal was explicitly based on a cost-benefit analysis that intentionally subjects regulated industries to annual compliance costs that are more than an order of magnitude greater than the supposed benefit of the proposal ($170 million in cost annually to obtain $15.5 million in benefit annually). As explained in more detail in Freeport's comments to the proposal, the costs will be even greater, and the benefits even less, than EPA's flawed assumptions suggest. Further, EPA *never* modeled the larger economic impacts of the proposal. Freeport did, and that modeling demonstrates that the taxpayer benefits do not exist due to lost tax revenues caused by the proposal's negative impact on hardrock mining. The proposal is based on a hopelessly flawed cost-benefit analysis and would inflict economic disaster on an important industry and the states, communities, and workers that industry helps to support.

Finally, it is important for EPA to be attentive to procedural issues related to the change in course justified by the information developed during the public comment period. EPA should explicitly correct the record on the most significant of the erroneous premises underlying the proposal, particularly: those related to the need for any rule; EPA's discretion not to finalize the proposal for mining (as explained by the D.C. Circuit); the costs and benefits (or lack thereof) of the proposal; the risks posed by "modern" mining operations relative to the legacy mines added to the National Priorities List in the 1980s, 1990s, and early 2000s that provided the underlying perspectives on risk considered by EPA; and the central relevance of existing, robust federal and state regulatory programs.

[1] 82 Fed. Reg. 3388 (Jan. 11, 2017).

Major Concerns Presented by the Proposed Rule

1. The proposal is predicated on a deeply flawed assessment of the risk posed by modern hard rock mining, which does not justify regulation of that industry under section 108(b).

Section 108(b) authorizes the President to develop and promulgate requirements that certain "classes of facilities" demonstrate adequate financial responsibility, "consistent with the degree and duration of risk associated with . . . hazardous substances." As an initial step, the President must "identify those classes [of facilities] for which requirements will be first developed," affording "[p]riority" to those "which the President determines present the highest level of risk of injury." In other words, by statute, the decision to regulate any class of facilities under section 108(b) must follow an assessment of "the degree and duration of risk" from those facilities.

The proposed rules violate that key statutory prerequisite. The 2009 notice identifying hard rock mining as a target for section 108(b) regulations—on which EPA never sought or received comment—flatly disregarded a critical question in assessing present-day risk: the effect of existing, rigorous state and federal regulations and financial assurance programs that largely have already mitigated the material environmental risks posed by mining. The proposed rules replicated that flawed approach. In analyzing "risk" from modern-day hard rock mining, the proposal relies almost exclusively on impacts from unregulated (or under-regulated) historic mining operations that are not relevant to, or predictive of, risk today under updated regulatory structures. Rather than analyze actual risk, EPA instead assumed that every feature of every operating hard rock mine in the United States will require a CERCLA response equivalent in scale to (or greater than) the worst-case outcomes of the unregulated past—an utterly implausible scenario and one which is not supported by the administrative or historical record.

EPA also erred in projecting *future* risks to taxpayers based on amounts spent on *historical* cleanups of mining sites (including legacy sites to which the proposed rules do not apply), without any demonstration that historical data was representative of current and future risks. The record clearly shows that this data is not representative of current mining activities conducted under updated regulatory structures. Of all mining sites added to the CERCLA National Priorities List in the past decade, only six operated into the mid-1990s or beyond (i.e., the era of modern and subsequently updated state environmental regulations). The response actions at three of those sites—the only ones that currently operate and would be covered by the proposed rules—have been funded 100% by private entities, with no impact on the U.S. taxpayer. The other three sites, where EPA funded CERCLA responses, ceased operations by 1995, before many modern state regulatory programs had taken full effect.

By relying heavily on historic mines operated in the past under limited or no regulation, EPA has provided only meager evidence of risk persisting under current regulatory structures. EPA focuses almost entirely on such legacy mines, apart from a handful of specific sites where minor releases were corrected by the mine operator with no CERCLA response (i.e., no taxpayer dollars) required. EPA also relies on environmental databases that merely confirm that (a) mine sites can be very large and can handle correspondingly large quantities of material containing low concentrations of naturally occurring metals, and (b) mine operations occasionally result in minor releases of material, generally contained on the mine site itself, which are addressed by existing regulatory programs. EPA also implausibly ignored technological progress, widespread deployment of sophisticated environmental management systems, and robust third-party certification programs that manage risk at today's mines.

In short, the administrative record fails to show any significant continued risk to either taxpayers or the environment from currently operating hard rock mines. Neither CERCLA nor the current settlement agreement governing the timing of this rulemaking require EPA to finalize the current proposal or to develop any 108(b) regulations for hardrock mining at all. Accordingly, EPA should decline to do so, and instead determine that such rules are not needed for this industry.

2. The proposal did not consider the effect of existing federal and state regulatory programs for hardrock mining.

In addition to relying heavily on archaic evidence from the unregulated past, EPA ignored extensive environmental regulation of hard rock mines in place today in substantially all states where mining is a significant industry. Astonishingly, EPA refused to consider the effect of such regulations—which include:

- Detailed, mandatory state-law closure and reclamation requirements designed to restore large land areas to appropriate post-mining land uses;
- Long-term water management requirements designed to protect and remediate ground and surface water;
- Operational requirements designed to prevent environmental problems from occurring;
- Corrective action requirements that mandate that mine operators promptly address any environmental problems, including spills and unpermitted releases, that may occur; and
- State-law financial responsibility requirements designed to back up those programs.

For example, Arizona, New Mexico, and Colorado (three of the most significant hard rock mining states) began imposing comprehensive hard rock mining regulations in the mid-to-late 1990s, and those regimes have been highly effective in protecting public health and the environment. Freeport alone currently maintains some $1.1 billion in state-mandated financial responsibility under these programs.

EPA erred by dismissing state programs as serving "significantly different purposes," and based on unsubstantiated concerns about "noncompliance." Again, one of the "different purposes" that EPA believes mandates the proposed rule is the need for CERCLA responses to spills and releases—yet EPA provided no evidence that the existing regulatory structures were flawed in addressing spills and releases. The administrative record contains more than adequate documentation showing that CERCLA authority is neither needed nor used for these types of events and that company responses are appropriate for protecting public health and the environment.

EPA's one-size-fits-all formula implausibly treats all mines the same while ignoring the geographical and site-specific variation accounted for by state programs. EPA's formula relies on a single site-specific measure (e.g., acreage) for each category (such as tailings impoundments, open pits, waste rock stockpiles, and process ponds). The formula then estimates cost by scaling EPA's figure for individual features to the size of an operating facility. By design, this approach cannot account for variations in how a particular site feature is operated and maintained, or draw on the experience of the mining or financial services industries to assess the efficacy of risk-reduction practices.

For example, mine pits in Arizona often function as a passive containment capture zone that will protect both groundwater and surface runoff with little, if any, need for future water treatment. This approach aligns with Arizona's arid environment and protective regulatory standards, which regulate groundwater at a defined point of compliance that Arizona's Department of Environmental Quality determines to be protective of human health and the environment on a site-specific basis. EPA ignored this, basing its financial responsibility formula on the premise that EPA, not the states, mandates groundwater standards regardless of current or likely future points of withdrawal or exposure. (It is important to note that EPA does not have legal jurisdiction to regulate state groundwater, although this fact has been ignored in EPA's proposed approach). EPA also relied on sites where aggressive water treatment was required to address very different environmental conditions. This means that the proposed rules require hundreds of millions of dollars in additional financial responsibility that is unnecessary and inappropriate for specific sites.

Compounding its radical inflation of financial responsibility estimates, EPA premised its entire rulemaking on the unjustified assumption that every feature at every operating mine site will require a CERCLA response *tomorrow*, notwithstanding the existence of regulations that will prevent such an outcome. EPA attempted to offset this flawed approach by allowing credits for supposed "best" management practices supported by "adequate" financial assurance. Because EPA does not explain what it means by "adequate," there is no way to know whether credits will be available at all. Even assuming they are, EPA does not explain or show why the practices it chose are "best"—or how they could be "best" for every operating mine nationwide. The rule ignores the reality that effective programs are tailored to specific environmental settings and operations for good reason. By ignoring this variability, the proposed rules ensure that practices fully protective of human health and the environment—such as those required by Arizona's Aquifer Protection Program and tailored to Arizona's arid geography and environment—yield no credits, greatly increasing the financial assurance required under the proposed rules with no corresponding environmental or risk reduction benefit.

3. The proposal is bad policy, its costs exceed its benefits, and it would harm taxpayers, industry, and the environment.

Even putting aside its numerous legal and substantive flaws, the proposal is simply bad policy, unlikely to achieve—and more likely to affirmatively harm—its primary goals of protecting taxpayers and the environment:

The proposal would cause net harm to taxpayers. By EPA's own account, the rule's primary goal is to protect taxpayers from potentially having to bear $527 million in unreimbursed CERCLA response costs from currently operating mines, in aggregate, over 34 years (i.e., $15.5 million per year). To achieve that goal, the proposed rules impose $170 million in costs *every single year* on the mining industry (using EPA's own flawed estimates). The proposal thus admittedly imposes costs that greatly outweigh the benefits of the rule. Further, the proposal actually harms the very taxpayers it purports to protect, because the resulting contraction in the mining industry (in just eight mining states alone, modeled by Freeport's experts at $1.3-3.8 billion in annual economic output) will deprive federal taxpayers of $93-$268 million in revenue annually—an amount that far exceeds the hypothetical annual benefit from the rule.

EPA's cost-benefit analysis understates costs and exaggerates benefits. EPA estimates that the proposed rules will yield $527 million in benefits to taxpayers over 34 years. But that figure is inflated, because it depends on ultraconservative and unrealistic assumptions about how many mining companies will exit the market, and whether such firms will contribute anything at all toward discharging their environmental obligations. Using more realistic assumptions in applying EPA's methodology, Freeport's economic analysis estimates the aggregate benefits of the proposed rule (again, the *total* over 34 years) of $80-$144 million (under the "no financial test" option), and $72-$130 million (under the "financial test" option").

As to costs, EPA's estimate of $110-$170 million in *annual* compliance costs dwarfs the expected benefits using EPA's own figures ($15.5 million *annual* benefit). Using the more realistic figures set forth above, the costs *for a single year* outweigh the projected benefit for the *entire 34-year period* analyzed by EPA. And EPA's cost estimate, unsurprisingly, is itself grossly understated. EPA's estimate of $7.1 billion in additional financial responsibility for the industry doubles to $15 billion using EPA's average instead of median estimates (which EPA used elsewhere in the proposal). Even this is still understated. EPA based its figures on a small fraction of the mining industry. Extrapolating from EPA's own calculations to the full industry, the figure is closer to $50 billion, depending on how much "credit" is given for existing practices. Based on its application of EPA's formula, Freeport *alone* will need more than $7 billion in additional financial assurance, an amount that meets or exceeds EPA's estimate for the *entire* hard rock mining industry. And Freeport is not alone. As discussed in one of Freeport's expert reports, a subset of mines operated by six large mining companies would likely face financial responsibility exceeding $15 billion. Freeport's experts anticipate actual annual costs of $1.1-$3.3 billion—10 to 20 times EPA's estimate, and between 23% and 66% of the entire industry's current annual profits.

These eye-popping figures are vastly greater than any amount that could reasonably be justified—and exceed even the $4 billion EPA has spent on every mine site addressed in 40 years of CERCLA cleanups. Driving mines out of business will harm, not help, the rule's aims, increasing the number of abandoned sites without an operating mining company to perform remediation.

The proposal would cause serious harm to the mining industry, jobs, and the availability of key commodities. If adopted, the proposed rules will result in significant contraction of the domestic hard rock mining industry and impede future growth. Freeport's modeling indicates that the proposed rules would eliminate some 10,000 well-paid mining jobs, and reduce economic activity in just eight mining states by $1.3-$3.85 billion *annually*. Those jobs are likely to be concentrated in particular areas, impacting entire communities. (Freeport's Henderson mine, for instance, paid 70% of all property taxes in Clear Creek County, Colorado in 2015.)

The proposal would create a de facto national mining regulation EPA has neither the authority nor the expertise to develop or implement. Faced with excessive financial responsibility requirements and "all or nothing" credits, many mines will be forced to qualify for EPA's crediting program or face scaling back operations or going out of business. While purporting to give mines a choice, the proposed rule would in practice create a blanket and uniform federal command-and-control regime, establishing a de facto set of national operating standards for hard rock mining. Mines would continue to operate only at EPA's sufferance—despite that agency's lack of statutory authority or expertise as a mining regulator.

The proposal's attempt to incentivize better mining practices has no justification. The administrative record provides no support for EPA's suggestion that the rule will create incentives for mine operators to adopt best practices. The proposed rule neither analyzes risks associated with current practices, nor attempts to show that its "best" practices are better, nor considers whether the benefits of the "preferred" practices outweigh their costs. Those questions can only be answered after the kind of site-specific analysis that EPA expressly declined to conduct.

EPA failed to adequately consult with the insurance industry, which led to many problems with the proposal. EPA ignored Congress's command that "[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." In developing the proposed rule, EPA limited itself to a few brief consultations with financial services industries, at a time in the rulemaking process before key features of the rule (such as the total amount of financial responsibility needed) had been developed. The lack of meaningful consultation helps explain the rule's resulting deficiencies. EPA has proposed arbitrary and unreasonable conditions on the kinds of third-party instruments used to demonstrate financial responsibility, which would create significant uncertainty about the appropriate amount of financial responsibility and whether or when an instrument can be released. Compounding these failures, the proposal would impose unworkable and restrictive conditions on financial responsibility instruments, conditions that are often unprecedented in the market. Even the limited consultations EPA engaged in with the financial services industry identified these as major problems that were likely to deter the industry from providing these instruments, or which would make them commercially and economically impractical. EPA is effectively forcing industry into highly or fully collateralized instruments such as letters of credit, or even outright capital set-asides—contrary to what is economically sustainable and what Congress intended.

EPA unlawfully proposed to eliminate corporate guarantees. EPA's proposal would either prohibit, or impose undue restrictions on, the use of corporate guarantees, denying well-capitalized mining companies the option to use a financial responsibility mechanism that Congress intended to provide. Prohibiting such guarantees violates section 108(b)(2), under which "[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." Despite Congress's command that all of these mechanisms be available to regulated entities, EPA has proposed to eliminate self-insurance mechanisms in its preferred approach. Self-insurance and corporate guarantees have a longstanding pedigree, and are routinely and successfully used to provide financial assurance under state mining laws *and* in connection with federal environmental requirements, including CERCLA response actions, closure requirements under the Resource Conservation and Recovery Act, and underground injection well plugging and abandonment requirements. The historical and administrative record shows little, if any, harm arising from self-guarantees to justify prohibiting or restricting their use. EPA's proposed restrictions on self-guarantees also make no policy sense; by EPA's own calculations, prohibiting self-insurance will save taxpayers a total of $16 million in aggregate over 34 years—while inflicting $60 million in increased compliance costs *every single year* on the mining industry (this $60 million is the difference in EPA's estimate of compliance costs between allowing self-insurance and forbidding it).

<u>The proposal would preempt well-functioning state programs that are tailored to local conditions and effectively manage risk.</u> CERCLA section 114(d) provides that when a regulated party maintains evidence of financial responsibility under federal law, a state cannot require "*any* other evidence of financial responsibility in connection with liability for the release of a hazardous substance." The reason for this is obvious: no one pays—or should pay—twice for the same thing. Imposing redundant costs is economically wasteful and would cause the mining industry to contract, decreasing domestic production, eliminating jobs, and increasing manufacturing costs for other domestic enterprises that depend on domestic supplies. If the proposed rules are finalized, section 114(d) will preempt most, if not all, state financial responsibility requirements for hard rock mines, which are imposed "in connection with liability for the release of a hazardous substance." As states have explained in numerous comments, most if not all state financial responsibility requirements for hard rock mines are "connect[ed] with liability for the release of a hazardous substance," because they are aimed at ensuring that mines have adequate resources to clean up any hazardous-substance releases that may occur, and to minimize the threat of future releases. Confoundingly, EPA's proposal takes the opposite view, and would subject industry to *both* existing state obligations and duplicative new federal rules. EPA asserts that state laws will avoid preemption, because state programs are not "limited to" hazardous substance releases. But the states themselves say otherwise. The end result of EPA's proposed approach would be chaos. Regulated entities will be forced to challenge state programs piecemeal on preemption grounds, to avoid bearing duplicative costs. States will defend against preemption claims to preserve their programs.

<u>EPA's concerns about administrative convenience cannot justify the proposal's one-size-fits-all approach.</u> In seeking to justify the proposal's one-size-fits-all approach, EPA repeatedly invokes its own administrative convenience. EPA suggests, for instance, that it would be difficult or burdensome to conduct site-specific risk analysis or craft a program that is responsive to local conditions or existing state programs. This theme is reflected in numerous aspects of the proposal, including: the backward-looking approach to risk assessment; the refusal to analyze how existing state and federal regulations reduce risk, or to conduct site-specific risk evaluations; the simplistic formula for estimating costs associated with particular mine sites; the selection of a handful of "best" practices to apply to crediting nationwide; the all-or-nothing approach to credits; and the proposed elimination of corporate guarantees and restrictive conditions on other financial instruments. Whatever role administrative convenience may play in other contexts, the justification fails here, given the finite and manageable universe of regulated mines and the concentration of sites in eight states with well-developed mining regulations. Notably, of the 221

hard rock mining sites nationwide that EPA says would be covered by the proposal, many have already been analyzed extensively under state regulatory programs.

Next Steps

At day's end, the proposal is a draconian, industry-killing, unlawful and ultimately counterproductive solution in search of a problem. However, comments and data submissions by state and federal agencies, Freeport and other mining companies, trade associations and many others have now provided EPA the legal and factual basis to reach a different, legally valid, and practical decision—not to finalize the proposal—which the D.C. Circuit has affirmatively held to be within EPA's discretion.

Perhaps most importantly from OMB's perspective, the proposal is based on an inherently flawed cost-benefit analysis that intends to subject the mining industry to costs many times greater than the purported benefits of the rule, and EPA ignored and refused to analyze the likely economic impacts of the proposal, which are dire. Freeport's detailed cost-benefit analysis, also relied on by the National Mining Association and other industry commenters, is the only document in the administrative record that both provides an appropriate level of analysis to correct EPA's flawed cost-benefit analysis and identifies an alternate set of anticipated costs and benefits (or lack thereof).

EPA should explicitly determine that hardrock mining does not present any significant degree of risk that requires further financial responsibility requirements under 108(b), given the realities of comprehensive state and federal regulation that govern modern mining practices. EPA should also explain and acknowledge that its earlier proposal to the contrary was almost entirely based on legacy, unregulated mining sites not representative of current conditions or current regulatory structures. The agency should further respect principles of federalism by acknowledging the likely preemptive effect its rules would have on longstanding and effective state regulatory regimes. And EPA should acknowledge that replacing state-specific regimes with de facto federal command-and-control regulations would be the worst of all worlds—likely to harm both taxpayers and the environment; prohibitively expensive for a key sector of the American economy; and fatal to beneficial and ongoing innovations in environmental management that have made modern mining companies successful and responsible stewards of the environment.

Faithful implementation of the statute in light of the current administrative record leads to a single conclusion: EPA should abandon the proposed rule and determine that the existing state and federal programs adequately manage the "degree and duration of risk" associated with the modern mining industry and that those programs are backed by appropriate financial assurance.